PUBLIC REQUEST TO ADDRESS
THE BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES, CALIFORNIA

Correspondence Received

MEMBERS OF THE BOARD

HILDA L. SOLIS
HOLLY J. MITCHELL
LINDSEY P. HORVATH
JANICE HAHN
KATHRYN BARGER

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Adam Rasmussen	
			Adam Regele	
			Adel Villalobos	
			Alan Comins	
			Alan Marmion	
			Alan Rasplicka	
			Alexa Bashnakyan	
			Alison Lindemann	
			Allen Penton	
			Allen Starczyk	
			Amanda Aguirre	
			Ana Fronseca	
			Andrea Carpenter	
			Andrew Eliopulos	
			Andrew Suffolk	
			Angela Gibson Shaw	
			Angela Gibson-Shaw	
			Angelica Huato-Nelson	
			Annie Wright	
			Arries Feraer	
			Arthur Sohikian	
			Ashley Christy	
			Barbara Myler	
			Barry Gribbons	
			Becki Robb	
			Bill Fitzpatrick	

As of: 11/17/2025 7:00:15 PM

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Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Bob Khalsa	
			Bob Khalsa	
			Bob Lyon	
			Bonnie Rejaei	
			Brandy Lux	
			Bri Kilmartin	
			Brian McCosker	
			Brian Schlick	
			Brock Hamilton	
			Cailee Poulsen	
			Cal Naulls	
			Calvin Hedman	
			Chad Walker	
			Chelsea Clapham	
			Chris Hailstone	
			Chris Najarro	
			Chris Perry	
			Chris Wells	
			Christian Lazore	
			Christine Healy	
			Christopher Avelino	
			Christopher Luyet	
			Cody Pruitt	
			Colby Rowe	
			Craig Peters	
			Crispina Tulpo	
			Dale Canfield	

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			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Dale Donohoe	
			Dan Greding	
			Danielle Carter	
			Darcey Oldhafer	
			Dave Norwine	
			David Bossert	
			David Rendall	
			David Vanderhorst	
			Denise Lite	
			Denise Mitchell	
			Dennis Sugasawara	
			Dennis Verner	
			Desiree Dodd	
			Diane Davis	
			Dianne Erskine-Hellrigel	
			Don Grissom	
			Dustin West	
			Elizabeth Hopp	
			Eric Angle	
			Eric Hamilton	
			Eric White	
			Felicia Grady	
			Frank Cigrang	
			Fred Arnold	
			Fred Sutton	
			Frederick Tazartes	

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			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Gary Jizmejian	
			Gary Saenger	
			Gina Boersma	
			Giselle Garavito	
			Gloria Mercado-Fortine	
			Gonzalo Guzman	
			Graham Silver	
			Greg Amaro	
			Greg Amsler	
			Greg Geraci	
			Gretchen Halstead	
			Henry Rodriguez	
			Holly Prabhu	
			Holly Thompson	
			Ian Hwang	
			Ira Aboulafia	
			Ivan Volschenk	
			Jackie Lopez	
			Jacqueline Rendall	
			Jake Lyon	
			James Shields	
			Jamie Lyon	
			Jay Julien	
			Jeff Graef	
			Jeff Montejano	
			Jeff Myers	

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Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Jen Seyfert	
			Jennifer L Hernandez	Please accept attached comment letter
			Jennifer L Hernandez	
			Jerry Pelton	
			Jessica Drake	
			Jessica Martucci	
			Jim Tanner	
			Jim Ventress	
			JO Chacon	
			Joann Meinardus	
			Jodie Francisco	
			Jody Evans	
			Joe Lopez	
			Joe Rivas	
			Joe Satorhelyi	
			Johanna Palmer	
			John Baron	
			John Branch	
			John Calhoun	
			John Calhoun	
			John Lite	
			John Musella	
			John Prabhu	
			John Prabhu	
			John Whelchel	
			Jon Tickle	
			Jonathan Cookler	

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Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Jordan White	
			Joseph Graziano	
			Joseph Satorhelyi	
			Josh Sinatra	
			JUAN SOLORIO JR	
			Kamil Kirio	
			Kara Roth	
			Karina Winkler	
			Kathy Norris	
			Kelly Thomas	
			Kenneth Aldrich	
			Kenneth Raleigh	
			Kevin MacDonald	
			Kevin Miso	
			Kevin Tamaki	
			Kiara Brown	
			Kim Armstrong Ross	
			Kit Davis	
			Kreitler Payes	
			Laina McFerren	
			Laura Raden	
			Lawrence Fleischmab	
			Lilit Jizmejian	
			Lillian Galestan	
			Lindsay Myers	
			Lindsay Schlick	
			Liz Seelman	

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			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Liz Tolentino	
			Loan Le	
			Lorena Diana	
			Lorraine Minverva	
			Louie Lopez	
			Lucas Silsbee	
			Lucy Melkonian	
			Luis Perdomo	
			Mandy Meeks	
			Marcus Cannon	
			Maria Delgado-Parr	
			Maria Salinas	
			Maribel Garth	
			Marina Eliopulos	
			MArlee Lauffer	
			Mary Leslie	
			Matt Aulbach	
			Matt Dierckman	
			Matthew Hargrove	
			Megan Andrew	
			Michael Grisanti	
			Michael Ward	
			Michelle Lopez	
			Michelle Rubenstein	
			Miguel Amado	
			Mike Grimes	
			Mike Hrezo	

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Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Mike Lebecki	
			Miles Helfrich	
			Mohamed Tantawi	
			Monica Aquin	
			Munnu Sudan	
			Nancy Starczyk	
			Nella McOsker	
			Nesrin Karam	
			Nicholas Casante	
			Nicole Stinson	
			Nikki Buckstead	
			Nimit Sudan	
			Ondre Seltzer	
			Pam Ingram	
			Pamela Verner	
			Patrick Moody	
			Paul Collins	
			Paul Wilson	
			Peyton Poulsen	
			Philip Tsui	
			Preston McGill	
			Rafaela Serna	
			Raffi Kaprelyan	
			Ralphy Serna	
			Randy Cude	
			Ravi Rajan	
			Recyl Chapman	

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			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Renee Leon	
			Richard Aronoff	
			Richard Dunbar	
			Richard Lambros	
			Rob Cramer	
			Robert Anderson	
			Robert Elmquist	
			Robert Lapsley	
			Robert Pallasch	
			Robert Stice	
			Roger Fugit	
			Roger Rosegrant	
			Ronald Hill	
			Roxie Ramey	
			Rula Eliopulos	
			Sameh Rashed	
			Sarah Bothwell	
			Scharme Grider	
			Scott Edwards	
			Scott Gronewold	
			Scott Heffernan	
			Scott Pagel	
			Sean Aguirre	
			Selina Thomas	
			Shane Cameron	
			Shaun Clapham	
			Shunna Jones-Moreno	

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Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Favor**	Starr James	
			Stephanie Cheung	
			Stuart Waldman	
			Susan Kline	
			Tamer Abdelaal	
			Taylor Sanchez	
			Tony Delia	
			Tony Flores	
			Tony Shields	
			Tracy Ramsouer	
			Tracy Shaw	
			Trestles Provincia	
			Tricia Rasplicka	
			Troy Hooper	
			Ulises Salazar	
			Valerie Maronyan	
			Vince Germann	
			Vinod Assomull	
			Whitney Saenger	
			Willian Walk	
			Yianni Eliopulos	
		Oppose	Brian B Flynn	SEIR is inadequate under CEQA (see attached written comment dated Nov. 16 2025).

As of: 11/17/2025 7:00:15 PM

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
90.		**Oppose**	Gene Dorio	My concern with these sites is their closeness to the Castaic Dam, and if there is a breach, such as from an earthquake, it could likely flood the area. If a breach occurred, it could potentially cause 40,000 casualties. Additionally, the wave from the dam would flood the nearby prison and animal shelter, likely reaching at least 40 feet in height. As the water flows toward the Pacific along the Santa Clara River, it would erode part of the Chiquita Canyon Landfill, leading to the dump being exposed and polluting the area along its route. I call for geologic and water flow studies, as well as evacuation plans for residents, schools, businesses, and roadways. Gene Dorio, M.D. Santa Clarita
			Hind Baki	
			Kelilah D Federman	
			SCOPE Friends of the SC River	Concur with the Planning Department that early grading should not be allowed (see correspondence.) Insufficient affordable housing. Please do not allow the destruction of the Valley Oak trees. More issues in our comment letter
			SCOPE Friends of the SC River	Concur with the Planning Department that early grading should not be allowed (see correspondence.) Insufficient affordable housing. Please do not allow the destruction of the Valley Oak trees. More issues in our comment letter
		Other	Brian Miller	
		Item Total	**268**	
Grand Total			**268**	

As of: 11/17/2025 7:00:15 PM

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

Open space has always been a part of the Santa Clarita Valley's identity. Beautiful rolling hills, valleys, and ridgelines help make our community truly gorgeous.

I am happy that as part of FivePoint's plans for the Valencia project, they are continuing the important preservation of our beautiful open space, while also helping to connect the community to the surrounding nature with walking paths and more.

This commitment - paired with their extensive conversation and sustainability initiatives – show me that FivePoint understands what makes our community unique and will continue working to protect it, while also helping us with clearly needed community priorities, like additional housing and retail opportunities. This is a project worthy of the County's support. They have mine!

Sincerely,

Mandy Meeks
mandy@ginabeeevents.com
661.607.2860

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Members of the Regional Planning Commission,

Valencia by FivePoint is already a great community that has a positive impact on the local economy and small businesses throughout the region. The next phase includes bringing additional housing, retail and jobs to the community with the proposed Entrada South and Valencia Commerce Center.

By creating both high-quality, local jobs and much-needed housing with these next two pieces, FivePoint is strengthening the jobs to housing balance – which is incredibly important for stimulating the economy throughout the Valley. And they're doing it all while remaining environmentally responsible.

Valencia by FivePoint is the real deal, and I hope you vote to support it. I am so excited to see the full vision brought to life!

Thank you,

Nicholas Casasante
nicholas.casasante@cbre.com
626.808.2698

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Los Angeles County Planning Commission,

I am writing to express my strong support for the next phase of the Valencia master-planned community—Entrada South and the expanded Valencia Commerce Center.

Thoughtful, forward-looking communities like Valencia by FivePoint are rare, and this project represents a model for responsible, sustainable development that meets the needs of today while planning wisely for tomorrow.

FivePoint has consistently demonstrated a deep commitment to sustainability. From achieving net zero greenhouse gas emissions and designing zero net energy homes and buildings, to preserving thousands of acres of open space and restoring local ecosystems, the company has made environmental stewardship a cornerstone of its community-building philosophy.

Entrada South and the Valencia Commerce Center are not simply about new housing or commercial expansion—they are a continuation of this thoughtful, integrated approach. With extensive trail systems, protected open space, and a clear focus on clean energy, these projects offer a blueprint for how vibrant communities and environmental responsibility can coexist and thrive.

Approving this project is a vote for a cleaner, smarter, and more sustainable Santa Clarita Valley. I encourage the Commission to support this next chapter of Valencia and help bring to life a community that reflects our shared values for the future.

Sincerely,

David Bossert
bossert.dave13@gmail.com
818-599-6065

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

The next phase of Valencia by FivePoint, Entrada South and Valencia Commerce Center, is exactly the kind of housing proposal that deserves our support.

FivePoint has already created thousands of jobs, preserved many acres of open space, and provided homes priced within reach for working families. It's a thoughtful, forward-looking model for smart development in L.A. County.

Now, with Entrada South and the expansion of the Valencia Commerce Center, we have an opportunity to build on that momentum. These projects will bring more homes, more jobs, and more vitality to the region.

The next step is here: Entrada South and the Valencia Commerce Center. Please support this project and help keep Santa Clarita thriving in a responsible and inclusive way.

Sincerely,

Gloria Mercado-Fortine
gmercado@earthlink.net
661-714-5041

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To: Los Angeles County Regional Planning Commission

Valencia by FivePoint is proposing a smart, eco-friendly plan that addresses our community's needs. The net-zero GHG community is helping address the region's critical housing shortage and already home to more than 3,500 community members. Up next, Entrada South will create 1,000+ new homes for working families.

Long-term, the community will create thousands of construction jobs and permanent, local jobs. Additionally, the next part of the Valencia Commerce Center will create space for even more growth across a wide range of industries and contribute to the critical tax revenue we need to fund the vital public services we rely on every day.

This is an impressive community, and its benefits extend far beyond its borders. Please support Entrada South and Valencia Commerce Center!

Sincerely,

adel villalobos
adel@lieforganics.com
818.632.2658

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Planning Commissioners,

Valencia by FivePoint delivers economic benefits to the entire region, and I am excited about the community's continued growth. The Santa Clarita Valley is already one of our region's most business-friendly areas, and this proposal will only deepen that well-deserved reputation. The Valencia Commerce Center commercial campus is home to Logix and many other job-producing businesses in diverse industries, including aerospace, healthcare, entertainment, and more. Now, FivePoint is proposing to bring millions more square feet to VCC to create even more local, quality jobs.

I hope you'll join me in supporting the Valencia by FivePoint proposals!

Sincerely,

Jody Evans
JEvans@lfcu.com
661.480.8725

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA Planning Commission,

FivePoint is an important part of the business community here in the Santa Clarita Valley, and I am writing to enthusiastically support the current proposal for Valencia by FivePoint's next chapter.

This plan will stimulate the regional economy, create many local construction and permanent jobs, increase tax revenue, and bring job-generating businesses to the region. It will also create more than 1,000 housing units and increase quality of life in the region. It's a great plan by a great company that has been investing in the success of LA County for decades.

I encourage you to support Valencia by FivePoint's current entitlements up for approval! Thank you.

Sincerely,

Philip Tsui
ptsui@trammellcrow.com
909-262-5572

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Planning Commission,

FivePoint has been part of the fabric of the Santa Clarita Valley for decades, not just building homes but creating a community-- boosting the economy, supporting local organizations, and building trust. The company has a long-standing presence and proven track record of positive partnership, and I support their proposed next phase of Valencia by FivePoint—Entrada South and the next stage of Valencia Commerce Center.

Valencia by FivePoint blends new housing, job creation, sustainability, and community engagement in a way that few developers even attempt. The proposals for Entrada South and the Valencia Commerce Center are a continuation of this thoughtful and holistic approach.

I urge you to support Valencia by FivePoint!

Thank you.

Sincerely,

Kevin Miso
kevin@kevinmiso.com
562-810-6228

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Planning Commissioners,

Valencia by FivePoint delivers economic benefits to the entire region, and I am excited about the community's continued growth. The Santa Clarita Valley is already one of our region's most business-friendly areas, and this proposal will only deepen that well-deserved reputation. The Valencia Commerce Center commercial campus is home to many job-producing businesses in diverse industries, including aerospace, healthcare, entertainment, and more. Now, FivePoint is proposing to bring millions more square feet to VCC to create even more local, quality jobs.

I hope you'll join me in supporting the Valencia by FivePoint proposals!

Sincerely,

Giselle Garavito
Rightdesignfp@gmail.com
323-470-8395

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Short and sweet...

I have been a close supporter of Newhall Land, and following, Five point, for nearly 40 years. The

"Masterplan" is without fault, like GE, they have commercially and residentially, "brought good things to life."

Sincerely,

Mike Lebecki
Michael.lebecki@gmail.com
661.205.6661

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

My name is Liz Tolentino, and I am a proud lifelong resident of Santa Clarita, as well as a current homeowner in Valencia. While I don't live in Valencia by FivePoint, many of my friends and clients do—and I've seen firsthand how much they love being part of that community.

The thoughtful design, walkability, and shared green spaces have made FivePoint a model for what modern neighborhoods can be. It's more than just homes—it's connection, quality of life, and a deep sense of community.

That's why I support the next phase of growth through Entrada South and the Valencia Commerce Center. More homes and thoughtfully planned retail will directly benefit current residents by reducing the need to leave the community for everyday essentials. It also reinforces Valencia's position as one of the most desirable places to live in Los Angeles County.

As a resident, real estate professional, and advocate for our city's long-term vitality, I believe smart growth like this adds lasting value for both current and future families.

I respectfully urge you to approve the plans and support the continued success of Valencia and the larger Santa Clarita community.

Warm regards,

Liz Tolentino

Valencia Resident | Santa Clarita Local | Real Estate Professional

Sincerely,

Liz Tolentino
liz@realestateliz.com
661.904.8471

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Planning Commission,

Valencia by FivePoint has earned my support because it addresses real community needs, including the creation of price-attainable housing, business-friendly commercial space and sustainable mobility options. Their proposed next phase, Entrada South and Valencia Commerce Center, will build on an already-successful model.

FivePoint works closely with local organizations, prioritizes open space, and supports environmentally friendly planning. I believe in what they're doing, and I encourage you to approve this next phase of the community.

Sincerely,

Andrew Suffolk
andrew.suffolk.RE@gmail.com
661-600-2624

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Regional Planning Commission,

I am writing to express my support for Valencia by FivePoint. This is a community that protects the environment every step of the way. The community is built to zero-net energy standards, prioritizes drought-tolerant landscaping, and offers innovative zero-emission transportation options for residents.

FivePoint is also dedicated to permanently preserving 10,000 acres of open space at full buildout and restoring native plants and habitats.

Approving the Entrada South and Valencia Commerce Center entitlements means FivePoint can continue its important conservation work in the region.

Thank you.

Sincerely,

Holly Thompson
holly@scvholly.com
661-714-2772

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

I am pleased to support FivePoint's plans for Valencia by FivePoint. LA County, like much of the country, is facing a dire housing crisis. The proposed Entrada South neighborhood will provide some of that much-needed housing.

Plus, by continuing to build out Valencia Commerce Center, a commercial park home to companies in a wide range of fields, the SCV will continue attracting high-quality companies and improve the economy for the entire region.

It's a win-win proposal!

Sincerely,

Nesrin Karam
homeswithnesrin@gmail.com
8183071989

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

I am writing in full support of FivePoint's plans to bring more housing to the region.

I especially appreciate that FivePoint has set aside most of its Valencia land -- high country in the Santa Clarita Valley -- as permanently protected open space.

Beyond this land preservation, FivePoint has worked to restore habitats in and around the Santa Clara River, creating a thriving ecosystem for native wildlife and plant species. They are also protecting and reviving the San Fernando Valley Spineflower, which earned them the At-Risk Species Conservation Award from the U.S. Fish and Wildlife Service – a testament to their ongoing commitment to our environment.

I fully trust FivePoint to enhance the Valencia community and continue to build while respecting and preserving the environment. Please support their entitlement request.

Sincerely,

Eric White
Ericwhite1@hotmail.com
661.313.6971

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

I am pleased to support FivePoint's plans for Valencia by FivePoint. LA County, like much of the country, is facing a dire housing crisis. The proposed Entrada South neighborhood will provide some of that much-needed housing.

Plus, by continuing to build out Valencia Commerce Center, a commercial park home to companies in a wide range of fields, the SCV will continue attracting high-quality companies and improve the economy for the entire region.

It's a win-win proposal!

Sincerely,

Chris Wells
Mr.wellschris@gmail.com
661-350-2522

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Planning Commission--

I support the continuation of Valenica by FivePoint. I am especially supportive of the next phase of the Valencia Commerce Center. This project is planned to bring thousands of construction jobs to the area as well as long-term career opportunities in industries like engineering, entertainment, and technology.

FivePoint's plan helps strengthen the local economy and supports families who want to live and work in our community. Combined with new housing in Entrada South, this is a smart and balanced investment in the future of the Santa Clarita Valley.

Please approve these entitles and let's keep this momentum going!

Sincerely,

Colby Rowe
colby@scvholly.com
760-895-7245

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

I support the expanding of Five Point

Sincerely,

Kelly Thomas
Kellytrealestate@gmail.com
661.877.1873

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

Valencia by FivePoint has earned my full support for its remarkable sustainability commitment, with walking trails, native habitat restoration and Level 2 EV chargers in every home, among many other initiatives.

The Valencia by FivePoint proposals before you for Entrada South and Valencia Commerce Center will bring much-needed housing, retail and commercial space to the Santa Clarita Valley.

Few communities at this scale lead with sustainability like Valencia by FivePoint. Let's continue moving toward environmentally-friendly development that reflects California's values. I urge you to support this project and keep this momentum going. Thank you!

Sincerely,

Kara Roth
kararoth10@gmail.com
661-478-4814

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

We are in the middle of a housing crisis that continues to stretch families and strain our regional economy. Homeownership feels increasingly out of reach for many, and yet we know that stable, affordable housing is one of the most powerful tools for building healthy communities.

That's why I'm writing in support of FivePoint's proposal for Entrada South. Valencia by FivePoint is already making a meaningful impact: many of the homes sold so far have been below the L.A. County median home price. That's real affordability, not just in name but in practice.

Adding another 1,000+ homes in a high-opportunity, jobs-rich area like the Santa Clarita Valley is a smart and necessary decision. This is the kind of thoughtful development that puts working families first, and I urge you to support these entitlements.

Thank you.

Sincerely,

Susan Kline
Sue@sueklineteam.com
818.642.8620

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Planning Commission,

I am a Valencia by FivePoint advocate because they are setting a new standard for sustainable living. Their pledge to maintain net-zero greenhouse gas emissions, restore wetlands along the Santa Clara River, and protect extensive open space reflects the kind of enlightened and responsible planning we need in L.A. County.

Valencia by FivePoint's next phase, Entrada South and Valencia Commerce Center, will deliver housing, local jobs, and retail options to the community, as well as additional sustainability and mobility solutions. This project doesn't just check a box; it redefines what responsible community planning looks like. Please approve the next chapter of Valencia by FivePoint!

Sincerely,

Lorena Diana
Sellingtreasures@sbcglobal.net
661-212-0886

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

As an SC Valley resident since 1982 I believe the growth and expansion of this beautiful community is vital. Newhall land and Farm and five points has proven to be an essential component of our success. They continue to prove themselves as a reputable company with the sole intent to protect the original vision of our valley

Looking forward to their continued success as Five Point Valencia builds the next phase

Sincerely,

Mike Hrezo
mikehrezo1@gmail.com
661-212-9900

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commissioners,

I want to express my support for the next phase of Valencia by FivePoint-- a master-planned community that reflects the importance of prioritizing housing and job growth.

With the new homes proposed for Entrada South and the expanded business space in the Valencia Commerce Center, this plan reinforces the jobs and housing balance that is essential to a great quality of life. Fewer long commutes, more local employment, and a stronger local economy all come from that balance.

FivePoint continues to set a high standard for sustainable, community-minded development. Please support these entitlements.

Sincerely,

Brian Schlick
brian@schlickart.com
661-309-5326

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Members of the LA County Planning Commission,

Valencia by FivePoint continues to demonstrate thoughtful, balanced, and responsible development. The next phase of the Valencia Commerce Center will lead to more local jobs and more tax revenue to fund our public services. Entrada South will also help meet our region's urgent housing needs. Together, the Valencia Commerce Center and Entrada South will reinforce the region's housing/jobs balance and strengthen quality of life.

Please approve this important project.

Sincerely,

Lindsay Schlick
lindsay@schlickart.com
661.313.3907

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles Planning Commissioners,

As the Santa Clarita Valley continues to evolve, we must make sure to lead with environmental stewardship. That's why I strongly support the Valencia by FivePoint community.

This is not just a residential community, it is a thoughtful blueprint for sustainable living. Long-term, FivePoint is permanently protecting 10,000 acres of open space, creating 50 miles of trails for hiking and biking, and setting a national example by pledging to achieve net-zero greenhouse gas emissions through a variety of on and off site investments.

FivePoint backs this commitment with additional action outside its project borders in other areas of LA County: installing solar panels, cool roofs, and EV chargers and more throughout economically disadvantaged areas. This is more than just checking a box -- FivePoint is making meaningful investments in the long-term health of our community.

Approving Entrada South and the next phase of the Valencia Commerce Center is a chance to move forward without leaving the environment behind. I hope you'll join me in supporting this future-focused vision and approve these projects.

Sincerely,

Miles Helfrich
mhelfrich27@sbcglobal.net
(661) 510-0637

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Planning Commission,

I am writing in support of Entrada South and Valencia Commerce Center, the next phase of the Valencia by FivePoint community. Entrada South, a mixed use community, will bring more than 1,000 new homes at a wide variety of price levels, including some affordable options, along with retail space. VCC will bring additional space for job-generating businesses that help strengthen our tax base.

I also support Valencia by FivePoint because they are actively investing in local and regional traffic mitigation and transportation improvements, including road-widening and major intersection upgrades.

FivePoint cares about the Santa Clarita Valley, and I urge you to support this next phase of the project.

Sincerely,

ELIZABETH HOPP
ehopp@sbcglobal.net
661.803.1732

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

The Valencia by FivePoint proposal isn't just about creating lasting benefits for one community. It's an economic and environmental asset for the entire region, and I fully support the proposed plans for Entrada South and Valencia Commerce Center. With its thoughtful combination of new housing, job-generating commercial space, clean energy infrastructure, and preserved open space, Valencia is setting a new standard for the future of communities in L.A. County.

Projects like this are rare: they address the region's housing shortage while also investing in long-term sustainability and economic strength. The expanded Valencia Commerce Center will bring more high-quality, local jobs to a thriving business park, while the Entrada South neighborhood helps more families afford to live close to work.

I happily lend my support to Valencia by FivePoint, and encourage you to approve both Entrada South and Valencia Commerce Center!

Sincerely,

John Calhoun
jcalhoun@vanguardmanagement.com
6617759400

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

I support the continued development of Valencia by FivePoint because it represents one of the most balanced, people-centered developments in the state. Few projects bring together housing, jobs, sustainability, mobility, and community quite like this one.

With Entrada South planned to bring homes and walkable retail, and the Valencia Commerce Center creating space for local jobs, this plan serves a wide range of needs while also promoting environmental responsibility. Entrada South and the Valencia Commerce Center will enhance mobility, improve access to jobs, and build upon an already vibrant community.

This is what 21st-century community planning should look like, and I encourage you to join me in supporting it!

Sincerely,

Jen Seyfert
jseyfert@escrowadvantage.com
661-803-4386

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I wholeheartedly support Valencia by FivePoint's proposals for Entrada South and Valencia Commerce Center, largely because sustainability is embedded in the community's design. FivePoint integrates solar panels, EV chargers, and drought-tolerant landscaping throughout the community, among many other environmentally responsible measures. These choices reflect the kind of leadership and vision we need in our communities. Preserving natural resources and minimizing carbon emissions should be a priority across the region, and FivePoint sets a strong example.

Please approve Entrada South and Valencia Commerce Center!

Sincerely,

Kenneth Raleigh
kwraleigh@gmail.com
661.373.1426

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Regional Planning Commission—

I enthusiastically support the Valencia by FivePoint entitlement package, including the Entrada South mixed-use neighborhood and the next phase of the Valencia Commerce Center (VCC).

VCC is already a thriving business park, and its continued development—along with the addition of new housing and retail—will strengthen the economy and business climate of the Santa Clarita Valley.

As a healthcare professional, I also want to emphasize the urgent need for additional housing to support our physicians, nurses, and hospital staff. Increasing local housing options is essential not only to retain our current workforce but also to recruit more healthcare providers to serve our growing community.

Please join me in supporting the Valencia Commerce Center and Entrada South.

Sincerely,

Renee Leon
leonrm@henrymayo.com
6617140291

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. Planning Commissioners,

I'm writing to express my strong support for the next phase of Valencia by FivePoint, including Entrada South and the expansion of the Valencia Commerce Center.

Valencia by FivePoint brings together the essential pillars of a thriving, balanced community—high-quality housing, good-paying local jobs, accessible park space, and a forward-thinking approach to environmental responsibility. This thoughtful, community-centered development is exactly what we need more of in Los Angeles County.

The 1,000+ planned homes in Entrada South will help address the housing crisis and support a healthier jobs-to-housing balance, while the expanded Valencia Commerce Center will attract a diverse mix of industries—such as healthcare, technology, and finance—stimulating job creation and generating vital tax revenue to support local schools and colleges.

FivePoint has been a trusted presence in the Santa Clarita Valley for many years. Their strong partnerships with environmental organizations and nonprofit groups reflect a deep commitment to building not just homes, but lasting communities.

I urge you to approve this next phase and continue supporting a team that puts the needs of Los Angeles County residents and our shared future first.

Sincerely,

Desiree Dodd
desdodd@gmail.com
818-795-8600

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA Planning Commissioners,

I am reaching out to express my support for FivePoint's plans for Valencia by FivePoint, and, more specifically, the Valencia Commerce Center (VCC) and Entrada South proposals. VCC continues to strengthen our region's economic resilience by attracting businesses in a wide range of industries, from aerospace to healthcare.

This isn't just development for its own sake. It's about building a diverse and balanced economy, creating good-paying local jobs, and reducing commute times by keeping work closer to home. By approving this next phase, you'll help continue to make the region attractive for employers. Pairing the next phase of VCC with 1,000+ new housing units in Entrada South makes it possible for more people to live where they work— a benefit for quality of life, traffic reduction, and environmental responsibility.

FivePoint has already proven they can deliver. This next step is vital to continuing that success and vision – please support Valencia by FivePoint.

Sincerely,

Jeff Myers
jeff@oakridgelandscape.net
661.295.7228

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the LA County Planning Commission—

Valencia by FivePoint is a clear win for both the Santa Clarita Valley and, more broadly, Los Angeles County. It is an economic and environmental asset for the entire region. I support the community and its next phase, Entrada South and the next piece of the Valencia Commerce Center.

From helping to alleviate the housing shortage to fueling business development and investing in sustainability, Valencia by FivePoint is setting an example for the rest of the region. Entrada South and the new stage of the Valencia Commerce Center represent important strides toward completing the Valencia vision, which will create lasting benefits for the County.

Please continue to support this project!

Sincerely,

Jim Ventress
jimventress78@gmail.com
661.857.4220

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Los Angeles Planning Commission,

I support the next phase of Valencia by FivePoint because it aligns housing with local employment, encourages eco-friendly transportation options, preserves the open space we all rely on, and fuels the business climate of the Santa Clarita Valley. Entrada South will create more than 1,000 additional housing units, helping to relieve the regional housing crisis.

I encourage you to support the Entrada South and Valencia Commerce Center proposals!

Sincerely,

Lawrence Fleischmab
Larry@fleischmanassociates.com
661-240-7299

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commission—

FivePoint is investing in the entire Santa Clarita Valley community, and that is why I am writing to express my support for the Valencia by FivePoint community. Here are a few examples:

The community is achieving net-zero greenhouse gas emissions through a variety of investments within the community, in LA County, and elsewhere in the State.

FivePoint is investing millions in open space conservation and habitat conservation and restoration, including in the High Country and along the Santa Clara River wetlands.

FivePoint has invested heavily in transportation improvements across the region, not only within the Valencia community but also widening roads and improving major interchanges to reduce congestion for all community members.

This is a proposal that will benefit the entire county, and I urge you strongly to approve Entrada South and Valencia Commerce Center without delay.

Sincerely,

Jay Julien
usajay@aol.com
(661)478-3800

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Regional Planning Commissioners,

I'm writing in strong support of Valenica by FivePoint's proposed next phase, which includes the continuation of the economically vital Valencia Commerce Center. This project will extend FivePoint's proven track record of contributing to a business-friendly, thriving Santa Clarita Valley that benefits everyone.

The Commerce Center is already home to businesses in aerospace, finance, and healthcare, and its expansion will allow more job-generating companies to join a growing regional economy. With Entrada South adding new homes nearby, this plan enhances the jobs-to-housing balance that improves quality of life and reduces traffic congestion, among many other advantages.

FivePoint has helped deliver a sustainable, dynamic community, and this next phase deserves to move forward.

Sincerely,

Scott Heffernan
scottheffernan@scvedc.org
6612884408

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

Valencia by FivePoint's commitment to sustainable development is nothing short of groundbreaking. It is one of the largest communities of its kind in the nation to pledge carbon neutrality, proving we can address climate change and provide meaningful relief for our regional housing crisis all at the same time.

FivePoint is now seeking your vote for Entrada South and the next phase of the already-thriving Valencia Commerce Center. Entrada South is a mixed-use neighborhood that will deliver 1,000+ more homes, as well as retail space. Valencia Commerce Center will add millions of square feet of commercial space for important local jobs.

Thank you for your consideration – I look forward to seeing the long-term Valencia vision brought to life!

Sincerely,

Christine Healy
brokerchristine@gmail.com
6617330759

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

I would like to express my support for the Valencia by FivePoint community. Already, it is home to 3,500 residents and offers a wide range of amenities for residents, including pools, parks, a community garden, trails and open space, and much more. The Valencia Commerce Center, a thriving business park nearby, houses numerous quality businesses that generate jobs and power the regional economy. The proposed next stage, Entrada South and additional space at Valencia Commerce Center, will build on this important jobs and housing creation.

Valencia by FivePoint also prioritizes clean energy transportation and public transit to decrease our reliance on cars and protect the environment. This is a great project that deserves to move forward.

Sincerely,

Jim Tanner
Jimtanner@realtyexecutives.com
661 964-1700

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

As a Valencia by FivePoint resident, I just have to say – I love living here! From our warm and welcoming community and family-friendly events, there's no place I'd rather call home.

FivePoint has done an incredible job at creating this unique neighborhood where I know my neighbors and it feels like a real community.

I am excited about the proposed plans for Entrada South and Valencia Commerce Center, especially the added amenities, added NEV and walking trails, and potential new community members.

I genuinely believe these additions will make Valencia even better, and I fully support FivePoint in the next phases of the development process.

Sincerely,

Nikki Buckstead
nikkibuckstead@gmail.com
916.247.0099

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commissioners,

The Valencia by FivePoint community has my full support because it addresses the housing crisis in a meaningful way.

L.A. County has made very poor progress toward meeting the housing allotment required in our Housing Element. We're not even 10% of the way to our goal! The Entrada South project will make a real difference, bringing more than 1,000 new homes to the community. Long-term, the Valencia by FivePoint community is planned to include up to 21,000 homes, which will provide high-quality housing for individuals, families, seniors, and all those looking for a safe and stable place to live in our beautiful County.

In tandem with the proposed commercial space in the next phase of the Valencia Commerce Center, and impressive sustainability and mobility programs, this is a well-rounded proposal that will benefit our entire region.

Please join me in my support for Entrada South and Valencia Commerce Center. Thank you so much.

Sincerely,

Felicia Grady
scvfelicia@gmail.com
661-964-1690

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I'm a resident of Valencia by FivePoint, and I am looking forward to the continued growth of my community with the next step: the mixed-use Entrada South and commercial Valencia Commerce Center.

On a personal level, the 1,000+ homes planned means more families who can enjoy the community and new friends. On a macro level, it will help LA County address its urgent housing goals (which we're currently lagging far behind on). Plus, the Valencia Commerce Center will attract even more job-generating companies and strengthen the economic vitality of our unique region.

Say 'yes' to Entrada South and the Valencia Commerce Center!

Sincerely,

denise mitchell
housesbydenise@yahoo.com
6613136860

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. Planning Commissioners,

I would like to express my full support for the next phase of Valencia by FivePoint.

I care deeply about the long-term health of the Santa Clarita Valley, and FivePoint's thoughtful planning shows they are a reliable and community-focused partner. Valencia by FivePoint has already created a vibrant, sustainable, and inclusive community that seamlessly blends housing, jobs and innovation. With its location less than 10 miles from the LA City border and within the entertainment studios' 30-mile zone, Valencia has great potential to add substantial economic value to the region.

The next pieces of the community, Entrada South and Valencia Commerce Center, will benefit the entire County, and I hope you will join me in supporting the project.

Sincerely,

Roxie Ramey
roxie.ramey@gmail.com
661-803-1647

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I am thrilled to support the plans for the next phase of Valencia by FivePoint -- Entrada South and Valencia Commerce Center. I am a resident of Valencia by FivePoint, and I really value the easy access to parks and trails in our community. Overall it's very easy to make planet-friendly choices here, such as using the Level 2 EV charger in our garages, relying on clean solar energy generated by rooftop EV panels, and taking advantage of the community's sustainable mobility program.

I am looking forward to the additional housing planned for Entrada South and the inclusion of some retail on the property. Plus, Valencia Commerce Center's next phase will bring additional quality local jobs to the community. I wholeheartedly support FivePoint's vision for the next phases of Valencia. Please say "yes"!

Sincerely,

Pam Ingram
Pamingram@pamingram.com
661-312-4428

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission:

FivePoint is an environmental leader in Los Angeles County. Not only is the Valencia by FivePoint community built with energy-efficient designs, but the company invests in sustainability initiatives outside the borders of Valencia, including installing EV chargers, solar roofs, and pool covers across the county. Additionally, FivePoint will be investing millions in funding for permanent habitat conservation and stewardship in the High Country area and along the Santa Clara River.

A vote for Valencia by FivePoint is a vote for a sustainable future in LA County!

Sincerely,

Joseph Satorhelyi
Joe@scvsfsa.net
661-755-7924

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Planning Commission,

Valencia by FivePoint is different. They've proven that they can create housing – at scale -- while protecting the environment, supporting clean transportation, boosting the economy, and increasing quality of life for the entire region.

With Entrada South and the next phase of the Valencia Commerce Center, FivePoint is continuing a plan that's already working. It's balanced, it's forward-thinking, and frankly, it's what all communities should aspire to become.

Let's keep this momentum going. Please move these proposals forward and support Entrada South and the Valencia Commerce Center.

Sincerely,

Gary Saenger
gsaenger@saengerassociates.com
805.573.6255

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Planning Commissioners,

Valencia by FivePoint delivers economic benefits to the entire region, and I am excited about the community's continued growth. The Santa Clarita Valley is already one of our region's most business-friendly areas, and this proposal will only deepen that well-deserved reputation. The Valencia Commerce Center commercial campus is home to many job-producing businesses in diverse industries, including aerospace, healthcare, entertainment, and more. Now, FivePoint is proposing to bring millions more square feet to VCC to create even more local, quality jobs.

I hope you'll join me in supporting the Valencia by FivePoint proposals!

Sincerely,

Whitney Saenger
wsaenger@saengerassociates.com
619-261-5653

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. Planning Commissioners,

I'm writing to express my support for the next phase of Valencia by FivePoint, Entrada South and Valencia Commerce Center. Valencia by FivePoint brings together so many important pillars of a healthy community— high-quality housing, good-paying local jobs, abundant park space, and innovative environmental responsibility. It reflects the kind of thoughtful, community-centered living we need more of in L.A. County.

FivePoint has been a trusted presence in the Santa Clarita Valley for years. Their partnerships with environmental and nonprofit groups show that they're deeply committed to the entire community. I hope you'll approve this next step and continue supporting a team that puts LA County first.

Sincerely,

John Prabhu
john@lanorthstudios.com
818.203.1164

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

I support the next phase of Valencia by FivePoint because it will create thousands of jobs (permanent and construction) and provide long-term benefits through a stronger local tax base.

The planned commercial area in Valencia Commerce Center will make room for more employers, while the homes in Entrada South help keep the jobs-housing ratio strong and stable -- something we need more of in Southern California.

Tax revenue from this project will help fund essential services like schools, emergency response, and infrastructure. These are the kinds of projects that create both short-term and lasting impact.

Please approve Entrada South and Valencia Commerce Center.

Sincerely,

Holly Prabhu
hrdolly@aol.com
661-878-1141

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

As a business resident of Valencia by FivePoint, I want to express my strong support for the proposed retail space at Entrada South. Our community has been thoughtfully planned, and these additions would further enhance what is already a vibrant and welcoming place to live and work.

More retail and amenities within walking distance would be a meaningful improvement for both residents and employees. It would add convenience without compromising the charm and character that make Valencia so special.

Our business thrives here because Valencia is a place where people genuinely enjoy spending time. That's a direct result of FivePoint's commitment to creating beautiful, well-designed spaces—parks, trails, and gathering areas that foster a strong sense of community. Adding new homes and retail simply means more people will have the opportunity to experience all that makes this area exceptional.

Thank you for your consideration.

Ana Fonseca

President & CEO

Logix Federal Credit Union

afonseca@lfcu.com

CC: Los Angeles County Board of Supervisors

Re: *SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)*

I have been a practicing physician and business owner for over 40 years and have witnessed the growth of the city. I fully support the development in Valencia by FivePoint.

They have been involved with creating a wonderful environment where residents feel safe and healthy in LA County. This is a place we are all proud of and have supported and contributed to its growth.

Sincerely,

Vinod Assomull
vinsnim@gmail.com
818.321.5800

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commission--

I fully support the next phase of Valencia by FivePoint, including Entrada South and the growth of the Valencia Commerce Center. This project will bring local housing, support thousands of jobs, and help maintain the Santa Clarita Valley's strong economy.

VCC will create space for even more companies to establish themselves in the Santa Clarita Valley and deliver job opportunities for our community across industries like aerospace, healthcare, and engineering. This is a smart plan that benefits the entire region.

Say 'yes' and support more jobs and a stronger economy in the Santa Clarita Valley!

Sincerely,

Kennneth Aldrich
ken@oarkdigelandscape.net
818-335-0068

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners,

I am writing to share my support for Valencia by FivePoint. Me and my family moved to Castaic almost 3 years ago, we previously lived in Canyon Country, moved to San Fernando Valley for a while but always wanted to come back to Santa Clarita. Our main focus has always been our safety, being able to participate in all sorts of activities within the area in a safe environment and believe in our neighbors. We decided to leave the SFV due to all kind of issues that made our lives miserable sometimes.

Commissioners: Please allow more housing projects, more families within our valley, more histories told. Valencia has become the more sought after area for young families to move to, lets make sure there is room for everyone here!

Sincerely,

Miguel Amado
migueamado@yahoo.com
818.645.4525

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

I write to you as a devoted supporter of the new entitlements for Valencia by FivePoint, which has proven that we don't need to choose between environmental sustainability, economic prosperity, and a high quality of life.

Entrada South and Valencia Commerce Center will build on the successful Valencia vision while achieving trailblazing standards of environmental responsibility. From preserving vast expanses of open space to implementing zero-net energy building designs, not to mention providing crucial protection for plant species, FivePoint continues to be a leader in meaningful sustainability. Their work shows that easing our housing crisis while embracing land conservation and climate resilience can all go hand in hand, and I urge you to support these proposals without delay!

Sincerely,

Marcus Cannon
mwcannon1@gmail.com
818-270-4538

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Commissioners,

I'm writing in strong support of Valenica by FivePoint and its proposal for the next phase of the Valencia Commerce Center. FivePoint has a proven track record of contributing to a business-friendly, thriving Santa Clarita Valley that benefits everyone, and I am honored to support their vision for Valencia by FivePoint.

The Valencia Commerce Center is already home to businesses in aerospace, finance, and healthcare, and its expansion will allow more companies to join a growing regional economy. With Entrada South adding new homes nearby, this plan enhances the jobs-to-housing balance that benefits residents and reduces traffic.

FivePoint has helped shape a sustainable, vibrant community, and this next phase deserves to move forward.

Sincerely,

Rafaela Serna
rserna@oakridgelandscape.net
661-936-7418

CC: Los Angeles County Board of Supervisors

Re: *SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)*

Dear Regional Planning Commissioners,

I am pleased to support Valencia by FivePoint, a net-zero community already home to 3,500 residents. Now, FivePoint is seeking County approval for Entrada South, which sits at the "front door" to the community and includes plans for new retail space and more than 1,000 new residences, ranging from apartments and townhomes to single-family detached condos. This is a great plan that addresses the region's urgent housing needs, and I think it is worthy of our support.

Thank you for your consideration.

Sincerely,

Ralphy Serna
rafaelaserna@gmail.com
818.714.3011

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Planning Commission,

I strongly endorse Valencia by FivePoint, leading the way for master-planned communities across the nation. From preserving open space to supporting job creation and providing new homes, it strikes the perfect balance.

The Entrada South and Valencia Commerce Center proposals build on this thoughtful foundation and reflect what smart, regional planning should look like. And, the benefits of Valencia by FivePoint extend far beyond the Santa Clarita Valley.

This is a responsible, well-rounded project that deserves your support to move forward.

Sincerely,

Troy Hooper
troy@krpusa.com
720-570-6169

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Los Angeles Regional Planning Commission,

As someone with enormous respect and affection for the Santa Clarita Valley, I am excited to support the Valencia by FivePoint community. It's a cutting-edge place to both live and work sustainably in northern L.A. County, near the County's 3rd-largest city.

The proposal to create Entrada South and Valencia Commerce Center will help advance the full Valencia vision, which many residents are excited about. Long-term, the community may include up to 21,000 homes and numerous parks, 50 miles of hiking and biking trails, and 10,000 acres of permanently protected open space, as well as fire stations, a library, and community gathering spaces. This is a bold vision that all of us can rally around.

Please vote 'yes'!

Sincerely,

Rob Cramer
robc5890@gmail.com
530.217.8230

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA County Regional Planning Commission –

I am writing in support of the Valencia by FivePoint proposal, which will create jobs and support the economic prosperity of the Santa Clarita Valley. The entitlement package includes the mixed-use Entrada South and the next stage of the Valencia Commerce Center, a thriving business park. This will welcome even more businesses into the region and create thousands of family-supporting jobs. Combined with the new housing to come in Entrada South, the proposals will help maintain a healthy jobs-housing balance.

This plan has earned my support, and I encourage you to vote ‘yes’!

Sincerely,

Jessica Drake
jesserbean79@gmail.com
661.295.7228

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Regional Planning Commission—

I enthusiastically support the Valencia by FivePoint entitlement package, including the Entrada South mixed-use neighborhood and the next piece of the Valencia Commerce Center (VCC).

VCC is already a prosperous business park, and its continuation evolution -- along with new housing and retail -- will fuel the business climate and economy of the Santa Clarita Valley.

Please join me in supporting VCC and Entrada South.

Sincerely,

Lindsay Myers

rrmissbrookes@gmail.com

661-478-6598

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I support Valencia by FivePoint due to the company's commitment to smart and transportation-focused planning. In addition to adding more than 1,000 homes, the Entrada South neighborhood is planned to include enhanced walkability and access to cleaner mobility options.

FivePoint's investment in transportation infrastructure within the community includes electric vehicle pathways, walking trails, and a planned mobility hub. Through the ValenciaGO program, some homeowners can even receive subsidies for zero-emission vehicles and receive free transit passes, making it even easier to get around without a car.

This kind of planning doesn't just reduce traffic impacts, it promotes healthier lifestyles and smarter transportation choices. Please support the Estrada South and Valencia Commerce Center proposals.

Sincerely,

Gretchen Halstead
Gretchen029@aol.com
818.470.7127

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Commissioners,

I am a strong supporter of Valencia by FivePoint, namely because it seamlessly brings jobs and housing together in a way that benefits the entire region. The Valencia Commerce Center is already home to businesses in fields like aerospace, engineering, and healthcare, and the next phase – bringing it to near completion -- will create more space for quality employers.

With Entrada South adding new homes nearby, more residents will have a chance to live closer to where they work. That means less time commuting, less traffic, and more opportunities for working families.

This balanced approach to community-building from FivePoint supports both our economy and our quality of life. I respectfully urge your support of Valencia.

Sincerely,

Fred Arnold
Fred@fredarnold.com
818-612-5626

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commissions,

I support the next phase of Valencia by FivePoint because it will create jobs, housing and protect the environment. Having up to 3.4 million square feet of additional commercial space at the Valencia Commerce Center means more jobs in industries with room to grow, while Entrada South provides price-attainable housing options nearby.

This approach fuels local hiring, powers our economy, and ensures that the Santa Clarita Valley remains a “land of opportunity.” It’s a smart investment in the region’s future, and I urge you to move it forward.

Sincerely,

Andrea Carpenter
andrac525@gmail.com
626.588.7151

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Planning Commission:

As a Valencia by FivePoint resident, I am excited to support the next phase of my community. Entrada South will bring more than 1,000 new homes to the community, as well as retail options. The next stage of the Valencia Commerce Center will build on the existing office park and boost the economy.

I especially appreciate Valencia's commitment to environmentally-friendly living. It is so important to protect our planet, and living at Valencia by FivePoint makes it easy to make smart, sustainable choices.

Please vote 'yes' and allow FivePoint to keep building on its success.

Sincerely,

Richard Dunbar
rdunbar3926@gmail.com
8186128038

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Planning Commission,

Living in Valencia by FivePoint has transformed how I see community. A house here is really a home, and it offers me and my family a safe space to explore and grow together.

I appreciate the walking paths and look forward to seeing the planned trail network in its entirety.

ValenciaGO is an incredibly unique offering that really sets the community apart from others in the area. The fact that residents get free transit passes and homeowners are given subsidies for purchasing electric vehicles is inspiring and makes it easy to live sustainably.

Valencia by FivePoint is a model community, and I hope you see that and will vote in support of the entitlement plans.

Sincerely,

Matt Dierckman
matt.dierckman@colliers.com
3104283313

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Los Angeles County Planning Commission,

I support the Entrada South and Valencia Commerce Center proposals as part of Valencia by FivePoint's broader vision for a well-balanced community that maintains a strong jobs-to-housing ratio— a key factor in improving quality of life across the region.

By adding both new homes and commercial space, this effort helps reduce long commutes, strengthens neighborhoods, and create opportunities for local employment. This project will provide thousands of construction and local jobs while also contributing valuable tax revenue to support public services.

FivePoint has helped fuel the remarkable economic growth of the Santa Clarita Valley, and this next phase is an important step in that same direction. Please vote to move this project forward.

Sincerely,

Kiara Brown
kiara@calarts.edu
6614143005

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

Valencia stands in stark contrast to Los Angeles to the south. FivePoint helps continue to grow the Santa Clarita Valley economy, and I fully support the next phase of the community: Valencia Commerce Center and Entrada South.

The project will bring new opportunities to a thriving job market, with space for businesses in fields like engineering, entertainment, and healthcare. It also ensures that people have the option to live near where they work. With Entrada South providing additional housing, this supports both families and employers.

FivePoint's vision is not just about buildings-- it's about shared prosperity. Please approve this next step in a proven economic success story.

Sincerely,

Greg Geraci
gregory.geraci@gmail.com
8184811680

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission,

Valencia by FivePoint is setting a new standard for responsible, community-centered planning. Its long-term vision includes innovative sustainability and mobility initiatives, housing, and economic opportunity-- all in one well-connected, thoughtfully designed community.

The upcoming Entrada South project will deliver over 1,000 much-needed homes and walkable retail space. The next phase of the Valencia Commerce Center will create additional job space for high-quality, local employment.

FivePoint is building Valencia with an eye towards environmental care and meaningful community partnerships. I proudly support the proposal and encourage you to move it forward.

Sincerely,

Eric Angle
eangle@pmpmanage.com
7608021948

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission:

The Valencia by FivePoint proposal is an incredible undertaking that will provide numerous benefits to the greater Los Angeles region – and as a 15-year resident of Valencia, I am proud to support it!

The Valencia by FivePoint community is holistic, providing much-needed new housing to address our region's critical housing crisis. It also provides community gathering spaces and preserves open space in perpetuity. At the same time, the community is generating jobs and strengthening the business community throughout our region. Simply put, housing and jobs go hand in hand.

The next phase of the Valencia Commerce Center will create space for even more economic growth across a wide range of industries and contribute to the critical tax revenue that will fund vital public services. Meanwhile, Entrada South will provide additional housing our County needs.

This is a well-designed, thoughtful plan that will benefit LA County as a whole, and I look forward to seeing it brought to life.

Thank you.

Sincerely,

Kevin Tamaki
kevin.tamaki@yahoo.com
310-266-3284

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Regional Planning Commission of Los Angeles County:

In its proposal for Entrada South and the next phase of the Valencia Commerce Center, FivePoint will:

Create more than 1,000 additional homes to address the ever-worsening housing crisis

Attract job-generating employers and help create thousands of high quality, local jobs

Protect our natural open space and the beautiful Santa Clarita Valley High Country

Invest in a variety of transportation improvements, including road widening and new traffic signals

And a lot more

This is a trailblazing proposal that will bring many benefits to the entire County. I support it, and I hope you will, too.

Sincerely,

Dennis Sugasawara
dennis.sugasawara@gmail.com
6613735294

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Members of the Regional Planning Commission,

It's no secret that Southern California is facing an immense housing crisis—one defined by both supply and affordability. This crisis continues to place significant strain on our communities and our economy. Valencia by FivePoint is playing a meaningful role in addressing these challenges through thoughtful, sustainable development that serves the region's long-term needs.

Valencia is already home to more than 3,000 residents, and its next phases of growth—including Entrada South and the expansion of the Valencia Commerce Center (VCC)—reflect a smart, comprehensive approach to community building.

Entrada South will bring more than 1,000 new homes to the region, including affordable housing options that are critically needed. Simultaneously, the expansion of the Valencia Commerce Center will add vital job-generating commercial space, supporting growing businesses across various sectors and reinforcing Santa Clarita Valley's reputation as a business-friendly environment.

Together, these projects strike a thoughtful balance between housing and employment, helping to ease the housing shortage while also promoting economic vitality. The environmentally responsible planning behind both Entrada South and VCC will contribute to a higher quality of life for current and future residents alike.

I am proud to offer my full support for Valencia by FivePoint and encourage you to join me in supporting this visionary, community-focused plan.

Thank you.

Sincerely,

Tracy Shaw
tracyashaw@att.net
661.803.5686

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Regional Planning Commission,

I am writing to extend my ardent support of Valencia by FivePoint and their commitment to helping to meet the critical housing shortage in Los Angeles County and their sustainable development approach. It is one of the largest master-planned communities in the nation to pledge net-zero GHG emissions, proving we can address climate change and the urgent housing crisis simultaneously.

FivePoint is now seeking your vote for Entrada South and the next phase of Valencia Commerce Center. Entrada South is a mixed-use neighborhood that will deliver 1,000+ more homes, as well as retail space. Valencia Commerce Center will add commercial space for high-paying local jobs.

I commend FivePoint's commitment to creating a holistic community while protecting the planet, and hope you'll take this into consideration and move the project forward.

Sincerely,

Barry Gribbons
gribbobc@lavc.edu
661-510-9574

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. Planning Commission,

I am writing in strong support of FivePoint and its continued efforts to build a vibrant, sustainable future for our community.

FivePoint has set a national standard for thoughtful, responsible development through its work in Valencia. Beyond just building homes and business spaces, FivePoint has demonstrated a deep commitment to supporting local businesses and cultivating a beautiful, inclusive community culture that makes Valencia truly special.

Now, FivePoint is seeking approval for the next chapters in this vision: Entrada South—a mixed-use neighborhood with more than 1,000 new homes and community-serving retail—and the next phase of the thriving Valencia Commerce Center. These developments will provide meaningful solutions for our region: much-needed housing, opportunities for local businesses to grow, and a stronger, more resilient local economy.

I respectfully urge you to approve these plans and continue supporting the growth and prosperity of our beautiful community.

Sincerely,

Gina Boersma

Owner, Gina Bee Events LLC

Sincerely,

Gina Boersma
gina@ginabeeevents.com
661.714.1850

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission,

I am writing in strong support of the proposal for the next stage of the Valencia by FivePoint project in the Santa Clarita Valley.

FivePoint has repeatedly demonstrated what it means to be a responsible and community-minded partner that invests in the people and future of this valley. The company's ongoing partnerships with local nonprofits, schools, and environmental organizations are proof that they're working cooperatively to improve our region.

The proposals for Entrada South and the continuation of the Valencia Commerce Center will build on the successful first phase of Valencia. The community is already home to more than 3,500 residents, and Entrada South will add more than 1,000 additional homes at a range of price points. At the same time, VCC will increase access to local job opportunities and boost the economy.

This is exactly the kind of smart and balanced development Los Angeles County should champion.

Say "yes" to these entitlements!

Sincerely,

William Walk
william.walk@colliers.com
818-334-1898

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission—

I am reaching out to share my deep support for and excitement about Valencia by FivePoint. The community's long-term vision includes up to 21,000 homes, thousands of construction and permanent jobs, public parks and other amenities – all while maintaining net zero greenhouse gas emissions.

The next phase (the Entrada South and Valencia Commerce Center projects) includes 1,000+ additional housing units, including some that are designated affordable, as well as community-serving retail, and millions of square feet in commercial space that will create quality local jobs. This will benefit the Valley in the short and long term, and it deserves our support!

Thank you!

Sincerely,

Shane Cameron
scameron@pmpmanage.com
661-295-4900

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

Valencia by FivePoint sets the standard for how master-planned communities can build housing sustainably. At Valencia by FivePoint, all homes include a Level 2 EV charger and solar panels -- and FivePoint is making similar investments across L.A. County through partnerships with nonprofit organizations like Climate Resolve, GRID Alternatives, and the LA Dodgers Foundation.

They're also committing up to $15 million for permanent habitat conservation in the Santa Clarita Valley and permanently protecting 10,000 acres of open space at the full buildout of the community.

Please approve the plans for Entrada South and the Valencia Commerce Center, the next phase of Valencia by FivePoint, to support this smart, sustainable community.

Sincerely,

trestles Provincia
rprovincia@pmpmanage.com
6612954900

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Hello,

I am Sarah Bothwell, I work with Gina Bee and her swarm. I've worked a lot of the events hosted and the home showings in the five point area and at the porch. This community has grown so much and is truly coming a SCV staple! The community itself is beautiful and so well kept. The people who live and visit this community are so welcoming and friendly. The events host (Friday night happenings, farmers market, pumpkin patch, etc) are so much fun and so creative. I love the way for all the different events hosted, you bring in local and small business owners to support! I really enjoy working and being apart of this community, keep up the amazing work.

Sincerely,

Sarah Bothwell
Sarah.bothwell@yahoo.com
661.600.5506

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the LA Regional Planning Commission,

As a Santa Clarita resident, I believe managed growth is essential to maintaining the quality of life and economic vitality of our community. Over the years, I've seen how thoughtful planning and development have allowed Santa Clarita to become one of Southern California's strongest economic centers, and I believe FivePoint has played a key role in achieving that balance.

Their long-term investment in our region—supporting Henry Mayo Newhall Hospital, preserving open space, building much-needed housing, generating millions in tax revenue, and creating thousands of jobs—has strengthened our city in meaningful ways.

If we want to continue attracting new businesses and providing opportunities for future generations, we must also ensure that we have the housing to support that growth. The proposed Entrada South and Valencia Commerce Center projects are a step in the right direction and reflect the type of balanced development Santa Clarita needs.

I urge you to vote in favor of the Valencia by FivePoint projects to help sustain our community's momentum and keep Santa Clarita thriving.

Sincerely,

Alison lindemann
alison@wsiebiz.com
3239746803

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I am writing to you because FivePoint has created a plan to deliver much-needed housing and economic vitality to our County while also preserving the vast tracts of open space, plant and animal habitat that make our region so special.

Valencia by FivePoint will set aside a huge area for parks, trails, and wildlife, ensuring that our community continues to enjoy its scenic beauty and natural heritage. The total open space in Valencia totals more than twice the size of Griffith Park, and almost 12 times the size of Central Park in New York!

The plan also includes well-designed pathways for walking and biking, which will encourage outdoor recreation and community engagement.

By protecting these green spaces, we are not only conserving nature but also enhancing our quality of life and integration with these wonderful spaces.

I think their balanced approach is a model for how we can achieve sustainable growth, and their proposal has my full support.

Sincerely,

Bri Kilmartin
events@happytrailsbar.co
661-360-6757

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

As a proud resident of Valencia by FivePoint, I'm excited about what's ahead and fully support the proposed next phase for my community. My family and I really appreciate the energy and thought behind this community—from clean, walkable trails to fun events like Earth Day and Friday Night Happenings. We've already made great friends with fellow Valencians!

What we need now is more local retail to serve our growing needs and more homes so we can have more neighbors to enjoy. I trust FivePoint to do what's best for the community, as well as the greater Santa Clarita Valley, and I support this project wholeheartedly.

Sincerely,

Recyl Chapman
RecylChapman@gmail.com
661.255.4200

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commissioners,

FivePoint's vision for Valencia has always balanced thoughtful growth with the needs of the community, and the plans before you for Entrada South and Valencia Commerce Center are no exception.

These projects are planned to bring over 1,000 homes, essential space for community-serving retail space, and office space for job-supporting businesses – all while preserving land and prioritizing environmentally-friendly living.

Supporting these entitlements is a step toward building a stronger, more resilient Santa Clarita Valley. I encourage you to approve the plans before you.

Sincerely,

Peyton Poulsen
Peyton.poulsen23@gmail.com
661.670.3803

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

FivePoint is building a beautiful community – Valencia by FivePoint – and it is one of the most sustainable, forward-thinking communities in the nation with a commitment to net-zero greenhouse gas emissions.

FivePoint is more than a real estate company. They are a partner in building communities to last, caring for the long-term wellbeing of their residents and the natural world around them.

Kudos to FivePoint.

Sincerely,

Cailee Poulsen
cepoulsen21@gmail.com
661.670.3811

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

I fully support the next phase in the Valencia FivePoint development. Housing is a top need in the Santa Clarita Valley and I'm grateful that FivePoint is providing a community focused development that has sustainability at its core. Please move this development forward.

Sincerely,

Liz Seelman
Liz_del@yahoo.com
6263490080

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors:

FivePoint is a true partner working to better the entire Santa Clarita Valley, and I am a proud supporter of their Valencia by FivePoint master-planned community. The project brings needed housing and jobs, boosting the economy, all while maintaining net-zero greenhouse gas emissions. The entitlement package for Entrada South and the next stage of the Valencia Commerce Center will extend and deepen that positive impact.

FivePoint also goes above and beyond with innovative mobility initiatives, including the ValenciaGo program, which offers eligible homeowners subsidy reimbursements on the purchase of a zero-emission vehicle, neighborhood electric vehicle or electric bike. They even offer pre-paid transit passes to residents!

With your support, Valencia by FivePoint can continue to grow, evolve, and leave lasting benefits for the greater LA region.

Sincerely,

Bob Khalsa
bobfoxbat@gmail.com
6615134433

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Commissioners,

I support the next phase of Valencia by FivePoint, Entrada South and Valencia Commerce Center. It will be a key economic driver for the region, providing thousands of construction and local jobs that directly benefit the Santa Clarita Valley.

The next phase of the Valencia Commerce Center will add more than 3 million additional square feet to an already thriving business park. Paired with the new housing planned for Entrada South, this proposal supports an impressive jobs-to-housing balance that enhances quality of life for local residents. And let's not forget the tremendous tax revenue it will create to fund things like police protection, schools, senior services, libraries, and more.

FivePoint has already enabled thousands of jobs. This next phase continues that success and brings even more opportunity to the region. Please approve this important step forward.

Sincerely,

Robert Pallasch
Rpallasch@aol.com
6612977190

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Planning Commission,

As a Valencia by FivePoint resident, I fully support the plans for retail space at Entrada South. We could really use more shops and amenities within walking distance. These plans would make life more convenient without changing the character of our community.

FivePoint has already created something special with park space, well-maintained trails, and beautiful community gathering spaces. Adding more homes and retail means more people can share in what makes this place great.

Thank you for considering this next step.

Sincerely,

Henry Rodriguez
henrod007@gmail.com
6619161162

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. Regional Planning Commission,

On behalf of Landscape Development, Inc., I am writing to express our strong support for FivePoint and its continued development in the Santa Clarita Valley.

As a company that has proudly contributed to the landscape construction of the Valencia community, we have seen firsthand how thoughtful, well-executed development projects like this one bring lasting value—not only in the form of housing and infrastructure but in real opportunities for employment, community growth, and long-term prosperity.

The Santa Clarita Valley is a thriving economic engine for the region, thanks in no small part to FivePoint's ongoing investments. From supporting essential institutions like Henry Mayo Newhall Hospital to preserving open space and building much-needed housing, their commitment to smart, balanced growth has had a meaningful and measurable impact.

We are proud to work alongside national builders in helping bring this vision to life—creating beautiful, functional outdoor environments that serve both residents and the broader community. Developments like Valencia directly contribute to our local economy, generate construction and permanent jobs, and help address California's urgent need for more housing.

The proposed Entrada South and Valencia Commerce Center projects are important next steps in continuing this positive momentum. Having a healthy balance of homes and jobs is critical for a resilient, sustainable future, and we believe these projects help ensure that future for our region.

Please vote in favor of Valencia by FivePoint. Landscape Development, Inc. stands firmly in support.

Sincerely,

Annie Wright
awright@landscapedevelopment.com
6612951970

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Planning Commission,

Valencia by FivePoint offers more than housing. It delivers jobs, tax revenue, and public investment. The expanded Valencia Commerce Center will provide space for a diverse range of industries such as healthcare, technology, finance and others while generating critical tax revenue to support the public services we all rely on.

These business opportunities will help strengthen the local economy and support workforce needs across the region. At the same time, the 1,000+ planned homes in Entrada South help ease our housing crisis and promote a healthy jobs-to-housing balance.

This is a thoughtful approach to housing, and it deserves all of our support.

Sincerely,

Tricia Rasplicka
TriciaR603@gmail.com
8183227329

CC: Los Angeles County Board of Supervisors

Re: *SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)*

To the Los Angeles County Planning Commission,

Valencia by FivePoint shows that a master-planned community can serve both people and the planet. With more than 10,000 acres of open space planned, a net-zero emissions pledge, and ongoing investments in mobility, FivePoint has earned our trust.

The Entrada South and Valencia Commerce Center proposals continue this legacy. More homes, more local jobs, and new retail-- all part of a complete, connected community that strengthens the Santa Clarita Valley.

I stand with this project and hope you will give it your full support.

Sincerely,

Denise Lite
dplacencio@dacorsi.net
8185226482

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

Valencia by FivePoint deserves praise for its ongoing contributions to the region's economic health. The next piece of the Valencia Commerce Center will create new space for job-producing industries and generate thousands of construction jobs in the short term.

Santa Clarita is already recognized as one of the most business-friendly areas in Southern California, in part due to the foundation laid by FivePoint and the Valencia Commerce Center. FivePoint's holistic design approach thoughtfully connects employment opportunities with new housing, so families can live closer to work. This reduces traffic congestion and increases access to stable, local employment.

The Entrada South and Valencia Commerce Center proposals work together to support a balanced and forward-thinking community. I strongly encourage your approval.

Sincerely,

Barbara Myler
Barbara@SummitWestPR.com
6612902911

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA Regional Planning Commission,

I am deeply impressed by Valencia by FivePoint's commitment to sustainable development. It is one of the largest master-planned communities in the nation to pledge net-zero GHG emissions, proving we can address climate change and the urgent housing crisis simultaneously.

FivePoint is now seeking your vote for Entrada South and the next phase of Valencia Commerce Center. Entrada South is a mixed-use neighborhood that will deliver 1,000+ more homes, as well as retail space. Valencia Commerce Center will add commercial space for high-paying local jobs.

I commend FivePoint's commitment to creating a holistic community while protecting the planet, and hope you'll take this into consideration and move the project forward.

Sincerely,

Karina Winkler
gm.hixva@excelhotelgroup.com
16198842011

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners:

Valencia by FivePoint successfully blends housing, mobility, job growth and sustainability. I applaud FivePoint for creating a model master-planned community. It is exactly what LA County needs, and I am in favor of the Valencia by FivePoint proposal to add crucial housing in the Entrada South neighborhood and bring needed jobs in the next phase of the Valencia Commerce Center, a focal point of the regional economy.

Sincerely,

Marina Eliopulos
Marina.eliopulos@yahoo.com
6618572002

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners:

Valencia by FivePoint successfully blends housing, mobility, job growth and sustainability. I applaud FivePoint for creating a model master-planned community. It is exactly what LA County needs, and I am in favor of the Valencia by FivePoint proposal to add crucial housing in the Entrada South neighborhood and bring needed jobs in the next phase of the Valencia Commerce Center, a focal point of the regional economy.

Sincerely,

Andrew Eliopulos
Andrew@ajeliopulos.com
6618572002

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission—

I am reaching out to share my deep support for and excitement about Valencia by FivePoint. The community's long-term vision includes up to 21,000 homes, thousands of construction and permanent jobs, public parks and other amenities – all while maintaining net zero greenhouse gas emissions.

The next phase (the Entrada South and Valencia Commerce Center projects) includes 1,000+ additional housing units, including some that are designated affordable, as well as community-serving retail, and millions of square feet in commercial space that will create quality local jobs. This will benefit the Valley in the short and long term, and it deserves our support!

Thank you!

Sincerely,

Rula Eliopulos
Rula.eliopulos@yahoo.com
6618028570

CC: Los Angeles County Board of Supervisors

Re: *SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)*

Dear L.A. County Planning Commission,

The Valencia by FivePoint proposal is worthy of the County's support. FivePoint is designing Valencia by FivePoint to be a healthy community that promotes healthy living, protects our great outdoors, and encourages community investment. These core values, paired with extensive sustainability initiatives and additional housing and retail opportunities, demonstrate it is a well-planned community that anyone would be lucky to call home.

I happily lend my support to Valencia by FivePoint, and encourage you to do the same.

Sincerely,

Yianni Eliopulos

Yianni.eliopulos@yahoo.com

6617537302

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA County Regional Planning Commission--

I'm writing in support of FivePoint's continued investment in mobility and transportation infrastructure in LA County. Within the Valencia by FivePoint community, they have designed miles of walking trails and electric vehicle pathways, and have a planned mobility hub. Beyond Valencia, FivePoint has invested millions in transportation improvements in the area, including road widening, new signals, and other upgrades at key intersections and along major interchanges, with future transportation investments planned for our region.

These kinds of investments promote healthier living and less congestion—not just in Valencia, but across the area. I urge you in the strongest possible terms to support Valencia by FivePoint.

Thank you!

Sincerely,

Luis Perdomo
Lperdomo77@yahoo.com
6613902198

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

Valencia by FivePoint continues to strengthen the regional economy, and I fully support the next phase of the community: Valencia Commerce Center and Entrada South.

The project will bring new opportunities to a thriving job market, with space for businesses in fields like engineering, entertainment, and healthcare. It also ensures that people have the option to live near where they work. With Entrada South providing additional housing, this supports both families and employers.

FivePoint's vision is not just about buildings-- it's about shared prosperity. Please approve this next step in a proven economic success story.

Sincerely,

John Lite
johnlite15@gmail.com
661-713-0192

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. Regional Planning Commission,

The Santa Clarita Valley is an economic driver for the region, in large part due to FivePoint's investments in this area.

The company has invested in the region for many decades, supporting Henry Mayo Newhall Hospital, protecting our open space, building much-needed housing, generating millions in tax revenue, and creating thousands of permanent and construction jobs. And that's really just scratching the surface. The proposed Entrada South and Valencia Commerce Center projects will build on that legacy.

Having a balance of jobs and homes is important, and this plan helps ensure our community continues to be a leader in providing both.

Please vote in favor of Valencia by FivePoint!

Sincerely,

Alan Rasplicka
Arasp2003@aol.com
8189703569

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I am writing today because I support the proposal before you for the Valencia by FivePoint community.

I am a current resident, and I fully support the proposals to create more housing.

This master-planned community represents an inspiring success story in L.A. County, including homes, businesses, and open space that is preserved and funded in perpetuity.

The proposed Entrada South neighborhood will bring more than 1,000 new homes, including designated affordable units, and the next piece of the Valencia Commerce Center will bring new space for job-generating businesses. The community is impressively achieving net-zero greenhouse gas emissions, and at full buildout will permanently protect 10,000 acres of beautiful Santa Clarita Valley open space. Long-term, the community will deliver even more housing and quality local jobs. That would be an extraordinary gift.

FivePoint is a true community partner, and I believe the proposal will uplift our entire region. Supporting this project means supporting a model for what future communities could and should be. Please say yes to a cleaner, smarter, more sustainable Santa Clarita Valley.

Sincerely,

Lilit Jizmejian
LilitL5@hotmail.com
818-355-8657

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

FivePoint is building a wonderful community – Valencia by FivePoint – in the Santa Clarita Valley, and it is already home to thousands of residents. In addition to creating much-needed housing, the company is permanently protecting about 2/3 of Valencia by FivePoint land. This preservation is just one part of FivePoint's longtime commitment to the environment.

FivePoint is also working on creating 50 miles of hiking and biking trails, has restored wetlands along the Santa Clara River, and is investing millions in habitat conservation. Now that's commitment to open space!

Both plans for Entrada South and Valencia Commerce Center will build on these conservation efforts – more than 60% of VCC will be designated as open space.

Please support these entitlements!

Sincerely,

Gary Jizmejian
gjizmejian@gmail.com
661-505-5161

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Los Angeles Regional Planning Commission,

As someone with enormous respect and affection for the Santa Clarita Valley, I am excited to support the Valencia by FivePoint community. It's a cutting-edge place to both live and work sustainably in northern L.A. County, near the County's 3rd-largest city.

The proposal to create Entrada South and Valencia Commerce Center will help advance the full Valencia vision, which many residents are excited about. Long-term, the community may include up to 21,000 homes and numerous parks, 50 miles of hiking and biking trails, and 10,000 acres of permanently protected open space, as well as fire stations, a library, and community gathering spaces. This is a bold vision that all of us can rally around.

Please vote 'yes'!

Sincerely,

Becki Robb
brobb44@gmail.com
6617546516

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Regional Planning Commission,

The Valencia by FivePoint community proves that housing and job creation, environmental protection, and innovative transportation solutions can all grow together. The planned next phase, Entrada South and Valencia Commerce Center, will continue that trailblazing vision.

FivePoint is a long-standing and trusted part of the Santa Clarita Valley business community, and I trust them to do what is best for us. I ask you to please support Entrada South and Valencia Commerce Center.

Sincerely,

Patrick Moody
patrick.moody5@gmail.com
6613839475

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Los Angeles Planning Commission,

As a resident of Valencia by FivePoint, I offer my support for the full Valencia vision without hesitation. This community is beautifully designed, but even more importantly, it feels like home. I support the next phase – Entrada South and the Valencia Commerce Center -- because I know what a thoughtful community-builder the FivePoint company is.

The weekly farmers market, family events, and community gatherings at our on-site parks make every week feel exciting. With new homes and businesses, we can welcome more neighbors, boost the local economy, and make everyday life even more convenient for everyone.

FivePoint has earned my support, and I hope you will vote 'yes' to this amazing community. Let's keep this success story going!

Sincerely,

Scharme Grider
Scharmegrider@equityunion.com
6616785417

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

I am writing in support of Valencia by FivePoint and its plans to deliver significant housing to the Santa Clarita Valley. The proposed Entrada South neighborhood will include over 1,000 homes at a variety of price points and much-needed retail space, creating a true mixed-use community.

Entrada South will provide walkable access to new retail opportunities for current and future residents that reduce the need for short car trips and improve the day-to-day convenience of the community. This is a practical and people-focused approach to planning, and I urge your support for the next phase.

Sincerely,

Ian Hwang
ian.hwang@bankofhope.com
2132353139

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I am writing today because I support the proposal before you for the Valencia by FivePoint community.

This master-planned community represents an inspiring success story in L.A. County, including homes, businesses, and open space that is preserved and funded in perpetuity.

The proposed Entrada South neighborhood will bring more than 1,000 new homes, including designated affordable units, and the next piece of the Valencia Commerce Center will bring new space for job-generating businesses. The community is impressively achieving net-zero greenhouse gas emissions, and at full buildout will permanently protect 10,000 acres of beautiful Santa Clarita Valley open space.

FivePoint is a true community partner, and I believe the proposal will uplift our entire region. Let's give them our support to keep going!

Sincerely,

Tony Flores
tonyflores101@gmail.com
6619040887

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Los Angeles County Regional Planning Commission and Board of Supervisors:

As a proud Valencia resident, I am writing in strong support of FivePoint's continued plans for our community, including Entrada South and the final portion of the Valencia Commerce Center.

I deeply appreciate FivePoint's ongoing commitment to sustainability—whether through EV chargers, drought-tolerant landscaping, or the use of recycled water. These efforts make me proud to live in a community that prioritizes innovation and environmental responsibility while creating a safe and welcoming place to call home.

My family has lived in Valencia for three years, and in that time we've experienced the gift of genuine community. Neighbors who started out as strangers have become dear friends, united by our shared gratitude for this beautiful neighborhood (and our love for our dogs—hoping a dog park is in the near future!). This sense of belonging was especially meaningful over the past year as our family walked through the heartbreaking loss of our 15-year-old son after a 5-year cancer journey. He loved living here, and both he and our daughter thrived in this community.

As Valencia continues to expand and grow, I am grateful to be part of a place that reflects the best of thoughtful planning, sustainability, and community building. I wholeheartedly support FivePoint's vision and look forward to seeing it continue to flourish.

Thank you for your time and thoughtful consideration.

Sincerely,

Shunna Jones-Moreno
shunnajm@gmail.com
8186797917

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

We love the charming area and the farmers market every Sunday ... wonderful addition to the community and LA, where families can still raise kids without worrying about safety and have a modern look and feel.

Sincerely,

Tamer Abdelaal
tamabdel@gmail.com
3105600038

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors,

Valencia by FivePoint is an important part of the Santa Clarita Valley. It is already home to more than 3,500 residents, many of them first-time homebuyers with young families. Entrada South, the front door to the community, is up next and will create an additional thousand-plus homes, including some designated affordable units, and retail space.

Valencia Commerce Center will bring space for job-generating businesses and boost the regional economy.

It is an incredibly well-rounded proposal, and I hope you'll join me in supporting it.

Sincerely,

Christian Lazore
christianlazore@gmail.com
8183989881

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Board of Supervisors,

I am excited to support the next step in Valencia by FivePoint. This master-planned community offers smart solutions to several of our region's most urgent challenges. It creates housing that working families can afford, provides commercial space that drives job creation, and respects the environment every step of the way.

What makes FivePoint stand out is their consistency. FivePoint and their earlier incarnation, the Newhall Land & Farming Company, have served this community for generations. They've delivered on past commitments and stayed true to their word every step of the way.

Please approve these plans and help bring even more opportunity to the Santa Clarita Valley.

Sincerely,

Josh Sinatra
Josh@SinatraRE.com
6617131036

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors,

Valencia by FivePoint blends what L.A. County needs most: new housing options, strong job creation, and a deep commitment to protecting the environment. Few projects approach land use with this kind of balance and purpose.

The Entrada South neighborhood will add new homes and community-serving retail, while the adjacent phase of the Valencia Commerce Center will support a wide range of job-producing industries. Together, these proposals represent a thoughtful investment in LA County's future. Valencia by FivePoint has already demonstrated its commitment to environmental stewardship and responsible planning and this next phase continues that work.

Please approve it!

Sincerely,

Frederick Tazartes
ftazartes@gmail.com
6617555834

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors,

I am an enthusiastic supporter of Valencia by FivePoint because it addresses the housing gap in one of the county's fastest-growing areas. With many homes to date sold below the L.A. County median home price, Valencia is offering real options for working families.

The Entrada South phase will add even more homes in a job-rich area, increasing the jobs to housing balance and improving quality of life. FivePoint's commitment to a balanced community — where people can live, work, and thrive— is something we need more of throughout our County and our State.

Please approve this next phase and keep going!

Sincerely,

Scott Edwards
nocommunityleftbehind@gmail.com
6613731034

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Board of Supervisors,

We all know Southern California is facing an urgent housing crisis, one that was worsened by the recent wildfires that left so many residents displaced.

FivePoint wants to continue being part of the solution, but they need your approval.

Valencia by FivePoint is already home to more than 3,000 residents, and many of the homes have been sold below the Los Angeles County median home price.

We cannot get out of our housing crisis unless we build more housing. FivePoint is stepping up to do just that. I support this 100 percent. Valencia by FivePoint seeks approval for Entrada South and more than 1,000 high-quality, beautiful homes to the area.

I urge you to support FivePoint and help us get the housing we so desperately need.

Thank you for your consideration.

Sincerely,

Jodie Francisco
jodiefrancisco@aol.com
8189703936

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

As a current resident of FivePoint Valencia, I can speak about the fantastic experience I have had. FivePoint created a beautiful, high-quality community for us to live in with a home that was in our price range. They also connected us with a community of neighbors and beautiful open space that makes living here special.

We are also extremely glad to be living in a place that we know is environmentally conscious, doing our part to help address the climate crisis.

I am pleased to see this community continue to evolve. I support these plans wholeheartedly.

Please approve Entrada South and the Valencia Commerce Center.

Sincerely,

Nicole Stinson
nicole@nicolestinson.com
(661)816-4234

CC: Los Angeles County Board of Supervisors

Re: *SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)*

To the Board of Supervisors,

I am writing to express my strong support for Entrada South and Valencia Commerce Center, the next phase of the Valencia by FivePoint project.

Valencia's use of solar energy, electric vehicle infrastructure, and preserved open space reflects a serious commitment to protecting our planet and reducing our collective environmental footprint. Plus, they have committed to being carbon neutral during both construction and operation of this expansive new destination. It is a holistic community that demonstrates how housing and jobs don't have to come at the expense of sustainability.

Please approve Entrada South and Valencia Commerce Center.

Sincerely,

Starr James
starrjamesrealtor@gmail.com
8185173318

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Board of Supervisors:

As someone who proudly lives at Valencia by FivePoint, I am a strong supporter of its proposals for Entrada South and Valencia Commerce Center.

I've been genuinely impressed by how much thought has gone into creating this thriving community. Every day I enjoy access to well-maintained walking paths, public parks, swimming pools, and green spaces where I can relax or take a stroll. The community garden and farmers market are also wonderful features of our community.

I support the plans for Entrada South and the Valencia Commerce Center because I believe in Valencia's long-term vision. I wish more communities had the same spirit and commitment to "doing development right."

Please join me and say 'yes' to Valencia by FivePoint!

Sincerely,

Mohamed Tantawi
mxt3216@gmail.com
818-648-8680

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commission,

I am writing as a Santa Clarita Valley resident and a supporter of the Valencia by FivePoint project.

Valencia is already a wonderful community, but FivePoint goes above and beyond in the greater L.A. region. For example, the company creates thousands of jobs and fosters an excellent jobs/housing balance that boosts the economy and quality of life for everyone in the region.

The company invests in sustainability initiatives outside the borders of Valencia, including installing EV chargers, solar roofs, and pool covers across the county. Importantly, FivePoint will be investing over time about $15 million in funding for permanent habitat conservation and stewardship in the SCV.

Plus, they have invested millions in transportation improvements in the area, including road widening, new signals, and other upgrades at key intersections and along major interchanges, with future transportation investments planned for our region. I think it's clear they have earned the right to allow their community to continue moving forward.

Please support Entrada South and Valencia Commerce Center.

Sincerely,

Michelle Rubenstein
poormichelle@gmail.com
213-272-9298

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. Planning Commission,

FivePoint has set a national standard for thoughtful, responsible development with Valencia by FivePoint.

Now, FivePoint is seeking approval for the next pieces of the community: Entrada South, a mixed-use neighborhood that includes more than 1,000 new homes and space for community-serving retail, and the next phase of the Valencia Commerce Center, an existing and thriving business park.

These entitlements deliver real solutions: housing for families, spaces for businesses to grow, and a stronger local economy. Please approve the plans.

Sincerely,

Graham Silver
graham@silvertunes.com
818-533-8863

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I am pleased to support the proposal for Valencia by FivePoint that addresses multiple community needs in a single, forward-thinking plan. This evolution thoughtfully merges residential development with commercial spaces, ensuring a healthy balance between housing, jobs, and leisure.

The design incorporates sustainable building practices, preserves a tremendous quantity of open space, and enhances local transportation networks. This holistic approach will spur economic growth while nurturing a vibrant, livable community.

Each of these components is vital to our region's success. This is a long-term investment to improve our County and quality of life, and I wish to see it take shape as quickly as possible.

Please join me in supporting these entitlements.

Sincerely,

Laura Raden
Laura@247-events.com
661.212.2684

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA County Planning Commissioners,

FivePoint is dedicated to protecting the environment as they go about creating a new master-planned community in the Santa Clarita Valley. The company has committed to investing in a wide array of sustainability investments:

-All new homes, commercial buildings, and public facilities within Valencia by FivePoint will be built with energy-efficient designs and technology.

-Homes have rooftop solar power.

-Every house is equipped with a Level 2 EV charger.

-They have made many off-site sustainability investments as well, including solar energy installations in disadvantaged communities throughout LA County.

Plus, they have introduced the ValenciaGo program, which offers eligible homeowners subsidy reimbursements on the purchase of a zero-emission vehicle, neighborhood electric vehicle or electric bike. And, they even offer pre-paid transit passes to residents through the program!

Approving plans for Entrada South and Valencia Commerce Center will enable FivePoint to continue making these incredible strides in the name of protecting the Earth. I support Valencia by FivePoint, and I hope you will, too.

Sincerely,

Monica Aquin
stsgirl_mo@yahoo.com
661-313-4320

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Regional Planning Commissioners,

I am writing to express my support for Entrada South and Valencia Commerce Center, the next two phases of the Valencia by FivePoint community.

This is a thriving and diverse community that makes homeownership accessible to thousands of families.

While helping to provide the housing our region desperately needs, FivePoint has made numerous investments in cutting-edge sustainability measures both on and off the site. They have also partnered with many important nonprofit organizations to help serve our entire region, including Climate Resolve, GRID Alternatives, and the L.A. Dodgers Foundation.

This community is an important part of the SCV community, and I hope you'll approve this plan promptly.

Sincerely,

Darcey Oldhafer
doldhafer@intertexcompanies.com
661-702-2262

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission,

The Valencia by FivePoint proposal is an incredible undertaking that will provide numerous benefits to the greater Los Angeles region – and I am proud to support it!

The Valencia by FivePoint community is holistic, providing much-needed new housing to address our region's critical housing crisis. It also provides community gathering spaces and preserves open space in perpetuity. At the same time, the community is generating jobs and strengthening the business community throughout our region.

The next phase of the Valencia Commerce Center will create space for even more economic growth across a wide range of industries and contribute to the critical tax revenue that will fund vital public services. Meanwhile, Entrada South will provide additional housing our County needs.

This is a well-designed, thoughtful plan that will benefit LA County as a whole, and I look forward to seeing it brought to life.

Sincerely,

Dale Donohoe
ddonohoe@intertexcompanies.com
661.702.2222

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I'm glad that FivePoint is continuing to invest in attracting jobs to the Santa Clarita region by completing the Valencia Commerce Center. High-quality, skilled jobs like those generated within VCC are highly valuable for our community. Having a balance of jobs and homes is important, and this plan helps ensure our community continues to be a leader in providing both.

I hope you will support this thoughtful, balanced proposal.

Sincerely,

Maribel Garth
mgarth@intertexcompanies.com
661.702.2263

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I fully support FivePoint's plans to bring additional housing, retail, and jobs into the community. I encourage the County to approve Entrada South, the "front door" to Valencia by FivePoint, which will bring new housing and community retail spaces. The entitlement package before you also includes the next phase of the already-flourishing Valencia Commerce Center, a valuable economic driver in the region that attracts job-generating businesses.

Please approve the Valencia by FivePoint entitlement package.

Sincerely,

Danielle Carter
dolsen@intertexpm.com
661.644.5555

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

Valenica is more than a collection of homes--it's an active, positive community I am proud to call home. It feels like every month we get a new invite for a community event hosted by Valencia by FivePoint that genuinely bring people together.

FivePoint is a proven community-builder with a well-earned reputation for creating thoughtful, well-designed places. I am thrilled they want to enhance Valencia with more homes, more shops (which we are very excited about), and more commercial space to attract jobs to our area.

I can speak very highly about FivePoint based on my experience living in Valencia, and I hope you will take this into account as you consider their project.

Sincerely,

Sincerely,

Gonzalo Guzman
guzmangee@gmail.com
818-391-3196

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

b L.A. County Regional Planning Commission

I am writing to express my support for FivePoint's plans for its community, Valencia by FivePoint. They are seeking approval for Entrada South and Valencia Commerce Center, which will bring housing, community retail, and spaces for local businesses to the region.

The Santa Clarita Valley is already one of our region's most business-friendly areas, in part due to Valencia by FivePoint and the Valencia Commerce Center. VCC is home to numerous job-producing businesses in diverse fields, including aerospace, healthcare, and financial services, and now FivePoint is seeking your approval for the next phase.

Valencia by FivePoint is already home to 3,000 residents, and Entrada South is planned to bring more than 1,000 new units to our community, including affordable units. Providing high quality homes allows employees to live near their jobs and spend less time on the road.

Valencia by FivePoint maintains a healthy jobs-housing balance, which strengthens quality of life in the region.

Please vote 'yes'!

Sincerely,

Jamie Lyon
jlyon@intertexcompanies.com
661.713.2903

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I am proud to support the Valencia by FivePoint project. I support the company and its new community for several reasons:

-Valencia by FivePoint is committed to net-zero greenhouse gas emissions and, at full buildout, will be one of the largest master-planned communities in the country to do so.

-Our county is in dire need of more housing, and FivePoint is providing it. The Entrada South plan will add more than 1,000 new homes, including affordable units, in addition to the housing already present in Valencia. Future phases will add even more housing.

-FivePoint is a huge economic driver for the region.

-Valencia by FivePoint will be setting aside two-thirds of its remaining L.A. County land – about 10,000 acres – as permanently protected open space.

These are all excellent reasons to support this proposal – I hope you agree!

Sincerely,

Jordan White
jwhite@intertexcompanies.com
661-702-2434

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

I am writing in support of the Valencia by FivePoint proposal. Already, the community is an important economic driver, and the project before you will continue to deliver benefits to the entire Santa Clarita Valley.

The proposed Entrada South neighborhood will bring 1,000+ new housing units, including affordable, and retail. The next piece of the Valencia Commerce Center will bring significant space for job-generating businesses to an existing and thriving business park.

These proposals represent a valuable opportunity to boost our regional economy and provide quality local jobs, and to address the housing crisis – which is more urgent than ever.

I hope you will join me in supporting this important project.

Thank you.

Sincerely,

Jessica Martucci
jmartucci@intertexcompanies.com
661-702-2271

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

I am writing in support of the Valencia by FivePoint proposal. Already, the community is an important economic driver, and the project before you will continue to deliver benefits to the entire Santa Clarita Valley.

The proposed Entrada South neighborhood will bring 1,000+ new housing units, including affordable, and retail. The next piece of the Valencia Commerce Center will bring significant space for job-generating businesses to an existing and thriving business park.

These proposals represent a valuable opportunity to boost our regional economy and provide quality local jobs, and to address the housing crisis – which is more urgent than ever.

I hope you will join me in supporting this important project.

Thank you.

Sincerely,

Joe Lopez
jlopez@intertexcompanies.com
661.702.2222

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles Regional Planning Commission,

I am writing to express my support for the Valencia by FivePoint project. The plan includes adding more than a thousand new homes to a thriving community along with new retail and commercial space.

I am so proud to support this community and its deep commitment to sustainability. Valencia by FivePoint, at full buildout, will be one of the largest master-planned communities in the nation to commit to net-zero GHG emissions. That is incredible!

Plus, Valencia is permanently preserving almost 2/3 of its land (10,000 acres!), helping our region continue its long legacy of beautiful open space to enjoy.

The community's commitment to sustainability and environmental responsibility is inspiring, and I hope you'll join me in supporting it.

Sincerely,

Sincerely,

CRISPINA TULPO
ctulpo@intertexcompanies.com
661-702-2270

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

Many of us appreciate the beautiful nature and majesty of the Santa Clarita Valley. I believe the FivePoint team embraces it too. You can see that very clearly in the details of their plan for Valencia, as well as in the Valencia community already here today. FivePoint is supporting nearby open space with conservation commitments and aid for local habitat, while also proposing new retail that will help us shop locally.

FivePoint's emphasis on building genuine, supportive communities sets them apart. From the community events that they host, to the design of walking paths and gardens, everything feels as though it is designed to bring residents together into a cohesive whole. FivePoint has perfected the Art of the Community. Now we would like to see them bring Valencia to the next level.

Please vote to support Entrada South and the Valencia Commerce Center.

Sincerely,

Jackie Lopez
jlope126@gmail.com
818-634-5698

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles Regional Planning Commission,

FivePoint's plans for building out the next phase of Valencia by FivePoint are designed with thoughtful mobility and transportation options in mind. With walking and biking paths, as well as zero-emission neighborhood vehicles and accompanying pathways, community members can get around without relying on cars.

The plans before you for Entrada South and Valencia Commerce Center will build on this by adding important linkage to the extensive walking and biking trail networks.

Plus, FivePoint invests in transportation improvements across the region, including working to widen roads and improve major interchanges to reduce congestion for all community members.

I am proud to fully support FivePoint's forward-thinking approach and hope you'll consider approving the project!

Sincerely,

Chelsea Clapham
chelseaclapham@live.com
661.755.5454

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Members of the Regional Planning Commission,

Valencia by FivePoint is proposing a smart, sustainable, and well-thought out project that addresses our community's needs.

The next piece of the Valencia Commerce Center will increase job-generating commercial space, adding to the flourishing center that already houses growing businesses in a wide range of sectors and helps power our economy. The development of this environmentally responsible plan promotes economic vitality and keep the Santa Clarita Valley a business-friendly area.

At the same time, the project will create more than 1,000 new homes in Entrada South, along with commercial and retail space, to help ease our unprecedented housing shortage.

Together, Entrada South and VCC will strengthen the region's jobs to housing balance and increase quality of life for local community members and the entire region.

I hope you'll join me in supporting Valencia by FivePoint.

Sincerely,

Michelle Lopez
Mj94lopez@gmail.com
818.634.6947

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission,

There is no question: we are facing a severe housing crisis. There are not enough homes, and those that are available are priced out of reach for too many. It is more important than ever to streamline and approve housing proposals like Valencia by FivePoint.

Mission Village, the existing neighborhood within Valencia by FivePoint, is already home to more than 3,000 residents. What's more, the community remains price obtainable compared to other regions.

The proposed Entrada South plan includes a wide variety of housing choices, including condos, townhomes, and single-family detached condos meant to serve first-time homebuyers and middle-class families. It also includes dedicated affordable housing, which is an important part of our housing mix.

This plan is exactly what the Santa Clarita Valley needs. Please support it!

Sincerely,

Brock Hamilton
bhamilton@intertexcompanies.com
661-964-9107

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA County Regional Planning Commission,

As a resident of Valencia by FivePoint, I can confidently say it's a great place to live! There are beautiful walking paths, a community garden, and public park space. And, importantly, FivePoint proves its commitment to the environment through its many sustainability programs.

FivePoint is now moving forward with bringing some retail space into the community with Entrada South. The proposed mixed-use neighborhood would make our lives easier and more walkable.

I hope you approve these entitlements!

Sincerely,

Amanda Aguirre
amandaj.goodin@gmail.com
661.993.4474

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the LA County Planning Commission:

FivePoint's long-term vision for Valencia addresses critical needs, including lack of housing, job opportunities, and community spaces, all while maintaining its commitment to sustainability and land stewardship.

With the plans for Entrada South and Valencia Commerce Center, Valencia can continue to grow in a way that benefits everyone – from families looking for a place to call home to businesses seeking a thriving local economy. It's a rare combination of forward-thinking development and respect for the environment, and it's exactly what our region needs.

I urge you to approve these entitlements to help Valencia continue to be a model for responsible and impactful growth.

Thanks!

Sincerely,

Don Grissom
dgrissom@intertexcompanies.com
661-414-3789

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. Planning Commissioners

I am writing in support of FivePoint's plans for Entrada South and Valencia Commerce Center, which address critical needs for the community – housing, job opportunities, and local retail spaces.

Importantly, FivePoint leads the way in sustainable living in the community – including solar power and drought-tolerant landscaping – and open space preservation. They do all this while building a place that thousands of southern Californians can call home and maintaining a remarkable jobs-to-housing balance.

I encourage you to support these entitlements -- they are a step forward for Santa Clarita Valley.

Sincerely,

Joe Rivas
JRivas@intertexcompanies.com
6616250267

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I fully support FivePoint's plans for Valencia with its proposed plans: Entrada South and the last piece of the Valencia Commerce Center.

With its strong commitment to sustainability and resource conservation, Valencia by FivePoint is a leader in responsible growth. FivePoint shows how affordable housing, job opportunities, sustainability, and preserving open space can be achieved together.

I believe this project is a valuable step forward for Santa Clarita Valley, and I encourage you to support this great community!

Thank you!

Sincerely,

Munnu Sudan
nimitmunnu@gmail.com
661-714-4736

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Planning Commission:

Valencia by FivePoint is a community that proves housing, job growth, mobility and sustainability can all prosper together.

The plan before you for Entrada South includes more than 1,000 new housing units and important retail space. The next phase of the Valencia Commerce Center will attract job-generating companies in a variety of industries and boost the economy. At the same time, FivePoint is investing hundreds of millions in transportation improvements around the region.

Valenica by FivePoint is a model for similar communities around the country. Please vote 'yes' and let this vibrant community continue to grow!

Sincerely,

Nimit Sudan
Nimitsudan@gmail.com
818-292-4702

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA County Planning Commission,

As a proud resident of Valencia by FivePoint, I want to express my support for the plans for the next phase: Entrada South and Valencia Commerce Center.

Living here has been a wonderful experience for me and my family. We enjoy the beautiful trails, parks, the Sunday farmers market, and community events that bring neighbors together.

FivePoint's vision for Valencia includes offering residents everything they need right in the community, and Entrada South and VCC are a critical step in bringing this vision to life.

I hope you'll approve this plan so that more families can enjoy the same amazing quality of life we have here.

Sincerely,

Shaun Clapham
shaun@unifiedpictures.com
661-388-1128

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Members of the Regional Planning Commission,

I am writing to express my support for the approval of Valencia by FivePoint's current entitlement package, including the Entrada South community and the next phase of the Valencia Commerce Center (VCC).

VCC is currently home to numerous job-producing businesses in diverse fields, including aerospace, healthcare, and financial services. The planned next phase will provide more quality, local permanent jobs and contribute to Valencia's strong jobs-housing balance.

Plus, Valencia by FivePoint will generate tens of thousands of construction jobs as well as tremendous tax revenue to fund our public services.

Supporting Valencia by FivePoint means ensuring our current and future economic prosperity in the Santa Clarita Valley.

Thank you.

Sincerely,

Mike Grimes
mgrimes@intertexcompanies.com
661-812-0826

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Projects like Entrada South are essential for sustainable growth in our region, providing both economic and community benefits while remaining sensitive to the environment and overall livability.

We respectfully urge the County to approve Five Point's application and look forward to seeing the positive impact this development will bring to the community.

Sincerely,

Sean Aguirre

saguirre@intertexcompanies.com

661-651-1695

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commissioners,

The Valencia by FivePoint projects before you, Entrada South and Valencia Commerce Center, will have a positive impact on the entire region.

Entrada South, a new mixed-use neighborhood, will bring more than 1,000 new homes, including designated affordable housing, helping more Angelenos achieve their homeownership dreams. Many of the homes sold already in Valencia by FivePoint were below the L.A. County median home price.

It will also bring space for community retail like grocery stores and restaurants, within walking distance for residents.

The next phase of Valencia Commerce Center will attract even more job-generating businesses, allow more SCV community members to work closer to their homes, and help boost the local economy.

It seems like a win-win plan to me! Please approve Entrada South and Valencia Commerce Center.

Sincerely,

Bob Lyon
blyon@intertexcompanies.com
6614355144

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

Valencia by FivePoint has quickly become an important part of the Santa Clarita Valley and serves as an example of how a community can promote sustainable living, offer affordable homes, and go above and beyond to create a sense of inclusiveness for its residents.

The proposed Entrada South and Valencia Commerce Center projects will build on this success and welcome more residents into the community through more than 1,000 new homes. And, retail and office space will benefit new and existing residents.

The proposed plans will strengthen the entire community by creating opportunities for families, businesses, and the local economy to grow together.

I encourage you to approve these entitlements and support Valencia by FivePoint!

Thank you!

Sincerely,

Eric Hamilton
ehamilton@intertexcompanies.com
661.233.1050

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commissioners,

I am writing to express my support for FivePoint's plans for its community, Valencia by FivePoint. They are seeking approval for Entrada South and Valencia Commerce Center, which will bring housing, community retail, and spaces for local businesses to the region.

With plans for over 1,000 new homes and essential retail, Entrada South will welcome new residents, help address the housing crisis and increase the community's walkability. The Valencia Commerce Center will provide vital job opportunities, helping create a balanced community where people can live and work. Both projects will build on the community's existing trail networks and sustainability initiatives.

I believe this next phase will enrich our region and hope you'll approve these entitlements.

Thank you.

Sincerely,

Scott Pagel
spagel@intertexcompanies.com
(661)505-5378

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

The Entrada South proposal is a much-needed response to our County's alarming housing shortage, providing a variety of housing options for individuals and families. These include a portion of designated affordable units.

By combining different housing types at different price points, along with accessible local retail and community spaces, Entrada South and the entire Valencia by FivePoint proposal will help strengthen our region.

By thoughtfully integrating housing, commercial space, recreation areas, and protected open space into a cohesive sustainable community, this project positions our region favorably for the future and stands as a model for other communities, in Southern California and beyond.

I urge you to support this balanced and forward-thinking plan.

Sincerely,

Jake Lyon
jakelyon488@hotmail.com
661-523-8889

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Hello,

Five Point is very beautiful place to live, if i could afford to live in Valencia, Five Point would be on the top of my list. I truly believe Five Point community fits perfect in Valencia.

Sincerely,

JO chacon
JChacon@intertexcompanies.com
(661)232-4782

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commissioners,

I am writing to express my support for FivePoint's plans for its community, Valencia by FivePoint. They are seeking approval for Entrada South and Valencia Commerce Center, which will bring housing, community retail, and spaces for local businesses to the region.

With plans for over 1,000 new homes and essential retail, Entrada South will welcome new residents, help address the housing crisis and increase the community's walkability. The Valencia Commerce Center will provide vital job opportunities, helping create a balanced community where people can live and work. Both projects will build on the community's existing trail networks and sustainability initiatives.

I believe this next phase will enrich our region and hope you'll approve these entitlements.

Thank you.

Sincerely,

Tracy Ramsouer
Tracy@coastdoor.net
(818) 735-7311

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission,

There is no question: we are facing a severe housing crisis. There are not enough homes, and those that are available are priced out of reach for too many. It is more important than ever to streamline and approve housing proposals like Valencia by FivePoint.

Mission Village, the existing neighborhood within Valencia by FivePoint, is already home to more than 3,000 residents. What's more, the community remains price obtainable compared to other regions.

The proposed Entrada South plan includes a wide variety of housing choices, including condos, townhomes, and single-family detached condos meant to serve first-time homebuyers and middle-class families. It also includes dedicated affordable housing, which is an important part of our housing mix.

This plan is exactly what the Santa Clarita Valley needs. Please support it!

Sincerely,

Lillian Galestan
lgalestan@intertexcompanies.com
661-600-1937

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners,

As a resident of Valenica by FivePoint, I've experienced first-hand what makes this community special – beautiful parks, fun events like Friday Night Happenings and, most importantly, neighbors who become friends. FivePoint has really cultivated a sense of connection and belonging for within the community.

I am most excited about welcoming more families into the community with the new homes proposed for Entrada South.

The planned retail spaces will bring the convenience of shopping and dining right here in our neighborhood, and the Valencia Commerce Center will add more job space and boost the economy which, in turn, will help the entire community.

All in all, it's a great plan and I look forward to seeing it brought to life.

Sincerely,

Diane Davis
davisgirls143@yahoo.com
661-478-8543

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners,

I am a proud supporter of Valencia by FivePoint.

It's no secret that L.A. County needs to build more housing – and FivePoint is an important part of that solution. At the same time, the community has been a strong economic engine for the region, with investments into the community generating meaningful economic output. With the completion of Valencia Commerce Center, the additional commercial space will boost the economy further and create more local, quality permanent jobs.

Valencia has a legacy of an impressive jobs/housing balance in the region and Entrada South and Valencia Commerce Center will continue that trend. Plus, the company has invested substantially towards traffic mitigation and transportation improvements locally and regionally.

FivePoint is a true partner for the region, and they have earned the County's support for their proposal. Please approve Entrada South and Valencia Commerce Center.

Thank you for your consideration.

Sincerely,

Lorraine Minerva
lorraine@westernairparts.com
631-455-8944

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I write in support of FivePoint's proposed plans, which are expanding upon a bold step toward a greener future. Valencia by FivePoint is one of the largest communities of its kind to commit to being net zero for greenhouse gas emissions – a major achievement.

This community is designed with modern energy solutions, such as solar systems and integrated electric vehicle charging, which demonstrate a clear commitment to reducing environmental impact. Thoughtfully planned landscaping and eco-conscious building practices are woven throughout the entire project, ensuring that technological best practices which increase sustainability are fully utilized.

This commitment shows that sustainable living is not only possible, but can also drive responsible community growth. I am confident that these measures will help Santa Clarita continue to lead the way in environmental responsibility.

Please consider this plan to be an essential investment in a cleaner, more efficient L.A. County. I urge you to approve Entrada South and Valencia Commerce Center.

Sincerely,

Chris Hailstone
chailstone@intertexcompanies.com
(661)702-2333

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I'm reaching out to extend my support for FivePoint's plans in Valencia, which will bring much-needed housing to our community. As housing costs continue to rise, it's encouraging to see FivePoint prioritize affordability and quality while still addressing sustainability and the environment.

The planned addition of over 1k homes in Entrada South will help address our region's housing shortage.

Not only will this address the housing crisis, but it will create opportunities for more people to live close to their work, schools, and recreational spaces, making Valencia a more accessible and connected place to call home. Please join me in supporting FivePoint's plans.

Sincerely,

Kim Armstrong-Ross
karmstrong@intertexpm.com
661.600.1938

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I am writing in support of the new proposal before you for consideration for Valencia by FivePoint – Entrada South and Valencia by FivePoint.

This next phase of the community will deliver a suite of mobility improvements—including enhanced public transit connections and safe walking and cycling paths—that will make daily commutes easier and more sustainable. FivePoint's investments in traffic mitigation and clean energy transportation options underscore their commitment to reducing congestion and pollution, and are guiding the community toward more sustainable practices.

By making mobility a true focus of this proposal, the plan improves accessibility and fosters a healthier, more connected community. I am confident that these measures will help us meet our required housing targets in a responsible, sustainable way. I hope this proposal will earn the County's support.

Sincerely,

Greg Amaro
GAmaro@intertexcompanies.com
661-383-6084

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commission:

I am writing to express my support for the proposed plans for Valencia by FivePoint.

What is inspiring about FivePoint's plans isn't just the community they're building – it's how they're doing it. Sustainability is woven into every part of Valencia by FivePoint from solar-power and EV chargers in every home and throughout the community to drought-tolerant landscaping. These features aren't just nice to have –they're an essential part of building a new community in the 21st century.

With approval of the entitlements before you -- Entrada South and Valencia Commerce Center -- FivePoint can continue setting the standard for eco-conscious development.

Please approve these plans!

Thank you.

Sincerely,

Jon Tickle
jtickle@intertexcompanies.com
661.435.5147

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. County Regional Planning Commission:

FivePoint gets it – open space matters. By preserving the majority of their land as open space and protecting it from development, FivePoint has shown they value SCV's natural resources. Providing hiking trails, restoring wetlands, and protecting habitats aren't an afterthought; sustainability and conservation are the foundation of Valencia by FivePoint community.

With plans for housing, retail, and commercial space in Entrada South and Valencia Commerce Center, FivePoint is proving that development doesn't have to come at the expense of the environment.

Please support this vision and approve these entitlements.

Sincerely,

Valerie Maronyan
vmaronyan@intertexcompanies.com
(661)702-2212

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles Planning Commissioners,

I am proud to support the entitlements for Entrada South and the last piece of the Valencia Commerce Center, part of Valencia by FivePoint. Southern California is facing an extreme housing crisis and global warming touches every corner of the Earth.

FivePoint works to address both issues. Valencia is already home to more than 3,000 residents and Entrada South, if approved, will bring more than 1,000 new residences to the community.

At the same time, Valencia by FivePoint sets the standard for sustainable living. With homes in the community equipped with sustainable amenities, like solar panels, zero-net energy designs, and EV chargers, FivePoint makes it easy for residents to live sustainably.

This thoughtful approach ensures that new growth aligns with environmental stewardship -- all while reducing costs for families! Please approve these entitlements.

Sincerely,

Alexa Bashnakyan
aarmine@intertexcompanies.com
661-702-2222 x 2215

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Anegeles County Planning Commision

I have been living in Valencia since 2000 and the growth of this valley has been tremendous. We need good affordable housing which Fivepoint has always been able to deliver. I am in support for the next phase of Entrada South by FivePoint.

Thank you

Sincerely,

Christopher Avelino
cavelino12000@yahoo.com
661.373.0902

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commission,

I'm in full support of FivePoint's plans to add high-quality housing and additional retail and commercial offerings to Valenica, through the Entrada South and Valencia Commerce Center proposals.

FivePoint has been incredibly considerate in crafting this proposal. They have already invested millions to traffic mitigation and transportation improvements for our region.

FivePoint is an innovative community builder, also delivering more walking paths, public transportation passes for all residents, zero-emission transportation purchase subsidies for qualifying homeowners, and more. By creating a community where people can live, work, and move more easily and sustainably, FivePoint is helping to create a model community for the future. It's very exciting. I ask that you vote to make this proposal a reality.

Thank you for your close attention to this important matter.

Sincerely,

Loan Le
lle@intertexcompanies.com
661-702-2255

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I'm writing to express my support for FivePoint's plan to bring needed housing and an economic boost to the Santa Clarita Valley. FivePoint has proven time and again its deep commitment to sustainability and protecting the earth by committing to create one of the largest net-zero GHG master-planned community in the nation.

FivePoint will achieve this unprecedented goal through a range of on-site and off-site investments, ranging from installing EV chargers in every home to solar powered roofs and innovative mobility plans, including the use of zero-emission neighborhood electric vehicles.

And FivePoint's proposed addition of 1,000+ homes in Entrada South is an important step in helping this part of the region address the chronic housing shortage. I am proud to offer my full support, and I hope you will join me.

Sincerely,

Lucas Silsbee
Lucasmpt@sbcglobal.net
661-481-8139

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Sustainability isn't just a policy vision—it's something we must actively build into our communities. At Green Convergence, we've been proud to partner with forward-thinking developers across California to bring renewable energy, battery storage, and grid-resilient infrastructure into real-world projects.

That's why I'm excited about the Entrada South development. FivePoint's commitment to net-zero greenhouse gas emissions is ambitious and commendable—but equally important is how they're integrating sustainability into each home through solar-ready designs, EV charging infrastructure, and drought-tolerant landscaping.

Our team at Green Convergence is working directly with the developers to ensure this project delivers on its energy goals—not just in concept, but in execution. Together, we're helping to shape a community that reflects California's values: clean, efficient, and future-ready.

I strongly support this project and encourage others to see it for what it truly is—a blueprint for responsible growth.

Best regards,

Preston McGill

Director of Commercial Development

Green Convergence

Sincerely,

Preston McGill
preston@greenconvergence.com
(559)580-3064

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission,

I support FivePoint's plans to bring additional housing, retail, and jobs into the region. FivePoint is seeking entitlements for the next phase of their community, Valencia by FivePoint. These entitlements – Entrada South and Valencia Commerce Center – will bring housing and retail space, as well as space for job-producing businesses.

Additionally, ValenciaGO offers homeowners and purchase subsidies on zero-emission vehicles and provides residents with public transportation passes. And, the majority of the VCC business park is in close proximity to a public transit stop.

Approving these entitlements will help maintain a strong jobs/housing balance, encourage the use of public transportation, and reduce traffic congestion.

I encourage you to support FivePoint's plans.

Sincerely,

Arthur Sohikian
arthur@avsconsultinginc.c
(213)379-1551

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Commissioners,

Valencia by FivePoint is a wonderful place to live. With beautiful homes, nearby amenities, extensive walking paths, and a farmers market right here in the community, Valencia has it all!

Plus, FivePoint truly prioritizes sustainability within the community, from net-zero energy homes and buildings and drought tolerant landscaping to EV chargers for every house and the ValenciaGO TMO program. They have made it easy to do right by the environment.

I also appreciate FivePoint's community outreach efforts as they have moved through the entitlement process. They make residents feel connected and valued.

Please join me and support Valencia by FivePoint!

Sincerely,

Joseph Graziano
Joe@grazianoroofing.com
661-510-8339

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear members of the Planning Commission,

Communities like Valencia by FivePoint aren't proposed every day, especially those with such a robust commitment to sustainability.

In addition to setting aside thousands of acres of land for conservation, FivePoint is integrating green building and green infrastructure into the fabric of this community, with electric vehicle chargers, energy-efficient design, solar panels, and countless other practical solutions that make this community "net-zero."

I'm very excited to see FivePoint looking to bring their vision for a sustainable community to life right here in the Santa Clarita Valley.

Please support this project!

Sincerely,

Johanna Palmer
dougandjohanna@gmail.com
661-255-4071

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Regional Planning Commission,

As the Santa Clarita region continues to grow, it is so important to protect the nearby environment.

FivePoint does exactly that with its dedication and commitment to preserving 10k acres of open space in Valencia, the majority of its LA County community, protecting it from development.

The company's wetland restoration along the Santa Clara River, along with its Spineflower conservation and reseeding efforts, protect vital habitats and local wildlife.

These programs reflect FivePoint's care and respect for the environment. Supporting these entitlements means FivePoint can continue building Valencia by FivePoint and addressing the region's housing needs while preserving the environment.

I am proud to stand with them. Please approve these projects.

Sincerely,

Brandy Lux
Lux776@gmail.com
951-775-8300

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commissioners,

FivePoint is seeking approval for Entrada South and the last piece of the Valencia Commerce Center for its community, Valencia by FivePoint.

The company's plans for Entrada South will bring added housing and retail spaces to the community. The community is planned with walkability and mobility in mind, making it easier for residents to get around.

The Valencia Commerce Center is a robust job center that makes it easier for community members to work near where they live and reduce traffic congestion.

These plans complement each other by creating a community that has everything residents need: jobs, housing, and community retail. I hope you'll join me in supporting Valencia by FivePoint and say "yes" to these entitlements.

Thank you!

Sincerely,

Lucy Melkonian
dlsc2001@gmail.com
818-470-3880

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To: Los Angeles County Planning Commission –

FivePoint has always prioritized sustainability and conservation throughout the Santa Clarita Valley. I fully trust them to build out their plans for Valencia by FivePoint responsibly and with the environment in mind.

Through active restoration of marsh wetlands and stream habitats along the Santa Clara River, as well as the protection and revitalization of the San Fernando Valley Spineflower, FivePoint continuously proves its commitment to protecting the natural world around us.

The plans before you – Entrada South and the last phase of the Valencia Commerce Center – are no different.

Please approve the entitlements and support bringing housing, jobs, and new trails to the community.

Sincerely,

Bill Fitzpatrick
bfitzpatrick@intertexcompanies.com
661-435-5155

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear County Planning Commission,

The Santa Clarita Valley, my home, is surrounded by beautiful open space. I consider myself lucky to live in a place with rolling hillsides and easy access to hikes and trails.

The Valencia by FivePoint community is a model, protecting this beautiful open space and creating parks and trails for public use, all while helping our region address the housing crisis that is afflicting the entire state. I truly believe FivePoint is part of the solution, and I wish more real estate companies would follow their lead. Please support their proposals!

Sincerely,

Dennis Verner
dennis@scvcommercial.com
6618573571

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

I fully support the next two phases of my community: Entrada South and the next piece of the Valencia Commerce Center.

The homes are affordable and there are so many community amenities. And, with Entrada South, my neighbors and I will have retail within walking distance, which is something I know we are all looking forward to.

Thank you, and I hope you'll take this under consideration!

Sincerely,

Joann Meinardus
scvjoann@gmail.com
661.510.4778

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

The housing crisis has reached a critical point. We need more housing, and we need it to be affordable for the average family.

Valencia by FivePoint is working to address this crisis, one neighborhood at a time, and I am proud to support their plan for Entrada South, which will bring more than 1,000 new homes into the community.

And Valencia by FivePoint offers residents more than just a home: FivePoint works hard to support sustainable living and foster connection within the community through parks, pools, and events.

Approving these entitlements is an investment in the future of Santa Clarita Valley and supporting FivePoint in creating meaningful housing solutions.

Sincerely,

Cal Naulls
cwnaulls@cbbank.com
661-295-2850

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA County Planning Commissioners,

The housing shortage in Southern California has impacted countless community members, and it has never been more necessary to address this issue. Valencia by FivePoint is working to make homeownership accessible and I am proud to support them in their upcoming entitlements.

They have already built more than a thousand homes in the community, and the Entrada South project alone will bring a thousand more to the area, building on the vibrant and diverse community.

I encourage you to support FivePoint's proposal – the plan offers a meaningful solution to our region's housing needs.

Sincerely,

Bonnie Rejaei
Bonniejoon@gmail.com
323-527-4581

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

I am writing to you as a Valencia by FivePoint resident to share my enthusiasm for this community. I have wonderful neighbors, the local park and open space are beautiful, and Valencia truly feels like home.

FivePoint works hard to cultivate a tight-knit community through a wide array of events that are open to all residents, hosting a farmers market and community garden, and creating a variety of public gathering spaces throughout the neighborhood.

Approving the next phase of the community means we get to welcome more neighbors, and we will get nearby shops and restaurants we can walk to. We are ready for the next phase of Valencia by FivePoint!

Please support Valencia by FivePoint's current entitlements for Entrada South and Valencia Commerce Center.

Sincerely,

Nancy Starczyk
Nancy@elitestates.com
661.803.0103

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

The housing shortage in Los Angeles County continues to create ripple effects that impact families and businesses alike. FivePoint's Entrada South project is a thoughtful step forward, with more than 1,000 homes planned, all are designed to be accessible to a wide range of potential residents.

Accessible housing strengthens the local economy by reducing long commutes, supporting local businesses, and fostering a more connected community. Combined with additional nearby job opportunities at Valencia Commerce Center, these entitlements represent a balanced approach to growth that meets both current and future needs.

For these reasons, I support the approval of Entrada South and Valencia Commerce Center.

Thank you!

Sincerely,

Allen Starczyk
Allen@whitestarusa.com
818-422-1789

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission --

I am pleased to support FivePoint's plans for Valencia, including Entrada South and the Valencia Commerce Center, which will move their plans for a balanced, walkable community forward.

If approved, the plans will integrate housing and jobs within the community while expanding on existing trail networks.

Additionally, FivePoint's ValenciaGO program offers subsidies for electric vehicles, bikes, and public transit, making sustainable transportation options affordable for residents.

In fact, the majority of the Valencia Commerce Center is planned to be within half a mile of public transportation.

I encourage you to approve these plans, as they address our region's mobility needs while promoting eco-friendly choices.

Sincerely,

Maria Delgado-Parr
mariaidelgado71@gmail.com
310.529.9175

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

I am a resident of Valencia by FivePoint, and I proudly support their proposed plans. Living here is incredibly fulfilling – I feel connected to my community and appreciate all the sustainability initiatives in the neighborhood.

Entrada South and the next phase of the Valenica Commerce Center – part 2 of the long-term plan -- are exciting because they'll build on the already wonderful community by adding more homes, retail, shopping, and local dining options.Valencia Commerce Cetner will complement this, bringing quality local jobs to the community and contributing to a healthy jobs to housing balance.

And, we all know the region needs more housing.

Please support Valencia by FivePoint!

Sincerely,

randy cude
RCUDE@SPECTRUMCRE.COM
661-414-2004

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To: Los Angeles County Planning Commission –

FivePoint has always prioritized sustainability and conservation throughout the Santa Clarita Valley. I fully trust them to build out their plans for Valencia by FivePoint responsibly and with the environment in mind.

Through active restoration of marsh wetlands and stream habitats along the Santa Clara River, as well as the protection and revitalization of the San Fernando Valley Spineflower, FivePoint continuously proves its commitment to protecting the natural world around us.

The plans before you – Entrada South and the last phase of the Valencia Commerce Center – are no different.

Please approve the entitlements and support bringing housing, jobs, and new trails to the community.

Sincerely,

Paul Collins
paul.collinsjr@gmail.com
(858)254-8858

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners,

Valencia by FivePoint is building a well-planned community, thoughtfully designed for housing, mobility and sustainability. I ask that you please support the proposal for their next phase of development.

With homeownership out of reach for so many, Valencia offers homes at a range of price points. Many of the homes sold to date in Valencia by FivePoint were below the LA County median home price.

As L.A. County residents, we all try to spend less time in the car and avoid sitting in endless traffic rather than spending time with friends and family. FivePoint provides better mobility, including on-site walking and neighborhood electric vehicle pathways, pre-paid public transit passes, and plans include investing millions in transportation improvements across the region, including road widening and new signals.

Completing the Valencia Commerce Center will add even more local jobs, helping to reduce commuting times for Valley residents who work there.

Altogether, Valencia by FivePoint plans include a very strong jobs/housing balance that makes quality of life better for the entire region.

I ask that you please approve the entitlement request before you for Entrada South and the next phase of the Valencia Commerce Center.

Sincerely,

Robert Elmquist
relmquist@gmail.com
805-824-4989

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners,
As you know, L.A. County's housing crisis is severe, and deeply entrenched. As part of the solution, we need to build housing that is 1) closer to where people work and 2) available at a mix of price points.

FivePoint's plans for the next phase of Valenica accomplish both of these things. They will add housing to one of the fastest growing job centers in the County, while also providing a mix of housing types (single family homes, condos, townhomes, etc.) to help residents find the perfect match. This is a strong and thoughtful plan, and I feel even more confident supporting it given FivePoint's accomplishments to date in the Santa Clarita Valley.

This project is a no brainer! I hope you will vote to move Entrada South and Valencia Commerce Center forward.

Sincerely,

Ira Aboulafia
ira@designmasonry.com
661-212-7487

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the LA County Regional Planning Commission,

It's impressive to see a master-planned development that prioritizes environmental responsibility in every aspect – with zero energy construction, energy efficient home designs, drought-tolerant landscaping, smart irrigation systems, recycled water, and electric vehicle chargers in every home.

They are seeking your approval to add more housing, community-serving retail, and job-producing business space. I trust them wholeheartedly to build their vision without sacrificing the environment to do so, and this is the kind of forward-thinking approach that benefits everyone in the region.

Because of their proven environmental record, I hope you'll join me in supporting a more sustainable future for our community.

Sincerely,

John Branch
john@pearsonsteelfab.com
661.808.9081

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission --

I am pleased to support FivePoint's plans for Valencia, including Entrada South and the Valencia Commerce Center, which will move their plans for a balanced, walkable community forward. If approved, the plans will integrate housing and jobs within the community while expanding on existing trail networks.

Additionally, FivePoint's ValenciaGO program offers subsidies for electric vehicles, bikes, and public transit, making sustainable transportation options affordable for residents.

In fact, the majority of the Valencia Commerce Center is planned to be within half a mile of public transportation.

I encourage you to approve these plans, as they address our region's mobility needs while promoting eco-friendly choices.

Sincerely,

Chris Perry
chris.perry@jensencorp.com
925-750-0037

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Regional Planning Commission,

Valencia by FivePoint has set a new standard for sustainable development. FivePoint is seeking approval for Entrada South and the final piece of the Valencia Commerce Center, and I am proud to stand with them. Approving these entitlements means there will be more housing and job-generating businesses in the Santa Clarita Valley, and it also means FivePoint can continue doing great conservation work in the region.

Not only is the community built with energy-efficient designs, but the company makes other sustainability investments all across L.A. County, including EV chargers, solar panels and cool roofs. Plus, they are permanently protecting so much of this beautiful high-country land. The high country is incredibly important to the Santa Clarita community, and I am deeply appreciative FivePoint is working to restore native plants and habitats, healing the ecosystem.

Please support this incredible project and company! Thank you.

Sincerely,

Roger Fugit
rfugit@ojinc.com
626-625-6785

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission --

I am pleased to support FivePoint's plans for Valencia, including Entrada South and the Valencia Commerce Center, which will move their plans for a balanced, walkable community forward. If approved, the plans will integrate housing and jobs within the community while expanding on existing trail networks.

Additionally, FivePoint's ValenciaGO program offers subsidies for electric vehicles, bikes, and public transit, making sustainable transportation options affordable for residents.

In fact, the majority of the Valencia Commerce Center is planned to be within half a mile of public transportation.

I encourage you to approve these plans, as they address our region's mobility needs while promoting eco-friendly choices.

Sincerely,

Chad Walker
chad@centerline-electric.com>
661-510-6940

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commission:

FivePoint's commitment to sustainability sets Valencia apart. As one of the largest communities in the nation pledging net-zero greenhouse gas emissions, Valencia by FivePoint integrates solar power, EV chargers, and zero-net-energy homes into daily life for its residents. These are real, measurable steps towards building a greener future for all of us and generations to come.

The proposed plans before you for Entrada South and Valencia Commerce Center – which will bring much-needed housing and job-generating office space to the Santa Clarita area -- build on this vision, ensuring that the community's continued growth aligns with environmental responsibility. I urge you to approve these entitlements.

Sincerely,

James Shields
james@centerline-electric.com
661-309-7827

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commissioners,

I support Valencia by FivePoint's long-term vision for a sustainable, affordable community, including the proposed neighborhoods in front of you today: Entrada South and Valencia Commerce Center. FivePoint has long demonstrated a commitment to responsible growth, and their vision for Valencia is a testament to this.

Their pledge to make Valencia by FivePoint one of the largest net-zero communities in the nation is both ambitious and inspiring, setting a standard for environmentally responsible development that I believe we should all support.

FivePoint is investing in a range of green infrastructure, from solar-powered roofs and electric vehicle chargers to thoughtful drought-tolerant landscaping that conserves water. These initiatives show their dedication to minimizing environmental impact while enhancing quality of life for residents. I hope you'll join me in supporting these plans for our community.

Sincerely,

Matt Aulbach
matt@jmillercanvas.com
714-641-0052

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

I fully support FivePoint's plan to bring new housing, retail, and commercial space to the Valencia community. Valencia by FivePoint is setting national environmental standards with zero-net-energy homes and buildings.

With plans to install an EV charger at every home, provide drought-tolerant landscaping, and build energy-efficient homes, FivePoint continues to prove its commitment to sustainability and responsible growth.

The business park, Valencia Commerce Center, is closely linked to public transportation and will be 60% open space.

It's clear FivePoint is deeply committed to sustainability, and I am honored to stand with such a rare, forward-thinking company!

Please approve these entitlements.

Sincerely,

Frank Cigrang
valleyglass00@gmail.com
661-810-9080

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission,

Valencia by FivePoint wants to provide what our region needs most: housing.

If approved, FivePoint's proposed plans for Entrada South will add over 1k homes to the community, including condos, townhomes and detached, single-family condos.

And FivePoint does more than build homes. Together, Entrada South and the next phase of the Valencia Commerce Center will bring community-serving retail and additional commercial space. Residents will have the option to work near home, which reduces commute times and traffic congestion.

And I hope you'll join me in supporting these entitlements.

Sincerely,

Kit Davis
kdavis.tuimail@sbcglobal.net

(661)251-7566

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commission,

Southern California's housing crisis puts a strain on the entire region and the economy. When housing is scarce and unaffordable, families face impossible choices, commuting times increase, and businesses struggle to attract and retain employees. It's an issue that touches everyone in the state.

FivePoint's full vision for Valencia, including the plans before you for Entrada South, offer a meaningful solution. In this phase alone, FivePoint will build an additional 1,000 homes, many affordable, in the SCV region.

Supporting these plans is a chance to address the housing crisis head-on while creating a better future and quality of life for families. I hope you'll join me in supporting this critical step forward.

Sincerely,

Sameh Rashed
sam@michaelsurfacesolutions.com
661-688-0088

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners:

It's more important than ever to live in an interconnected, transit-oriented environment, and I am proud to stand with FivePoint as they seek approval to build out Entrada South and the next phase of the Valencia Commerce Center.

Beyond community mobility initiatives, FivePoint has made numerous investments to improve transportation in the county. The company is investing millions in traffic mitigation and transportation improvement locally and regionally, including road widening, new signals and other upgrades at several key intersections.

Please support the plan!

Thank you for your consideration.

Sincerely,

Roger Rosegrant
topmop@dslextreme.com
818-201-7874

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commission,

Southern California's housing crisis puts a strain on the entire region and the economy. When housing is scarce and unaffordable, families face impossible choices, commuting times increase, and businesses struggle to attract and retain employees. It's an issue that touches everyone in the state.

FivePoint's full vision for Valencia, including the plans before you for Entrada South, offer a meaningful solution. In this phase alone, FivePoint will build an additional 1,000 homes, many affordable, in the SCV region.

Supporting these plans is a chance to address the housing crisis head-on while creating a better future and quality of life for families. I hope you'll join me in supporting this critical step forward.

Sincerely,

Pamela Verner
pamela@scvcommercial.com
661-714-5271

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission,

I am writing to express my support for the next step in the long-term vision of Valencia by FivePoint: Entrada South and the next phase of the Valencia Commerce Center.

At full buildout, Valencia by FivePoint will be one of the largest communities of its kind to achieve net-zero greenhouse gas emissions. FivePoint makes living sustainably an easy choice for residents – all homes have an EV charger and are built to zero-net energy standards.

They are also preserving 10,000 acres of open space over time – meaning it will never be developed – and offer EV subsidies for residents.

Approving these entitlements means FivePoint can create much-needed housing in a community that truly values and prioritizes the environment. I hope you'll join me in supporting these efforts.

Thank you.

Sincerely,

Allen Penton
aspplumbinginc@gmail.com
661-619-2200

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commission,

The Valencia by FivePoint proposal is a natural plan to support. At full buildout, the community has the potential to bring approximately 21,000 homes to the area – housing that we desperately need if we are ever to get our housing crisis under control. Importantly, many homes sold in the community to date have been below the LA County median price.

The Entrada South entitlement before you is the next phase, and includes 1,000+ homes, as well as important community-serving retail.

At the same time, Valencia by FivePoint includes commercial space for job-generating uses, supporting an impressive jobs to housing ratio that enhances quality of life and economic vitality for the entire SCV region.

Please support the Valencia by FivePoint plan and approve Entrada South and the Valencia Commerce Center!

Sincerely,

Robert Anderson
robby4extreme@gmail.com
949-378-7993

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commissioners,

FivePoint has proven time and time again its commitment to preserving the environment, in the Santa Clarita Valley and across the state. Their work along the Santa Clara River, where they have restored wetlands and created habitats for native wildlife, is a shining example of thoughtful conservation.

On top of that, FivePoint plans include $15 million in funding over time for permanent habitat conservation and stewardship, ensuring these efforts will benefit the entire region for generations to come.

FivePoint is seeking approval for Entrada South and Valencia Commerce Center. FivePoint has shown its dedication to conservation and has a deep history of land stewardship in the region. Approving these entitlements means FivePoint can continue to create homes, build a community, and protect our natural resources.

I support the plans for Valencia by FivePoint, and I hope you will, too.

Sincerely,

Jeff Graef
jefgra@kompan.com
714.293.5065

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the Los Angeles County Regional Planning Commission:

I am writing to you, as a resident of the Valencia by FivePoint community, to express my support for the proposed projects before you. Valencia is a hidden gem in the LA area! The houses are beautiful, there are many trails nearby for walking and biking, and FivePoint plans a wide range of family-friendly activities for the community. Our neighbors are warm and friendly, and we love how many diverse backgrounds are represented here. Every time I go to the park or pool, I feel like it's an opportunity to make a new friend.

I ask that you please support the plans for Entrada South and Valencia Commerce Center. Thank you for your time and attention.

Sincerely,

Ulises Salazar
les@salazarconstruction.net
(661)291-1888

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

L.A. County Planning Commission,

Southern California's housing crisis puts a strain on the entire region and the economy. When housing is scarce and unaffordable, families face impossible choices, commuting times increase, and businesses struggle to attract and retain employees. It's an issue that touches everyone in the state.

FivePoint's full vision for Valencia, including the plans before you for Entrada South, offer a meaningful solution. In this phase alone, FivePoint will build an additional 1,000 homes, many affordable, in the SCV region.

Supporting these plans is a chance to address the housing crisis head-on while creating a better future and quality of life for families. I hope you'll join me in supporting this critical step forward.

Sincerely,

Cody Pruitt
codyp@sierracei.com
661-588-5124

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission --

I am pleased to support FivePoint's plans for Valencia, including Entrada South and the Valencia Commerce Center, which will move their plans for a balanced, walkable community forward. If approved, the plans will integrate housing and jobs within the community while expanding on existing trail networks.

Additionally, FivePoint's ValenciaGO program offers subsidies for electric vehicles, bikes, and public transit, making sustainable transportation options affordable for residents.

In fact, the majority of the Valencia Commerce Center is planned to be within half a mile of public transportation.

I encourage you to approve these plans, as they address our region's mobility needs while promoting eco-friendly choices.

Sincerely,

Alan Comins
alan@greenpolishingsolutions.com
818-772-8364

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners:

It's more important than ever to live in an interconnected, transit-oriented environment, and I am proud to stand with FivePoint as they seek approval to build out Entrada South and the next phase of the Valencia Commerce Center.

Beyond community mobility initiatives, FivePoint has made numerous investments to improve transportation in the county. The company is investing millions in traffic mitigation and transportation improvement locally and regionally, including road widening, new signals and other upgrades at several key intersections.

Please support the plan!

Thank you for your consideration.

Sincerely,

Taylor Sanchez
estimatorag20@gmail.com
661.860.0992

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commissioners,

I'm writing to express my support for Valencia by FivePoint's plans to add critical housing, job space, and build on its commitments to sustainability and preserving open space.

I am passionate about protecting our High Country, and I am thrilled that FivePoint is dedicating about two-thirds of Valencia by FivePoint land as protected, undeveloped space. Plus, the company has plans for 50 miles of trails and has already completed significant restoration efforts along the Santa Clara River. It's reassuring to see this kind of priority placed on conservation.

I encourage you to support the entitlement request, the plans will bring immeasurable benefit to the region.

Sincerely,

Angelica Huato-Nelson
huatonelson@mac.com
661-373-0210

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles Regional Planning Commission,

The housing shortage in Southern California has reached a breaking point, and FivePoint's plans for Entrada South are an important step in the right direction. With over 1,000 new homes, this project will provide options for families, young professionals, and others who are struggling to find an affordable place to live.

But housing is only part of the equation.

The next phase of the Valencia Commerce Center adds a critical component – job-supporting commercial spaces that allow residents to live and work in the same community. Together, these entitlements represent a thoughtful approach to growth, creating a balanced environment that supports residents at work and at home.

Approving these entitlements isn't just about building homes – it's about giving people the chance to put down roots and create a community in Valencia by FivePoint. Please support this project!

Sincerely,

Alan Marmion
alan4paint@gmail.com
661-212-5526

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

As a Valencia by FivePoint resident, I hope you will approve the entitlements to keep the community growing. One important factor that really attracted me to the community is FivePoint's commitment to green initiatives. We love the EV subsidies and pre-paid transit passes and feel that, by living in Valencia, we are doing our part to support a sustainable future. This is true not just for our generation but for future generations as well as this community continues to grow and thrive.

I hope you'll support the Valencia by FivePoint project!

Sincerely,

CHRISTOPHER Luyet
chris@duracore.com
916-717-4775

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commissioners,

FivePoint shows what mobility can (and should) look like through its community, Valencia. With walkable neighborhoods, bike paths, and plans to open a mobility hub – FivePoint makes sustainable travel practical and accessible.

The plans for Entrada South and Valencia Commerce Center build on this vision, connecting homes, jobs, and retail while reducing traffic and gas emissions.

Please approve these entitlements and support smarter, cleaner transportation for our community.

Thank you for your consideration,

Sincerely,

Arries Feraer
pm@hitechtileandmarble.com
818.888.6908

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear LA County Planning Commission,

FivePoint, a longtime steward of Santa Clarita Valley land, is addressing the housing crisis head-on with plans for its community, Valencia by FivePoint.

Entrada South, one of the entitlements before you, proposes bringing more than 1,000 homes to the area. Adding thousands of new residences and welcoming thousands of new families also boosts local businesses and fosters a more connected and inclusive community.

I encourage your support and approval of these entitlements. Thanks!

Sincerely,

Dan Greding
gpstripe@hotmail.com
805-497-3534

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Los Angeles Planning Commissioners:

The Santa Clarita Valley is made better by its natural resources, and having accessible places to hike, bike, walk, or simply enjoy a peaceful moment is important for mental and physical health.

Thanks to FivePoint's stewardship, nearly 10k acres of SCV land is permanently protected. The company also has a long history of land preservation, including the conservation efforts along the Santa Clara River.

This isn't just about preserving what we have – it's about shaping a future where building housing and environmental conservation go hand-in-hand.

By approving these entitlements for Valencia by FivePoint, you're supporting an organization with a proven track record of building responsibly while respecting the land. Please approve these plans.

Sincerely,

Dustin West
dwest@pciconcrete.com>
661-949-2855

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA Planning Commission,

At full buildout, Valencia by FivePoint will have 50 miles of walking and biking trails, transforming how we think about mobility. Walkable communities are critical to building connections and reducing reliance on cars. FivePoint makes choosing the environment easier and more affordable.

I am proud to support FivePoint and the company's plans for Entrada South and Valencia Commerce Center, which together will bring housing, and space for retail and job-producing businesses.

Exemplified by these two projects, FivePoint works to create a strong jobs-to-housing balance and encourages people to live where they work, which further limits traffic congestion in the area.

I hope you'll join me in supporting these entitlements for Valencia by FivePoint.

Sincerely,

Louie Lopez
louiejr@lopez-engineering.com
626-335-0586

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

County Planning Commission—

Valencia by FivePoint incorporates energy-efficient homes, solar power, and EV chargers throughout the community. It's exciting to see a company that's not just talking about sustainability but proving its commitment. FivePoint is building it into the very foundation of the Valencia community.

That's why I support FivePoint's plans to build more housing, retail, and space for job-producing businesses in the community with Entrada South and the next phase of Valencia Commerce Center.

Supporting these entitlements means supporting a company that prioritizes smart, sustainable growth and I hope you'll join me in standing behind a plan that shows how sustainable living, housing, mobility, job growth, and community can be achieved together.

Sincerely,

sg scott gronewold
scott@emeraldmetalproducts.com
5624902540

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

As a Valencia by FivePoint resident, I hope you will approve the entitlements to keep the community growing. One important factor that really attracted me to the community is FivePoint's commitment to green initiatives. We love the EV subsidies and pre-paid transit passes and feel that, by living in Valencia, we are doing our part to support a sustainable future. This is true not just for our generation but for future generations as well as this community continues to grow and thrive.

I hope you'll support the Valencia by FivePoint project!

Sincerely,

Tony Delia
tony@carpetcrown.com
818.988.7500

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

LA Planning Commission,

At full buildout, Valencia by FivePoint will have 50 miles of walking and biking trails, transforming how we think about mobility. Walkable communities are critical to building connections and reducing reliance on cars. FivePoint makes choosing the environment easier and more affordable.

I am proud to support FivePoint and the company's plans for Entrada South and Valencia Commerce Center, which together will bring housing, and space for retail and job-producing businesses.

Exemplified by these two projects, FivePoint works to create a strong jobs-to-housing balance and encourages people to live where they work, which further limits traffic congestion in the area.

I hope you'll join me in supporting these entitlements for Valencia by FivePoint.

Sincerely,

Tony Shields
jts1790@ca.rr.com
661-857-3487

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commission:

FivePoint goes above and beyond to protect wildlife, preserve open space and create meaningful access to nature for its residents – and for the broader Santa Clarita Valley community.

Valencia by FivePoint is planned to have 50 miles of trails for walking and biking. The entire community will have access to these trails for exercise, fresh air, and appreciating the natural world around us.

Please approve these plans and bring this incredible public resource to Santa Clarita!

Sincerely,

Paul Wilson
paulwilson@jwccontractors.com
661-723-1180

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Los Angeles Planning Commissioners:

The Santa Clarita Valley is made better by its natural resources, and having accessible places to hike, bike, walk, or simply enjoy a peaceful moment is important for mental and physical health.

Thanks to FivePoint's stewardship, nearly 10k acres of SCV land is permanently protected. The company also has a long history of land preservation, including the conservation efforts along the Santa Clara River.

This isn't just about preserving what we have – it's about shaping a future where building housing and environmental conservation go hand-in-hand.

By approving these entitlements for Valencia by FivePoint, you're supporting an organization with a proven track record of building responsibly while respecting the land. Please approve these plans.

Sincerely,

Megan Andrew
mandrew0702@gmail.com
(661)-714-2228

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Planning Commission:

FivePoint goes above and beyond to protect wildlife, preserve open space and create meaningful access to nature for its residents – and for the broader Santa Clarita Valley community.

Valencia by FivePoint is planned to have 50 miles of trails for walking and biking. The entire community will have access to these trails for exercise, fresh air, and appreciating the natural world around us.

Please approve these plans and bring this incredible public resource to Santa Clarita!

Sincerely,

John Whelchel
rickerconst@aol.com
661-510-6009

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

As the Broker/Owner of RE/MAX of Santa Clarita / Gateway / Valencia, a Board Member of the Santa Clarita Valley Economic Development Corporation, and a resident of the Santa Clarita Valley since 1988, I am writing to express my strong support for the Entrada South project and the final phase of the Valencia Commerce Center.

These projects represent a vital step forward for the Santa Clarita Valley. Entrada South will help address our region's acute housing shortage, creating new opportunities for families and working professionals to live closer to where they work. At the same time, the final phase of the Valencia Commerce Center will generate thousands of high-quality jobs, stimulate economic growth, and enhance our commercial base.

FivePoint's vision for these communities also includes extensive open space, public trails, and sustainable infrastructure—investments that will benefit current and future generations. These elements reflect a balanced, responsible approach to growth that prioritizes long-term community well-being.

In my roles as both a real estate professional and an economic development advocate, I have seen how projects like these can transform communities for the better. With housing demand at critical levels and job creation a top priority, Entrada South and the Commerce Center are not just welcome—they are essential.

I respectfully urge your support for these projects as they move forward for consideration this summer. The future of the Santa Clarita Valley—and Los Angeles County more broadly—depends on bold, thoughtful leadership to guide smart growth and sustainability.

Sincerely,

David M. Rendall

Broker/Owner, RE/MAX of Santa Clarita / Gateway / Valencia
Board Member, Santa Clarita Valley Economic Development Corporation
Santa Clarita Valley Resident Since 1988

davidrendall@grouponelegal.com
661.702.4550

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commission,

As a resident of Valencia by FivePoint, I am proud to support the plans for the next phase -- Entrada South and Valencia Commerce Center -- and the full Valencia vision.

Valencia is a wonderful place to live, and I really value the easy access to parks and trails, and programs like ValenciaGO that make it easier for me and my neighbors to live sustainably.

I am looking forward to the additional housing planned for Entrada South and the inclusion of some community retail.

Valencia Commerce Center's next phase will bring additional quality local jobs to the community.

I wholeheartedly support FivePoint's vision for the next phases of Valencia.

Please say "yes"!

Sincerely,

Calvin Hedman
calvin.hedman@hpllp.com
661.286.1540

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

When it comes to sustainability, Valencia by FivePoint goes above and beyond what any other master-planned community is doing.

The planned projects, Entrada South and Valencia Commerce Center, are planned to include zero-energy construction, Level 2 EV chargers for every home and throughout the community, and the use of recycled water.

All of this is in addition to the company permanently preserving two thirds of their land as open space.

I am proud to support a sustainable future for our community, not just for our generation but for generations to come.

Please support the plans for Valencia by FivePoint!

Sincerely,

kamil kirio
Kamil@carpetcrown.com
818-988-7500

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Los Angeles County Planning Commissioners,

We are all facing a critical housing shortage and an environmental crisis, and Valencia by FivePoint is showing that progress in one area does not have to come at the expense of the other. At full buildout, the community is planned to bring up to 21,000 new homes to the region, in addition to abundant new parks, community gathering spaces, new trails and open space.

Valencia by FivePoint is also one of the largest communities in the nation to maintain net-zero greenhouse gas emissions, a feat they are achieving through on-site investments (EV chargers for every home, solar energy, etc.) and off-site investments throughout LA County and beyond.

We can create the housing we need while protecting the environment – this is exactly the kind of community we should be supporting. Please vote 'yes' to the next Valencia by FivePoint proposals, Entrada South and Valencia Commerce Center.

Sincerely,

Dale Canfield
daleb@dalecc.com
8052078344

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

To the L.A. Regional Planning Commissioners—

I am writing in support of Entrada South and Valencia Commerce Center, the next phase of the Valencia by FivePoint community. Entrada South, a mixed use community, will bring more than 1,000 new homes, including some affordable options, along with retail space. VCC will bring additional space for job-generating uses.

And, through innovative mobility solutions, FivePoint is connecting every aspect of the community. Valencia by FivePoint plans to include neighborhood electric vehicle pathways, walking trails, and community mobility hubs that make it easier for residents to connect in ways that are healthier and more sustainable. ValenciaGO, an innovative transportation management organization, goes even further by providing free public transit passes for eligible residents as well as purchase subsidies for zero-emission vehicles for those who qualify within the community.

FivePoint is rethinking mobility in Valencia, and I fully support these efforts. Please help bring the Valencia vision to life and approve the next phase of Valencia by FivePoint!

Sincerely,

Jacqueline Rendall
jackierendall23@gmail.com
661-674-8144

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

Home prices feel unattainable for so many everyday people in our region. While it is important to increase our supply of homes, we must do so in a way that doesn't uproot or disrupt the fabric of existing communities.

I believe that the Valencia by FivePoint proposal will do exactly that. FivePoint has already developed one of the leading sustainable communities in the country. They are prioritizing our interests through commitments to preserving open space, with plans to create new places for us to shop and dine, while providing abundant housing at a mix of price points.

This is a thoughtful, balanced and creative plan, and should be worthy of your swift approval of Entrada South and Valencia Commerce Center.

Thank you for your time today.

Sincerely,

Craig Peters
craig.peters@cbre.com
818-621-4616

CC: Los Angeles County Board of Supervisors

Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors:

FivePoint is a true partner working to better the entire Santa Clarita Valley, and I am a proud supporter of their Valencia by FivePoint master-planned community. The project brings needed housing and jobs, boosting the economy, all while maintaining net-zero greenhouse gas emissions. The entitlement package for Entrada South and the next stage of the Valencia Commerce Center will extend and deepen that positive impact.

FivePoint also goes above and beyond with innovative mobility initiatives, including the ValenciaGo program, which offers eligible homeowners subsidy reimbursements on the purchase of a zero-emission vehicle, neighborhood electric vehicle or electric bike. They even offer pre-paid transit passes to residents!

With your support, Valencia by FivePoint can continue to grow, evolve, and leave lasting benefits for the greater LA region.

Sincerely,

Bob Khalsa
bobfoxbat@gmail.com
6615134433

CC: Los Angeles County Board of Supervisors

ARONOFF BROTHERS, L.P.
19921 Turnberry Drive · Tarzana, California 91356-5634
Telephone (818) 343-1064 · turnberry@turnberryinc.com

August 10, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners,

Aronoff Brothers L.P. owns multiple properties in the Valencia Commerce Center (VCC), as well as the Valencia Center II Condominiums, and the RiverCourt Association, Inc. I am a member of the VCC Association, the RiverCourt Association. I also serve on the board of each of these associations. I am an enthusiastic supporter of FivePoint's proposal for the next phase of the Valencia by FivePoint community.

VCC is a flourishing commercial park in the Santa Clarita Valley that powers our local economy and provides a meaningful source of high-quality jobs, tax revenue, and overall economic vibrancy. FivePoint's proposal would advance VCC to near completion by adding up to 3.4 million additional square feet of commercial and industrial space, enlarging the positive impact of this thriving economic hub.

FivePoint is also seeking approval for Entrada South, a mixed-use neighborhood that will help address our regional housing crisis by providing more than 1,000 additional housing units, alongside community-serving retail and other amenities. Importantly, Valencia by FivePoint will continue to be a leader in environmental sustainability, preserving abundant open space while achieving net-zero greenhouse gas emissions.

This is a well-balanced proposal that will strengthen all of L.A. County. Please join me in supporting this investment.

Sincerely,

Richard L. Aronoff
Managing Partner

cc: Los Angeles County Board of Supervisors

AVALONINV LP
4525 RESEDA BLVD.
TARZANA, CA. 91356

JONATHAN COOKLER
CHAIRMAN
JONATHAN COOKLER CO INC.
GENERAL PARTNER

July 25, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners,

As a business owner at Valencia Commerce Center (VCC) and a member of the VCC Association, I am an enthusiastic supporter of FivePoint's proposal for the next phase of the Valencia by FivePoint community.

VCC is a flourishing commercial park in the Santa Clarita Valley that powers our local economy and provides a meaningful source of high-quality jobs, tax revenue, and overall economic vibrancy. FivePoint's proposal would advance VCC to near completion by adding up to 3.4 million additional square feet of commercial and industrial space, enlarging the positive impact of this thriving economic hub. The plan includes bringing commercial space for job generating uses such as aerospace, healthcare, engineering, light manufacturing entertainment and more. This will maintain Valencia's healthy jobs-housing balance to help create and maintain a thriving community.

FivePoint is also seeking approval for Entrada South, a mixed-use neighborhood that will help address our regional housing crisis by providing more than 1,000 additional housing units, alongside community-serving retail and other amenities. Importantly, Valencia by FivePoint will continue to be a leader in environmental sustainability, preserving abundant open space while achieving net zero greenhouse gas emissions.

This is a well-balanced proposal that will strengthen all of L.A. County. Please join me in supporting this investment.

Sincerely,

Jonathan Cookler

cc: Los Angeles County Board of Supervisors

Building Industry Association of Southern California, Inc.

August 1, 2025

David W. Louie, Chair
County of Los Angeles Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Chair Louie and Members of the Los Angeles County Regional Planning Commission,

The Building Industry Association of Southern California, Inc. (BIASC) extends our strong support for the proposed next phase of Valencia by FivePoint: Entrada South and Valencia Commerce Center.

BIASC is the voice of the region's building industry, with six chapters offering localized services to building professionals from Ventura to the southern tip of Orange County. Throughout its 103-year history, the association has served its builder and associate members by anticipating, protecting and promoting their common interests through its many programs, services, councils and committees. Together, our members build nearly all new home communities throughout the region. More information can be found at www.biasc.org.

FivePoint has achieved something extraordinary: proving that creating high-quality new housing at scale does not have to come at the expense of the environment. The community, which is planned to provide up to 21,000 homes at full buildout, is also one of the largest in the nation to commit to net-zero greenhouse gas emissions.

Our region is facing an extreme shortfall of housing for our population. This issue was worsened by the recent tragic wildfires in Pacific Palisades and Altadena. But it is not just a crisis of supply. It is also a crisis of affordability. Many local residents dedicate too much of their income toward housing costs, leaving not enough funding for other critical areas like education, healthcare and retirement savings, and degrading overall quality of life.

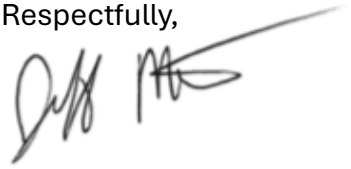
Valencia by FivePoint is an important part of the solution. The proposal before you and the entire Valencia by FivePoint plan will provide extensive benefits to the greater Los Angeles region. FivePoint is thoughtfully creating a holistic, master-planned community with plans

for schools, fire stations, and a library. Valencia by FivePoint will help generate quality local jobs and strengthen the business community across the County and the region. Now more than ever, it is important that we support housing. Valencia by FivePoint has been well planned for years and is included in the SCS/RPT, the county's own General Plan Housing Element as well as the local Area Plan. Advancing these projects forward will support the county's RHNA goals that is far behind schedule.

Valencia by FivePoint is already home to more than 3,000 residents, and is seeking approval for the next neighborhood, Entrada South, which will provide more than 1,000 additional homes. FivePoint is also seeking approval for the next phase of the Valencia Commerce Center, a vibrant commercial space that attracts job-generating companies, boosts the local economy, and helps promote a healthy jobs/housing balance.

BIASC strongly supports the proposal and approvals requested to continue the buildout of this innovative community and the benefits noted.

Respectfully,



Jeff Montejano
Chief Executive Officer
BIASC

cc: Los Angeles County Board of Supervisors

Los Angeles County Business Federation
Strengthening the Voice of Business Since 2008

July 24, 2025

Chair Louie and Planning Commissioners
Los Angeles Regional Planning Commission
320 W. Temple St.
Los Angeles, Ca 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Chair Louie and Commissioners:

On behalf of the Los Angeles County Business Federation (BizFed), a grassroots alliance of 240 business organizations representing 420,000 employers with 5 million employees throughout Southern California, we write to share our strong support for the Valencia by the Fivepoint community and its proposed next phases: Entrada South and the continued development of Valencia Commerce Center.

BizFed is dedicated to fostering the long-term economic health and prosperity of Los Angeles County. Our mission is to advocate for policies and projects that strengthen our regional economy. With the latest edition of Entrada South and the Valencia Commerce Center will further its journey of creating a healthy and affordable community for thousands of southern Californians.

As you are aware, Los Angeles County is facing a severe and worsening housing crisis that harms our competitiveness and stifles our economy. Entrada South will help address this challenge by creating more than 1,000 new homes at a variety of price points, which will also move L.A. County closer to meeting the goals outlined in its 2021-2029 Housing Element. Additionally, the plan will create up to 3.4 million additional square feet of job-producing commercial space at Valencia Commerce Center, which is already a significant economic engine and tax revenue generator in the Santa Clarita Valley. Housing near jobs is a key goal for the development and Valencia. Our businesses need housing for their workforce. This development will help to keep and attract businesses to continue to grow our economy.

Valencia by FivePoint is a net-zero greenhouse gas and net-zero energy, committed to a sustainable development investing numerous programs to achieve this goal. Furthermore, there is a wide array of resident amenities, a comprehensive transportation and mobility program, and will ultimately provide more than 10,000 acres of permanently protected open space. This proposal has earned our support, and we hope it will earn your vote.

If you have any questions, please don't hesitate to contact our BizFed Director of Advocacy, Chris Wilson at (562) 201-6034 or chris.wilson@bizfed.org

Sincerely,

Angela Gibson-Shaw
BizFed 2025 Chair
GLAAACC

David Fleming
BizFed Founding Chair

Tracy Hernandez
BizFed Founding CEO
IMPOWER, Inc.

David Englin
BizFed President

BizFed Association Members

Action Apartment Association
Advanced Medical Technology Association
Alhambra Chamber
American Beverage Association
Antelope Valley Chamber formerly Lancaster Chamber of Commerce
Apartment Association of Greater Los Angeles
Apartment Association of Orange County
Apartment Association, CA Southern Cities, Inc .
Apartment Association of California
Arcadia Association of Realtors
AREAA North Los Angeles SFV SCV
Armenian American Business Association
Armenian Trade & Labor Association
Arts District Los Angeles
ASCM Inland Empire Chapter
Associated Builders & Contractors SoCal (ABC SoCal)
Associated General Contractors
Association of Independent Commercial Producers
AV Edge California
Azusa Chamber
Bell Chamber
Beverly Hills Chamber
BioCom
Black Business Association
Black Professional Network
Boyle Heights Chamber of Commerce
Bridge Compton Org
Building Industry Association - LA/Ventura Counties
Building Industry Association of Southern California
Building Industry Association- Baldyview
Building Owners & Managers Association of Greater Los Angeles
Burbank Association of Realtors
Burbank Chamber of Commerce
Business and Industry Council for Emergency Planning and Preparedness
Business Resource Group
CalAsian Chamber
CalChamber
California African American Chamber of Commerce
California Apartment Association- Los Angeles
California Asphalt Pavement Association
California Bankers Association
California Black Chamber of Commerce
California Business Properties
California Business Roundtable
California Cleaners Association
California Contract Cities Association
California Council for Enviornmental & Economic Balance (CCEEB)
California Fuels & Convenience Alliance- Formerly California Independent Oil Marketers Association (CIOMA)
California Gaming Association
California Grocers Association
California Hispanic Chamber
California Hotel & Lodging Association
California Independent Petroleum Association
California Infrastructure Delivery Coalition
California Life Sciences Association
California Manufacturers & Technology Association
California Metals Coalition
California Natural Gas Producers Association
California Restaurant Association
California Retailers Association
California Self Storage Association
California Small Business Alliance
California Travel Association (CalTravel)
California Trucking Association
Californians For Smarter Sustainability
Carson Chamber of Commerce
Carson Dominguez Employers Alliance
Central City Association
Century City Chamber of Commerce
Chatsworth Porter Ranch Chamber of Commerce
Citrus Valley Association of Realtors
Civil Justice Association of California CJAC
Claremont Chamber of Commerce
Commerce Business Council formerly Commercial Industrial Council/Chamber of Commerce
Compton Chamber of Commerce
Compton Community Development Corporation
Compton Entertainment Chamber of Commerce
Construction Industry Air Quality Coalition
Construction Industry Coalition on Water Quality
Council of Infill Builders
Crenshaw Chamber of Commerce
Culver City Chamber of Commerce
Downey Chamber of Commerce
Downtown Alliance
Downtown Long Beach Alliance
DTLA Chamber of Commerce
El Monte/South El Monte Chamber
El Salvador Corridor Association
El Segundo Chamber of Commerce
Employers Group
Energy Independence Now EIN
Engineering Contractor's Association
EXP The Opportunity Engine
FastLink DTLA
Filipino American Chamber of Commerce
Friends of Hollywood Central Park
FuturePorts
Gardena Valley Chamber
Gateway to LA
Glendale Association of Realtors
Glendale Chamber
Glendora Chamber
Greater Antelope Valley AOR
Greater Bakersfield Chamber of Commerce
Greater Coachella Valley Chamber of Commerce
Greater Downey Association of REALTORS
Greater Lakewood Chamber of Commerce
Greater Leimert Park Crenshaw Corridor BID
Greater Los Angeles African American Chamber
Greater Los Angeles Association of Realtors
Greater Los Angeles New Car Dealers Association
Greater San Fernando Valley Chamber
Harbor Association of Industry and Commerce
Harbor Trucking Association
Historic Core BID of Downtown Los Angeles
Hollywood Chamber
Hospital Association of Southern California
Hotel Association of Los Angeles
ICBWA- International Cannabis Women Business Association
Independent Cities Association
Independent Hospitality Coalition
Industrial Environmental Association
Industry Business Council
Inglewood Board of Realtors
Inland Empire Economic Partnership
Irwindale Chamber of Commerce
Kombucha Brewers International
La Cañada Flintridge Chamber
LA County Medical Association
LA Fashion District BID
LA South Chamber of Commerce
Larchmont Boulevard Association
Latin Business Association
Latino Food Industry Association
Latino Golfers Association
Latino Restaurant Association
LAX Coastal Area Chamber
Licensed Adult Residential Care Association-LARCA
Long Beach Area Chamber
Long Beach Economic Partnership
Long Beach Major Arts Consortium
Los Angeles Area Chamber
Los Angeles Economic Development Center
Los Angeles Gateway Chamber of Commerce
Los Angeles Latino Chamber
Los Angeles LGBTQ Chamber of Commerce
Los Angeles Parking Association
Los Angeles Regional Food Bank
MADIA Tech Launch
Malibu Chamber of Commerce
Manhattan Beach Chamber of Commerce
Manhattan Beach Downtown Business & Professional Association
Marina Del Rey Lessees Association
Marketplace Industry Association
Monrovia Chamber
Motion Picture Association of America, Inc.
MoveLA
MultiCultural Business Alliance
NAIOP Southern California Chapter
NAREIT
National Association of Minority Contractors
National Association of Theatre Owners CA/Nevada
National Association of Women Business Owners
National Association of Women Business Owners - LA
National Association of Women Business Owners-California
National Federation of Independent Business Owners California
National Hookah
National Latina Business Women's Association
Norweigian American Chamber of Commerce
Ofiso Community Foundation
Orange County Business Council
Orange County Hispanic Chamber of Commerce
Pacific Merchant Shipping Association
Panorama City Chamber of Commerce
Paramount Chamber of Commerce
Pasadena Chamber
Pasadena Foothills Association of Realtors
PGA
Pharmaceutical Care Management Association
PhRMA
Pico Rivera Chamber of Commerce
Pomona Chamber
Rancho Southeast REALTORS
ReadyNation California
Recording Industry Association of America
Regional CAL Black Chamber, SVF
Regional Hispanic Chambers
San Gabriel Valley Economic Partnership
San Pedro Peninsula Chamber of Commerce
Santa Clarita Valley Chamber
Santa Clarita Valley Economic Development Corp.
Santa Monica Chamber of Commerce
Secure Water Alliance
Sherman Oaks Chamber
Signal Hill Chamber
South Bay Association of Chambers
South Bay Association of Realtors
South Gate Chamber of Commerce
Southern California Contractors Association
Southern California Golf Association
Southern California Grantmakers
Southern California KFC Franchise
Southern California Leadership Council
Southern California Minority Suppliers Development Council Inc.
Southern California Water Coalition
Southland Regional Association of Realtors
Specialty Equipment Market Association
Structural Engineers Association of Southern California
Sunland/Tujunga Chamber
Sunset Strip Business Improvement District
Swiss American Chamber of Commerce
Thai American Chamber of Commerce
The Bridge Network
The LA Coalition for the Economy & Jobs
The Los Angeles Taxpayers Association
The Two Hundred for Homeownership
Torrance Area Chamber
Tri-Counties Association of Realtors
United Chambers – San Fernando Valley & Region
United Contractors
United States-Mexico Chamber
Unmanned Autonomous Vehicle Systems Association
Urban Business Council
US Green Building Council
US Resiliency Council
Valley Economic Alliance, The
Valley Industry & Commerce Association
Venice Chamber of Commerce
Vermont Slauson Economic Development Corporation
Veterans in Business
Vietnamese American Chamber
Village of Sherman Oaks BID
Warner Center Association
West Covina Chamber
West Hollywood Chamber
West Hollywood Design District
West Los Angeles Chamber
West San Gabriel Valley Association of Realtors
West Valley/Warner Center Chamber
Westchester BID
Western Electrical Contractors Association
Western Manufactured Housing Association
Western Propane Gas Association
Western States Petroleum Association
Westside Council of Chambers
Westwood Community Council
Whittier Chamber of Commerce
Wilmington Chamber
World Trade Center
Yes in My Backyard
7-Eleven Franchise Owners Association of Southern California

BRIDGE TO HOME
homeless services | Help. Hope. Change.

August 11, 2025

To the L.A. County Planning Commission and County Board of Supervisors:

On behalf of Bridge to Home, I am writing to express support for the Valencia by FivePoint housing project. As a local nonprofit executive working directly with vulnerable populations, I believe this development represents an opportunity to address one of our community's most urgent needs: access to safe and affordable housing.

Valencia by FivePoint demonstrates a commitment to tackling the severe shortage of affordable homes in our region. This type of investment is not only critical, it also acknowledges and includes residents who are too often left out of large-scale housing initiatives: working families, seniors, and individuals at risk of displacement.

As with many communities across California, Santa Clarita faces increasing pressure to provide housing options that are financially attainable for all income levels. Projects like this are essential to preventing displacement and maintaining the diversity and stability of our local population.

In their development, Mission Village (approved for 4,055 homes and now under construction) includes approximately 10% affordable housing. FivePoint is currently working with an affordable housing builder on their first phase of affordable homes (approximately 300 restricted affordable family and senior housing units). They are currently working to secure financing.

The next phase, Entrada South, is currently under consideration and includes over 1,500 new homes, with 10% dedicated to restricted affordable housing.

For these reasons, I respectfully ask the Planning Commission and Board Supervisors to approve the Valencia by FivePoint project. It represents a thoughtful and much-needed investment in our community's long-term health and housing stability.

Thank you for your time and consideration.

Chris Najarro
Executive Director

23752 Newhall Ave, Santa Clarita, CA 91321
Tel.: 661.254.4663 | BTOHOME.COM
A California Non-Profit Public Benefit Corporation (I.R.C. §501(c)(3)) | Tax ID No. 95-4587823

Landscape Development, Inc.

October 24, 2025

Los Angeles County Board of Supervisors
Att: Clerk of the Board of Supervisors
Room 383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors:

BrightView Landscape Development, Inc. is a licensed General Contractor, Subcontractor, and a Union member of Laborers Local 300 - LiUNA! We have worked on the community development for FivePoint at Mission Village, Valencia, CA project.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The project also includes extensive open space, and a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, and off-site sustainability improvements in underserved communities and scores of other features that protect the environment and advance health and wellness. Importantly, the project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection.

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

Landscape Development, Inc.

In conclusion, we urge the County's Board of Supervisors to approve this project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Vince Germann
Senior Vice President

13691 W. Vaughn St.
San Fernando, CA 91340
C. 858.945.2606
Vince.Germann@brightview.com
www.brightview.com

Since 1964
Safety • Quality • Service

C. A. RASMUSSEN, INC.

General Engineering Contractors
License No. 254681 A

Valencia Commerce Center
28548 Livingston Avenue
Valencia, CA 91355-4171
Telephone 661.367.9040
Fax 661.367.9099
www.carasmussen.com

9/22/25

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Our company is a licensed General Contractor and a member of Local Union 12, 300, 600, and 209 that has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the Project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection. Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

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C. A. RASMUSSEN, INC.

General Engineering Contractors
License No. 254681 A

Valencia Commerce Center
28548 Livingston Avenue
Valencia, CA 91355-4171
Telephone 661.367.9040
Fax 661.367.9099
www.carasmussen.com

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Sincerely,

C.A. Rasmussen, Inc.

Adam Rasmussen
President

Cc: L.A. County of Board of Supervisors

CalARTS

California Institute of the Arts
24700 McBean Parkway
Valencia, California 91355-2340
calarts.edu

RAVI S. RAJAN
President

OFFICE OF THE PRESIDENT
Phone 661 253-7820
president@calarts.edu

September 1, 2025

Los Angeles County Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

The California Institute of the Arts (CalArts), a Disney endowed, internationally recognized arts college welcomed its first class in 1970, and has been serving the Santa Clarita Valley and beyond ever since. We offer comprehensive degree programs in visual, performing, media and literary arts from our campus in Valencia, where students have access to local experts and extensive community resources.

FivePoint and its subsidiary, the Newhall Land & Farming Company (who helped facilitate opening our campus), have been longstanding members of the community and bring expansive benefits to the region. The first phase of Valencia by FivePoint, now home to several thousand residents, has been a well-recognized success for the Santa Clarita Valley. The proposed next phase -- Entrada South and the continuation of the Valencia Commerce Center -- will build on that success.

Importantly, the new community will deliver more than 1,500 high-quality, price-attainable homes that can serve our faculty, staff, students, and alumni. Valencia Commerce Center may also one day house creative businesses that provide solid employment and internship opportunities for our student body and graduates.

At CalArts, environmental stewardship is one of our guiding principles. It is a priority we share with FivePoint. At full buildout, Valencia by FivePoint community will be one of the largest in the nation to commit to achieving net zero greenhouse gas emissions, thanks to a variety of on-site and off-site investments. In addition, FivePoint has committed to permanently protect up to 10,000 acres of the vast open space we enjoy in the Santa Clarita region, and its energetic conservation work has protected a variety of native wildlife habitats and animal species.

A rising tide lifts all ships, and the health of CalArts depends on the health of our broader region. The next phase of Valencia by FivePoint will bring meaningful benefits to this community, as well as our school and our environment. We urge you to give this project your full support.

Sincerely,

Ravi Rajan, President

cc: Los Angeles County Board of Supervisors

California Chamber of Commerce
1215 K Street, 14th Floor
Sacramento, CA 9581

August 11, 2025

County of Los Angeles Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commission,

The California Chamber of Commerce (CalChamber) is a non-profit business association with over 14,000 members, both individual and corporate, representing 25% of the state's private sector and virtually every economic interest in the state of California. Seventy-five percent of its members have 100 or fewer employees. CalChamber has proudly supported and fostered the growth and competitiveness of California's dynamic economy for over 100 years. We respectfully submit this letter in support of L.A. County's approval of the next phase of Valencia by FivePoint in the Santa Clarita Valley -- Entrada South and the expansion of the Valencia Commerce Center.

This proposal will meaningfully advance the goal of promoting job growth and housing creation in the Santa Clarita Valley, and thus for California overall. The planned expansion of Valencia Commerce Center will add millions of square feet to one of northern L.A. County's most important employment hubs, attracting and retaining good-paying, dependable jobs across industries such as healthcare, aerospace, manufacturing, professional services, and more. This investment will also strengthen the region's tax base, support its jobs-housing balance, and create a significant number of high-wage jobs.

At the same time, Los Angeles County faces a severe housing deficit. The County has achieved only about 8% of its state-mandated RHNA target for the 2021-2029 Housing Element, with the median home price in the County exceeding $950,000.[1] This prolonged

[1] https://www.redfin.com/county/321/CA/Los-Angeles-County/housing-market?utm_source=chatgpt.com

shortage is exacerbating the state's housing crisis and undermining business recruitment, constraining economic growth, and diminishing quality of life. The proposed Entrada South community will deliver more than 1,500 new homes at a variety of price points, including affordable housing units, located near thriving job centers. In total, Valencia by FivePoint will ultimately contribute up to 21,000 new homes to the region while embracing environmentally sustainable community development -- a model other builders across the state could look to emulate.

The Valencia by FivePoint proposal for Entrada South and Valencia Commerce Center is thoughtful, well-designed, and a powerful catalyst for California's sustainable economic future. CalChamber strongly encourages the County to support this project of statewide significance.

Sincerely,

Adam Regele

Vice President of Advocacy and Strategic Partnerships

cc: Los Angeles County Board of Supervisors

California Apartment Association
Los Angeles County

August 7th, 2025

Chair Davis W. Louie
Los Angeles County Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT for Desperately Needed Housing

Dear Chair Louie and Members of the LA County Planning Commission,

On behalf of the California Apartment Association, the nation's largest statewide trade group representing owners, investors, developers, managers, and suppliers of rental homes and apartment communities, I am writing to express strong support for the advancement of housing development at all levels of affordability and in all communities.

Our state and county continue to face a severe and long-standing housing shortage. The need for housing at all levels is urgent, and the consequences of inaction are felt across every sector of society. Affordability and obtainability challenges are directly tied to the chronic underproduction of housing over many years.

It is critical that we embrace smart and sustainable housing development as a vital part of the solution. Projects that add housing whether they are infill, mixed-use, new communities, or redevelopment of underutilized land play a key role in increasing supply, stabilizing costs, and providing homes for residents across income levels.

As decision-makers, you can address this crisis by supporting housing proposals that meet the needs of your region. The approval of such developments is not just a planning decision; it is a statement of commitment to creating thriving, inclusive, and equitable communities.

We respectfully urge your commission to take a proactive stance in advancing housing solutions throughout the county. Every jurisdiction has a role to play, and every home added to the supply helps bring us closer to resolving this crisis.

Thank you for your consideration and ongoing leadership in addressing the county's housing challenges.

Sincerely,

Fred Sutton
California Apartment Association

California Business Roundtable

July 30, 2025

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commission,

I am writing to express my support for Valencia by FivePoint on behalf of the California Business Roundtable. The California Business Roundtable has a mission of driving sustainable economic development in California. We are dedicated to promoting a business environment where companies can thrive, create jobs, and contribute to our overall prosperity. The Valencia by FivePoint proposal fits squarely into that mission.

The project will enable the creation of up to 3.4 million square feet of commercial space at Valencia Commerce Center for quality job-generating uses in healthcare, engineering, entertainment, and more. Additionally, Valencia Commerce Center's prime location in the Santa Clarita Valley strengthens the region's jobs to housing balance.

Entrada South will offer more than 1,500 much-needed homes at a variety of price points, in addition to retail and commercial space. This investment in a significant L.A. County population center will drive economic growth for the entire region.

Valencia is already an important part of Southern California's economic ecosystem, creating thousands of jobs and generating vital tax revenue to fund public services in the County. This proposal will increase both jobs and tax revenue at a critical moment, for both the region and the state. In addition, FivePoint's admirable commitment to environmental sustainability – including a commitment to net-zero greenhouse gas emissions – demonstrates that strong environmental practices and healthy business growth can exist side-by-side. In addition, the development will permanently preserve two-thirds of it's property into permanent open space. This development demonstrates that master-planed communities can build at scale, embrace sustainable practices and build housing close to jobs at scale.

For these reasons, the California Business Roundtable strongly supports the Valencia by FivePoint community's latest phase – Entrada South and the next phase of the Valencia Commerce Center.

Sincerely,

cc: Los Angeles County Board of Supervisors

CALIFORNIA BUSINESS PROPERTIES ASSOCIATION

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Sr. Director of Government Relations
SKYLER WONNACOTT

County of Los Angeles Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: *SUPPORT for Entrada South (Project 00-210) & Valencia Commerce Center (Project 87-150)*

Dear L.A. County Planning Commissioners:

California Business Properties Association has been an advocate for commercial real estate in California for over 50 years, serving as the recognized voice of all aspects of the real estate industry. We represent over 10,000 members across the office, retail, and industrial sectors and advance responsible real estate development.

CBPA strongly supports FivePoint's plans to bring extensive economic benefits to the Santa Clarita Valley community with the continuation of Valencia by FivePoint.

FivePoint is seeking your approval for the Entrada South community and the next portion of the Valencia Commerce Center. Valencia by FivePoint is already home to over 3,000 residents and poised to be a powerful economic engine in the Santa Clarita Valley. It has delivered thousands of construction jobs and permanent jobs, meaningful economic output, and significant annual tax revenues for L.A. County and the State. These new entitlements will only continue and expand this positive impact.

CBPA California Business Properties Association (CBPA) is the recognized voice of all aspects of the commercial – office, retail, and industrial – real estate industry in California, representing the largest commercial real estate consortium with over 10,000 members.

The Valencia Commerce Center is an existing commercial center that is already home to businesses in the aerospace, healthcare, and engineering sectors, among others.

This next phase will bring up to 3.4 million square feet to VCC in the heart of the growing Santa Clarita Valley, generating even greater economic benefits for the region and its residents. This will allow residents additional opportunities to work locally at new quality jobs created in VCC.

The addition of more than 1,500 new homes in Entrada South will also help relieve the housing crisis that has been holding our economy back.

FivePoint's plan will deliver substantial economic benefits at the local, regional, and state levels and CBPA is proud to support it. Thank you for your consideration of our views.

Respectfully,

Matthew Hargrove
President & CEO

cc: Los Angeles County Board of Supervisors

CCA
CENTRAL CITY ASSOCIATION OF LOS ANGELES

July 23, 2025

L.A. County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

Re: Support for Continuation of Valencia by Fivepoint: Entrada South and Valencia Commerce Center

Dear L.A. County Regional Planning Commission,

Established in 1924, Central City Association (CCA) is committed to advancing policies and projects that enhance Downtown Los Angeles' (DTLA) vibrancy and increase opportunity in the region. We are a membership organization representing over 300 members including businesses, nonprofits and trade associations that have played a leading role in transforming DTLA into a dynamic mixed-use 24/7 urban environment. In keeping with our mission to support affordable and sustainable housing development, **we are pleased to voice our strong support for the continuation of Valencia by Fivepoint's development project, Entrada South and Valencia Commerce Center.**

At a time when affordable housing is in desperate need across L.A. County, Entrada South is a vital opportunity to help meet this urgent demand. The proposed project will introduce over 1,000 new residential properties to the Valencia by Fivepoint area, thus addressing the housing insecurity in the region. In addition to housing, the plan includes a significant amount of community retail space which will increase vitality to the region, support local businesses and create a sense of belonging for businesses and residents alike. Furthermore, the development will complete the Valencia Commerce Center creating a job-generating commercial space hub for industries such aerospace, healthcare, engineering, light manufacturing and entertainment. These employment opportunities will support the local economy thrive and continue to build a strong Valencia by Fivepoint community.

We request your support for the continuation of Valencia by Fivepoint's development project, Entrada South and Valencia Commerce Center. This project would not only promote more affordable housing development but does so with the forefront of sustainability and the health of their residents and workers in mind.

We appreciate your consideration.

Sincerely,

Nella McOsker
President & CEO
Central City Association

September 4, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Members of the LA County Regional Planning Commission,

I moved to the Santa Clarita Valley 50 years ago to take advantage of the many features that distinguish this community, including its easy access to majestic open space for biking, hiking, walking, and general enjoyment. This is a truly wonderful place to live.

As Executive Director and President of the Community Hiking Club in the Santa Clarita Valley, I have always been impressed by the commitment that Five Point has made to preserving open space in their plans for Valencia by Five Point. I have been working to conserve land throughout the Los Angeles County region since 2003, and I am happy to share my strong support for the next phase of this well-planned community, Entrada South and Valencia Commerce Center.

As part of the complete Valencia community, Five Point plans to permanently preserve 10,000 acres of land -- approximately two-thirds of its entire acreage – including a sweeping High Country area and other open space that will be preserved and funded in perpetuity. This includes conservation areas and funding for the rare San Fernado Valley Spine flower, which Five Point was instrumental in bringing back to health. The company also plans to create more than 50 miles of hiking and biking trails that will connect to the vast, surrounding public open space areas in the San Gabriel and Santa Susana Mountains.

These measures are in addition to Five Point's investments in clean energy, zero-emissions mobility, and other sustainability features that will make the community carbon neutral, both for construction and operations.

I have gotten to know the Five Point team, including Matt Carpenter and his colleagues, and they are first-rate professionals who care deeply about this community. Their extraordinary stewardship of this land is a testament to enlightened planning and a genuine commitment to natural resource conservation, and I urge you to approve Entrada South and Valencia Commerce Center and allow them to continue this important work.

Sincerely,

Dianne Erskine Hellrigel

Dianne Erskine-Hellrigel

Cc: Los Angeles County Board of Supervisors

VALENCIA COMMERCE CENTER ASSOCIATION

July 16, 2025

Regional Planning Commission
County of Los Angeles Planning Department
320 W. Temple Street, Room 150
Los Angeles, CA 90012
comment@planning.lacounty.gov

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners,

The Valencia Commerce Center Association represents owners of businesses and properties in Valencia Commerce Center, a flourishing commercial/industrial business park in the Santa Clarita Valley. The Commerce Center is home to nearly 300 businesses in a range of industries that fuel the economy of Los Angeles and the surrounding region. The Association and its Board of Directors strongly support FivePoint's proposal to expand this important economic asset as part of the next phase of entitlements for the *Valencia by FivePoint* master-planned community.

The Newhall Land & Farming Company, now part of FivePoint, began the development of the Commerce Center nearly 40 years ago. With over 9 million square feet of commercial space well located in this growing region, adjacent to the third-largest city in L.A. County, the Commerce Center is a vital source of high-quality jobs, critical tax revenue and overall economic activity that benefits the entire County. FivePoint's proposal to nearly complete the Commerce Center by adding up to 3.4 million additional square feet of commercial and industrial space will expand and strengthen its positive impact on our region. Additionally, it will help the Santa Clarita Valley extend its leadership in key sectors such as healthcare, technology, aerospace, entertainment and finance.

The proposed next phase of the Commerce Center is part of an innovative community envisioned by FivePoint that includes thousands of price-attainable homes, plans for community-serving retail space, parks and recreation areas, preserved and funded open space, 50 miles of trails, a library, fire stations, and more. Notably, the full community is designed to achieve net zero greenhouse gas emissions, enabled by wide-ranging sustainability investments throughout the Santa Clarita Valley, L.A. County and elsewhere in California. This is a progressive and brave approach to community building that achieves many of L.A. County's objectives including economic growth, increased housing production and protection of the environment.

Economic resources like Valencia Commerce Center must continue to evolve to stay relevant in our dynamic economy. Please join us in supporting this critical investment in L.A. County's future prosperity.

Sincerely,

John Calhoun
Senior Association Manager
Acting on behalf of the Board of Directors

c/o Vanguard Management ~ 28245 Avenue Crocker, Suite 103 ~ Valencia, CA ~ 91355
661.775.9400 office ~ 661.775.9898 fax

Greater Los Angeles African American Chamber of Commerce

501(C) 6

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Cameron Onumah
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Breana Weaver

July 23, 2025

Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
Re: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commission,

The Greater Los Angeles African American Chamber of Commerce (GLAAACC) was established in 1991 to advocate for African-American owned businesses an increase their participation in the L.A. regional economy. Our mission includes fostering job creation, promoting entrepreneurship, and expanding access to economic opportunity for all.

We energetically support the next phase of the Valencia by FivePoint community—Entrada South and the next phase of Valencia Commerce Center (VCC). This is a visionary and innovative project that will fuel our economy while also achieving an important balance with environmental sustainability and corporate responsibility. Since its prior County approval in 2017, Valencia by FivePoint has created homes for more than 3,000 residents, generated tremendous economic activity and tax revenue, preserved significant amounts of open space, and introduced a pioneering sustainable mobility program – all with zero net increase of greenhouse gas emissions.

The new proposal will take these achievements to the next level. Entrada South will deliver more than 1,000 new homes for L.A. County, and the next phase of VCC will deliver 3.4 million square feet of commercial space for job-producing businesses. In the process, the project will create significant numbers of new construction and service-sector jobs, new contract opportunities for diverse businesses, and critical housing for our regional workforce. The positive impact for our members, and all Angelenos, will be significant and long-lasting.

FivePoint has received the prestigious designation of Builder of the Year from GLAAACC twice, in 2024 and 2022 demonstrating their commitment to the mission of GLAAACC and enhancing our local economy. We encourage you in the strongest terms to support this proposal without delay.

Sincerely,

Angela Gibson-Shaw

Angela Gibson Shaw

GLAAACC President

5120 W. Goldleaf Circle, Suite 230 | Los Angeles, California 90056
Phone: 323.292.1297 | Fax: 323.292.1451 | info@glaaacc.org

August 8, 2025

Chair David W. Louie
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Chair Louie and Members of the L.A. County Regional Planning Commission,

The Golden State Gateway Coalition advocates for strategic transportation infrastructure investment in northern Los Angeles County to promote sustainable economic growth in one of California's most dynamic regions.

Master-planned communities bring coordinated housing and transportation development that reduces sprawl and improves our regional connectivity. From the beginning, the Valencia by FivePoint project has placed a well-deserved emphasis on comprehensive transportation investments, plus a commitment to building a sustainable, net-zero GHG community. Ultimately, this development will consist of approximately 21,500 homes and millions of square feet of commercial, job-generating space making this a truly sustainable community.

These have included more than $150 million in direct investments in local and regional traffic mitigation and transportation improvements, with additional investments also planned in the future. These include road widening, new signals and other upgrades at several key interchanges and intersections. FivePoint has also been instrumental in securing major funding for the long-term improvements to the 5 Freeway currently underway, working closely with the Golden State Gateway Coalition and its representatives from the Santa Clarita Valley, Antelope Valley, and L.A. County. These investments have alleviated congestion, supported regional commerce, and improved overall quality of life.

Given this success to date, we believe Valencia by FivePoint has earned support for its next phases. On behalf of the Golden State Gateway Coalition, we heartily recommend approval of the next phase of Valencia Commerce Center and Entrada South.

Sincerely,

John Musella

John Musella
Executive Director, Golden State Gateway Coalition

cc: Los Angeles County Board of Supervisors

September 23, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Planning Commissioners:

GRID Alternatives submits this letter in strong support of FivePoint and their proposal for the Valencia by FivePoint community – Entrada South and the next phase of the Valencia Commerce Center.

GRID Alternatives is a nonprofit organization that envisions a rapid, equitable transition to a world powered by renewable energy that benefits everyone. Our mission is to build community-powered solutions to advance economic and environmental justice through renewable energy.

We have had the opportunity to partner with FivePoint to deliver clean energy retrofits for homeowners in disadvantaged areas of Los Angeles County. These retrofits have included cool roofs and solar arrays that empower homeowners to benefit from zero-emission solar energy while lowering their electric bill. These installations have delivered significant environmental and financial benefits at no cost to participating homeowners. Many of these installations have been completed by local L.A. County businesses, extending their economic benefits.

FivePoint's leadership in these efforts reflects a deep and genuine commitment to environmental responsibility and inclusive economic progress in L.A. County. Their investments are improving quality of life for families living far beyond the footprint of their community in the Santa Clarita Valley. This work sets a powerful example of corporate responsibility and long-term vision—one we hope will inspire other companies across California.

We are proud to support FivePoint's proposal and commend their thoughtful and far-sighted approach to development.

Sincerely,

Ashley Christy, Executive Director

cc: Los Angeles County Board of Supervisors

GRID Alternatives Greater LA 1662 Long Beach Avenue Los Angeles, CA 90021 O 310.735.9762 F 310.388.0288 E infogla@gridalternatives.org W gridla.org

Henry Mayo
Newhall Hospital Foundation

July 17, 2025

Dear Regional Planning Commissioners,

Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

I am pleased to write to you as in support of Valencia by FivePoint. The Henry Mayo Newhall Hospital Foundation is a nonprofit, philanthropic organization that strives to increase community awareness and raise vital funds for hospital initiatives, such as expanding services and acquiring new technology to bolster the excellent care already available at our renowned hospital.

The most successful hospitals grow and prosper with the help of their community. Henry Mayo Newhall Hospital is no exception, as we proudly celebrate our 50th year serving the Santa Clarita Valley.

FivePoint and its predecessor, Newhall Land, have been leaders in the Santa Clarita Valley community for over a century, providing critical assistance to help our region and our hospital flourish and help keep our community healthy. This continuing commitment to Henry Mayo Newhall Hospital dates back to our hospital's formation, with Newhall Land's donation of 25 acres of land and an initial capital investment back in 1969.

Today, Valencia by FivePoint is a vital asset for the local and regional economies, providing much-needed housing and jobs for this region, and, importantly, helping enable a healthy lifestyle for the thousands of residents that call the community home. With over 50 miles of walking paths planned, as well as public parks and outdoor recreation spaces, Valencia by FivePoint encourages the community to get outside and move. In addition, the community's impressive sustainability investments contribute to cleaner air and healthier lives for us all.

Valencia by FivePoint also supports healthy eating through its on-site farmers market, and fosters connection through communal gathering spaces, inviting people to spend time together and forge healthy social bonds.

These impressive achievements make the entire region better. We support Valencia by FivePoint's continued growth and success through the proposed next phase of the community, Entrada South and Valencia Commerce Center. They are a good corporate partner and committed to quality development.

Sincerely,

Marlee Lauffer
Foundation President, Henry Mayo Newhall Hospital Foundation

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3911 Laura Alice Way - CONCORD, CALIFORNIA 94520-8544
(925) 686-1780 - FAX: (925) 686-1499

September 15, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Our company is a licensed General Contractor and a member of the International Union of Operating Engineers Local 12 and Southern California District Council of Laborers of the Laborer's International Union of North America that has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-

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site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the Project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection.

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Sincerely,

Brian McCosker

President

Cc: L.A. County of Board of Supervisors

Jerry Pelton
J&P Development, LLC
5380 Dorwin Ln.
Santa Barbara, CA 93111
805.570.2374
jrpelton@aol.com

08/09/2025

Los Angeles County Regional Planning Commission

Department of Regional Planning

320 West Temple Street

Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners,

I own 7 industrial properties in Los Angeles County and am a business owner at Valencia Commerce Center (VCC) and a member of the VCC Association. I am an enthusiastic supporter of FivePoint's proposal for the next phase of the Valencia by FivePoint community.

VCC is a flourishing commercial park in the Santa Clarita Valley that powers our local economy and provides a meaningful source of high-quality jobs, tax revenue, and overall economic vibrancy. FivePoint's proposal would advance VCC to near completion by adding up to 3.4 million additional square feet of commercial and industrial space, enlarging the positive impact of this thriving economic hub.

FivePoint is also seeking approval for Entrada South, a mixed-use neighborhood that will help address our regional housing crisis by providing more than 1,000 additional housing units, alongside community-serving retail and other amenities. Importantly, Valencia by FivePoint will continue to be a leader in environmental sustainability, preserving abundant open space while achieving net zero greenhouse gas emissions.

This is a well-balanced proposal that will strengthen all of L.A. County. Please join me in supporting this investment.

Sincerely,

Jerry Pelton

cc: Los Angeles County Board of Supervisors

July 25, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners:

As a business owner at Valencia Commerce Center (VCC) with two of our five locations in the Santa Clarita area, I am an enthusiastic supporter of FivePoint's proposal for the next phase of the Valencia by FivePoint community.

VCC is a flourishing commercial park in the Santa Clarita Valley that powers our local economy and provides a meaningful source of high-quality jobs, tax revenue, and overall economic vibrancy. FivePoint's proposal would advance VCC to near completion by adding up to 3.4 million additional square feet of commercial and industrial space, enlarging the positive impact of this thriving economic hub.

FivePoint is also seeking approval for Entrada South, a mixed-use neighborhood that will help address our regional housing crisis by providing more than 1,000 additional housing units, alongside community-serving retail and other amenities. Importantly, Valencia by FivePoint will continue to be a leader in environmental sustainability, preserving abundant open space while achieving net zero greenhouse gas emissions. LA North Studios is working with FivePoint to add electrical vehicle charging stations to one of our properties.

This is a well-balanced proposal that will strengthen all of L.A. County. Please join me in supporting this investment.

Sincerely,

John Prabhu

John Prabhu
Manager
LA North Studios LLC

cc: Los Angeles County Board of Supervisors

LOS ANGELES AREA
CHAMBER OF COMMERCE

July 29, 2025

County of Los Angeles Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150) - SUPPORT

Dear Los Angeles County Regional Planning Commission,

On behalf of the Los Angeles Area Chamber of Commerce, ("The Chamber"), the largest business organization in the Los Angeles region, I am writing to express our strong support for the second phase of Valencia by FivePoint, Entrada South and Valencia Commerce Center.

Valencia by FivePoint is a community of regionwide economic significance, creating workforce opportunities and meaningful tax revenue that benefits the L.A. region. The Chamber believes the proposed next phases will amplify these benefits for the region, most notably addressing the region and state's severe housing shortage.

The proposed Entrada South community is planned to deliver approximately 1,500 new homes at a variety of price points, located near thriving job centers. The proposed communities will allow Angelenos to live and work in the same community, eliminating the need for long commutes and thus improving quality of life. The plan's other component, Valencia Commerce Center, will enlarge a flourishing job center that currently houses job-generating businesses in a variety of sectors. This next proposed phase will bring up to 3.4 million square feet of new space, generating even more economic benefits for the L.A. region.

The Chamber supports projects that tackle the existing needs of our communities and address the housing crisis, cultivate healthier neighborhoods, and increase safety in our communities to make the region a more commuter-friendly place to live and work. The Valencia by FivePoint community is a project that achieves just that.

The entire Valencia by FivePoint community is projected to provide up to 21,000 new homes while preserving 10,000 acres of open space, providing 50 miles of trails, and achieving net zero greenhouse gas emissions. The Chamber believes FivePoint's ambitious plan to advance this cutting-edge community while fostering economic growth and promoting sustainability is commendable, and we urge the County to support this project.

Sincerely,

Maria S. Salinas
President & CEO

cc: Los Angeles County Board of Supervisors

Accredited Chamber
U.S. Chamber of Commerce

350 S. Bixel St. | Los Angeles, CA 90017 | P: 213.580.7500 | F: 213.580.7511 | lachamber.com

July 28, 2025

Los Angeles County Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Planning Commission,

On behalf the Los Angeles Business Council (LABC), a business research and advocacy organization representing more than 500 members across greater Los Angeles, I write in support of the Valencia by FivePoint community in the Santa Clarita Valley.

For more than 80 years, the LABC has harnessed the power of business, government, and community to promote progress in the Los Angeles region in the areas of transportation, housing, sustainability, and economic development. Today, our members represent business and civic leaders from all industry sectors who are focused on innovative public policy that strengthens our economy while improving quality of life for all of us.

From the beginning, LABC has been an avid supporter of the Valencia by FivePoint community. This forward-looking, master-planned community is “proof of concept” that, by harnessing well-designed solutions, we can tackle our urgent housing crisis while also protecting the environment and driving economic growth for Los Angeles County. To date, Valencia by FivePoint has created homes for more than 3,000 people, created thousands of jobs, and upheld its commitment to remain carbon-neutral while promoting sustainable mobility, protecting open space, and more.

We extend our enthusiastic support to the next phase of Valencia by FivePoint, Entrada South and the next phase of the Valenica Commerce Center. This new phase will add even more high-quality housing units at a variety of price points, helping to relieve L.A. County’s well-documented housing shortage. It will also add to a successful commercial

center that has already created high-paying, family-supporting jobs in a range of in-demand fields.

The full Valencia by FivePoint vision will create up to 21,000 homes and millions of square feet of commercial space, protect more than 10,000 acres as dedicated open space, continue promoting sustainable mobility, create 50 miles of hiking and biking trails, and remain fully carbon-neutral, thanks to a series of sustainability investments on-site, around L.A. County, and elsewhere in California. This is a winning vision for sustainable development in our region, and we're proud to offer our full support for Entrada South and Valencia Commerce Center.

Sincerely,

Mary Leslie

LABC President

LOS ANGELES COUNTY
ECONOMIC DEVELOPMENT CORPORATION
Collaboratively Advancing Growth and Prosperity for All

July 30, 2025

David W. Louie
Chair
County of Los Angeles Regional Planning Commission
320 West Temple Street Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Chair Louie and Members of the L.A. County Regional Planning Commission,

The Los Angeles County Economic Development Corporation (LAEDC) is a nonprofit organization focused on equitable economic growth in the Los Angeles region. We advance key industries, provide business assistance, and collaborate with educational institutions to develop a robust workforce and support the continued growth of L.A. County.

The Valencia by FivePoint community addresses three of the County's most pressing challenges: our deep-seated housing shortage, our unsteady economy, and our effort to reduce climate change. At full buildout, the community will create up to 21,000 homes and generate thousands of quality, local jobs, and millions in tax revenue all while maintaining net-zero GHG emissions.

We recognize the benefits of FivePoint's proposed next phase, currently before L.A. County – Entrada South and continuation of Valencia Commerce Center. Entrada South will create more than 1,500 new homes along with new, community-serving retail space. We need more housing in our region to ensure we have adequate workforce housing, that is price obtainable. In addition, the next stage of the Valencia Commerce Center will support the economic growth of the Santa Clarita Valley and all of Los Angeles County by attracting more high-quality businesses to the already-successful business park.

The next phase of Valencia by FivePoint is an innovative and ambitious proposal with the potential to meaningfully advance the economy of L.A. County in a responsible and sustainable manner.

Thank you for your leadership and consideration.

Sincerely,

Stephen Cheung
President & CEO | Los Angeles County Economic Development Corporation (LAEDC)

MECI Miller Equipment Company, Inc. Cont. Lic. A83168

September 19, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Miller Equipment Company is a licensed General Contractor and a member of Operating Engineers Local Union 12 and Laborer Union Local 300 that has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the Project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection.

(661)945-2525 • FAX (661) 945-1183
Post Office Box 2956 • Lancaster, CA 93539-2956

MECI Miller Equipment Company, Inc. Cont. Lic. A831682

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Sincerely,
Miller Equipment Company, Inc.

John A. Baron, Vice President

Cc: L.A. County of Board of Supervisors

(661)945-2525 • FAX (661) 945-1183
Post Office Box 2956 • Lancaster, CA 93539-2956

August 13, 2025

County of Los Angeles Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Planning Commissioners,

As a longtime resident and business owner in Valencia, as well as an active community volunteer, the long-term health of the Santa Clarita Valley is incredibly important to me. That's why I'm a strong supporter of the next phase of the Valencia by FivePoint master-planned community.

The restaurant I own, Salt Creek Grille, is located at the Valencia Town Center – a remarkable economic hub and community gathering place that FivePoint and its predecessor played a key role in creating. For years, I have witnessed firsthand the thoughtful planning and development that have gone into Valencia, and I see the direct benefits of this investment each day in terms of jobs, local tax revenue, and general economic health that keeps our community vibrant. I know that moving forward with Entrada South and the next leg of the Valencia Commerce Center will keep these benefits flowing.

As you are doubtlessly aware, Los Angeles County is in the midst of a severe housing crisis that has made daily life incredibly challenging for residents and stifled our economy. Entrada South will help address this challenge by creating more than 1,000 new homes, on top of the housing already created in Mission Village. On top of that, the next chapter of the Valencia Commerce Center will create up to 3.4 million additional square feet of commercial space, creating new jobs and supporting industries we all rely on. This proposal will add to the critical tax proceeds that fund services such as schools, police and fire protection, libraries, and much more.

Of course, a community needs more than a strong economy to be successful. It also needs men and women who care about its future. I have the privilege of being actively involved in a variety of nonprofit organizations here in Valencia, including serving as the longest-tenured Board Member of the Henry Mayo Newhall Hospital Foundation and a member of the Boys & Girls Club Advisory Board. I have seen firsthand how the FivePoint team shares my commitment to this community, through its support for Henry Mayo Newhall Hospital dating back to its very creation, and its continued dedication to the Boys & Girls Club. This is a company that is truly

24415 Town Center Drive • Suite 115 • Valencia, CA 91355 • (661) 222-9999 • Fax (661) 222-9981
www.saltcreekgrille.com

invested in the long-term future of our Valley. The fact it will be so environmentally responsible, including preserving 10,000 acres of open space at completion, will make an already great project even better.

Opportunities to make this kind of positive difference in a community don't come along very often. I urge you to seize this chance and say **yes** to Valencia by FivePoint. Thank you for your consideration.

Sincerely,

Greg Amsler
Owner, Salt Creek Grille

cc: Los Angeles County Board of Supervisors

SAM HILL & SONS, INC.

September 16, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Our company is a licensed General Contractor and a member of the International Union of Operating Engineers Local 12 and the Southern California District Council of Laborers Local 585 that has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the Project also complies with

SAM HILL & SONS, INC.

California's stringent fire codes to promote comprehensive fire prevention and protection.

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Sincerely,

Ronald L. Hill
President
Sam Hill & Sons, Inc.

cc: L.A. County of Board of Supervisors

August 8, 2025

Los Angeles County Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

The Santa Clarita Valley Chamber of Commerce is the largest business membership organization in the Santa Clarita Valley representing more than 65,000 member employees.

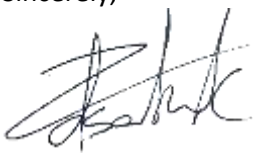
Continuing the tradition of success set by its predecessor, Newhall Land and Farming Company, Valencia by FivePoint has been a wonderful addition to the region, and we are excited to support its continued growth. The community generates much-needed housing for the Santa Clarita Valley and is a powerful economic driver that delivers meaningful and lasting benefits. In addition, it is designed to be fully carbon-neutral with comprehensive sustainability investments across the County, and elsewhere in California. Valencia by FivePoint remains dedicated to open space preservation, with plans to permanently protect 10,000 acres of open space.

The proposal before you includes Entrada South, which includes more than 1,500 new homes and retail space, and the continuation of Valencia Commerce Center, with millions of square feet of commercial, warehouse and light industrial space.

This new phase represents a valuable opportunity to boost our regional economy and generate high-quality new local jobs. Critically, it will also enable us to address our housing crisis – which is more urgent than ever. The current lack of home inventory is increasing housing costs and putting home ownership out of reach for too many. At Valencia by FivePoint, homes have sold at a variety of price points, with many below the L.A. County median, enabling many families to afford a stable home in this high-opportunity community.

We are pleased to strongly support Valencia by FivePoint and the many benefits that additional new housing and quality local jobs will bring to our region.

Sincerely,



Ivan Volschenk
President & CEO, Santa Clarita Valley Chamber of Commerce

cc: Los Angeles County Board of Supervisors

SOUTHERN CALIFORNIA
LEADERSHIP COUNCIL

444 South Flower Street, 37th Floor
Los Angeles, CA 90071
P: 213.622.4300
F: 213.622.7100

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Executive Staff:
Mike Roos
President

Richard Lambros
Managing Director

August 6, 2025

Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Members of the L.A. Country Regional Planning Commission,

The Southern California Leadership Council (SCLC) respectfully submits this letter in support of the FivePoint proposals for Entrada South and Valencia Commerce Center. SCLC is a non-partisan, non-profit, public policy organization that provides leadership on major public policies and issues that are critical to the economic vitality, job growth, and quality of life in Southern California. Our Board brings together the experience and expertise of three former California governors (Pete Wilson, Gray Davis, and Arnold Schwarzenegger), a core group of elected leaders from Southern California's largest local government jurisdictions and four dozen presidents and CEOs of the region's largest companies and major public agencies.

SCLC is a regional organization that is concerned with the most important issues facing our region, including the current housing affordability crisis. Housing affordability has been one of our primary focus areas over the past five years due to its negative impacts on Southern California's economy, employment, and quality of life. Because our view is regional, we infrequently comment on individual development projects, but we have determined that Entrada South and the Valencia Commerce Center, as parts of the natural evolution of Valencia by FivePoint, are projects of regional significance, and we are therefore submitting this letter to voice our support for them.

Valencia by FivePoint has already done much to address our concerns about the housing crisis. It has created thousands of jobs and generated tremendous economic activity while providing homes for more than 3,000 residents in the Santa Clarita Valley. Importantly, it has achieved these important goals while offering homes that are within financial reach of many Southern California residents, remaining carbon-neutral, and maintaining a significant portion of its land as preserved and funded open space.

Long-term, Valencia by FivePoint will become even more regionally significant, providing over 21,000 homes, creating tens of thousands of construction and permanent jobs, and generating billions of dollars in economic activity. At the same time, two-thirds of its land – totaling 10,000 acres – will remain as protected open space in perpetuity. Its housing component is especially important in light of the fact that currently L.A. County has only achieved a mere 8% of its 2028 Regional Housing Needs Allocation goals, with only a little over four years left in the current RHNA cycle.

We therefore see Valencia by FivePoint, and with it Entrada South and Valencia Commerce Center, as a model for the sustainable new development and attainably priced housing that our region urgently needs. Because of this, we urge you to wholeheartedly support these two projects.

Sincerely,

Richard Lambros
Managing Director

cc: Los Angeles County Board of Supervisors

SCV Education Foundation
ESTABLISHED 1995

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JSB Development

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Mariam Nasiry
California Credit Union

Amy Serlye
City of Santa Clarita

Taylor Kellstrom
Kellstrom Reality Group

Alexis Yannich
Retired Educator

Staff

Joe Satorhelyi
Executive Director

Lety Ledesma
Events Coordinator

Matt Laughlin
RWM Coordinator

August 8, 2025

Los Angeles County Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners:

The Santa Clarita Valley Education Foundation has served all five of the local school districts in the Santa Clarita Valley since 1984, currently supporting 55 public schools, 50,000+ students and over 2,200 teachers. Our goal is to touch the lives of each and every teacher and student through one of our programs and events.

FivePoint and its predecessor company, The Newhall Land & Farming Company, have been supporters of the Santa Clarita Valley Education Foundation since formation as the original founders--aiding in our mission, participating in our events and generally supporting our local schools. We have also appreciated the support of Los Angeles County with our efforts.

FivePoint is a dedicated community partner, and we are pleased to support the next phase of Valencia by FivePoint. This phase includes Entrada South, a vibrant new residential neighborhood, that will deliver robust new housing options for the Santa Clarita Valley. As a master-planned community, FivePoint works closely with our school districts to ensure schools are adequately planned for students.

The proposal also includes the next phase of the Valencia Commerce Center, which will create local jobs and tax revenue that is necessary to support much-needed public services. We appreciate that FivePoint is committing to net zero greenhouse gas emissions and zero-net energy building designs, helping to protect our atmosphere and environment for future generations.

FivePoint has become an integral part of the fabric of this community, through their dedication and support of our non-profits. For the reasons noted above, the Santa Clarita Valley Education Foundation is proud to support Valencia by FivePoint's next phase: Entrada South and Valencia Commerce Center. Thank you for your consideration and support of this important plan.

Sincerely,

Joe Satorhelyi
Executive Director

Santa Clarita Valley Committee on Aging
Independence ◆ Dignity ◆ Quality of Life

27180 Golden Valley Road
Santa Clarita, CA 91350

August 19, 2025

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners:

The Santa Clarita Valley Senior Center, operated by the Santa Clarita Valley Committee on Aging, has served older adults and their families in the Santa Clarita and Antelope Valleys for nearly 50 years. Each year, we provide a wide range of services — including nutrition, transportation, wellness programs, caregiver support, and adult day care — to over 10,000 seniors and their families who rely on us to help them live with dignity, independence, and connection.

FivePoint and its predecessor company, Newhall Land & Farming Company, have been generous supporters of the SCV Senior Center for more than 30 years. This includes supporting the development of our modern and beautiful new 30,000-square-foot building that opened in 2019 – whose courtyard is named in FivePoint's honor.

FivePoint is a dedicated community partner, and we are pleased to support the next phase of Valencia by FivePoint. This phase includes Entrada South, a vibrant new residential neighborhood, that will deliver robust new housing options for the Santa Clarita Valley. Importantly, these include affordable housing units and may include homes reserved specifically for seniors – a much-needed component of a well-balanced community. Entrada South will also provide open space, parks, retail areas, and amenities for residents of all ages. This multi-generational community will strengthen connections within and between families, increasing quality of life for all.

The proposal also includes the next phase of the Valencia Commerce Center, which will create jobs and tax revenue that is necessary to support much-needed public services, including services for our seniors. We appreciate that Valencia is making these investments while

committing to net zero greenhouse gas emissions and zero-net energy building designs, helping to protect our atmosphere and environment for future generations.

FivePoint has become an inextricable part of the fabric of this community, through their dedication and generosity. For the reasons noted above, the Santa Clarita Valley Senior Center is proud to support Valencia by FivePoint's next phase: Entrada South and Valencia Commerce Center. Please join us in supporting this important plan.

Sincerely,

Kevin MacDonald, CEO

cc: Los Angeles County Board of Supervisors

Phone: 661-259-9444 email: admin@scv-seniorcenter.org www.MySCVCOA.org
DBA: SCV Senior Center, Meals on Wheels Santa Clarita Valley,
Meals on Wheels Antelope Valley, Antelope Valley Senior Services

SANTA CLARITA VALLEY
ECONOMIC DEVELOPMENT CORPORATION

June 26, 2025

Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

SUBJECT: Support for Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commission,

On behalf of the Santa Clarita Valley Economic Development Corporation (SCVEDC), I am writing to express our strong support for FivePoint's proposed Entrada South and Valencia Commerce Center projects, two transformative developments that are essential to the continued economic and community growth of the Santa Clarita Valley.

SCVEDC's mission is to foster a thriving economic environment for our region, which is home to the third-largest city in Los Angeles County and one of its most dynamic growth areas. Over the past 15 years, our organization has supported more than 644 companies, facilitated the creation and retention of over 23,000 jobs, and welcomed over 174 new businesses to the area.

FivePoint has been a long-standing and trusted partner in this progress. The company's sustained investment in our region, particularly through the visionary Valencia community has significantly contributed to job creation, economic resilience, and the attraction of new industries to the Santa Clarita Valley.

The Entrada South and Valencia Commerce Center projects represent a critical next step. Entrada South will bring a thoughtfully designed, mixed-use residential community that supports workforce housing, while the continued expansion of the Valencia Commerce Center enhances a major employment hub that already supports a wide range of industries, including aerospace, life sciences, healthcare, and financial services. These projects help maintain a healthy jobs-housing balance that allows residents to live closer to where they work, reducing traffic, improving quality of life, and reinforcing the region's economic sustainability.

In addition to creating tens of thousands of permanent and construction jobs, these projects will generate significant tax revenue to support public services, infrastructure, and quality-of-life improvements for all Santa Clarita Valley residents. The proposed developments align with smart growth principles and ensure that our region remains competitive, innovative, and inclusive. FivePoint's ongoing investment in the Santa Clarita Valley is a vital driver of our regional success. On behalf of our organization and our 50-member board, I respectfully urge the Commission to approve this important proposal.

Thank you for your leadership and for your consideration. Should you have any questions or need further information, please feel free to contact us directly.

26455 Rockwell Canyon Road | University Center, Suite 263 | Santa Clarita, CA 91355
(661) 288-4400 | Fax (661) 288-4414 | scvedc.org

Sincerely,

Ondre Seltzer
President & CEO
SCVEDC

Calvin Hedman
Co-Chair
SCVEDC

Docusign Envelope ID: 254921C0-5534-48F6-A4D9-FBA4A78737BE

6 Degrees HR Consulting

25101 The Old Road
Stevenson Ranch, CA 91381
Office 661 432-1088 Fax 661 432-1089
selinaphr@gmail.com
6degreeshr@gmail.com
www.6degreeshrconsulting.com

July 21, 2025

To Whom It May Concern:

As the CEO and Founder of 6 Degrees HR Consulting, Inc., and the Chairwoman of the Valley Industry Association since 2024, I am writing to express my strong support for the next phase of the Valencia by FivePoint community development project.

For years, FivePoint has demonstrated a thoughtful and deliberate approach to responsible community growth. This upcoming phase of the Valencia project represents not only a continuation of that legacy, but an important step forward in addressing several critical needs within the Santa Clarita Valley.

From my perspective as a business owner and regional leader, I'd like to highlight the following key reasons why this development deserves our community's full support:

1. **Housing Accessibility**: The project will bring a much-needed variety of new housing options to our region, supporting residents at all stages of life while helping address the increasing demand for attainable homes.

2. **Local Economic Growth**: With each phase of development, we see measurable boosts to our local economy—supporting job creation, small businesses, and long-term commercial vitality.

3. **Community Infrastructure and Investment**: FivePoint has consistently demonstrated its commitment to building more than just homes—this next phase includes continued investment in parks, trails, schools, and transportation access, contributing to a better quality of life for all residents.

4. **Sustainable and Thoughtful Design**: The Valencia community model prioritizes sustainability, environmental stewardship, and open space preservation—values that reflect our region's forward-thinking approach.

5. **Strengthening Santa Clarita's Identity**: Projects like this strengthen Santa Clarita's identity as a vibrant, inclusive, and future-ready city, helping us attract talent, families, and businesses who value quality of life.

In my roles, I've had the privilege of working alongside leaders in industry, education, government, and nonprofit sectors—and I've seen firsthand the transformative impact of strategic development when done in partnership with the community. FivePoint continues to set the standard.

I encourage decision-makers and stakeholders at all levels to support this next phase of Valencia. It aligns with our shared vision for the Santa Clarita Valley as a place of opportunity, innovation, and community.

Sincerely,

DocuSigned by:
Selina Thomas PHR SHRM-CP
C641588F401347E...

Selina Thomas, PHR, SHRM-CP
CEO & Founder, 6 Degrees HR Consulting Inc.
Chairwoman, Valley Industry Association 2024-2025

Six Flags
Entertainment Corporation

September 2, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Regional Planning Commission,

Magic Mountain and FivePoint Valencia have had a close, cooperative relationship dating back to the founding of the theme park in 1971. FivePoint, and before it the Newhall Ranch & Farming Company, have been excellent neighbors and collaborators, and we have grown and evolved together as the Valencia region has continued to develop over the past five decades.

Following the merger between Cedar Fair Entertainment and Six Flags, the Park Manager and I had the opportunity to sit down with Don Kimball and Matt Carpenter in Valencia to learn more about Valencia by FivePoint and their plans for Entrada South and Valencia Commerce Center. We were deeply impressed by what we heard – this is a thoughtful plan that will continue to strengthen Valencia and the Santa Clarita Valley through the creation of new housing and job opportunities within a highly sustainable, forward-looking master planned community.

We strongly support Valencia by FivePoint's commitment to address the housing shortage in our region and to continue building out the Valencia Commerce Center with a new phase that is estimated to bring 10,000 high-paying jobs to the area—already one of the largest economies in L.A. County. Together, the project will support a healthy jobs/housing balance and generate significant tax revenues that will reinforce the Santa Clarita Valley's position as a favorite place to live and to visit.

From our decades of partnership, we know that FivePoint is heavily invested in the Santa Clarita Valley and committed to its long-term prosperity and environmental sustainability. I am genuinely excited by what the future holds for us both and ask for your swift approval of the Entrada South and Valencia Commerce Center projects.

Sincerely,

Raffi Kaprelyan

Regional SVP, Six Flags Entertainment Corporation

cc: Los Angeles County Board of Supervisors

STICE COMPANY
GENERAL ENGINEERING CONTRACTOR

10851 JEFFREY RD. IRVINE, CALIFORNIA 92602
PHONE 949.654.4600 / FAX 949.654.494
CONTRACTORS LICENSE NO. 515997

September 19, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Our company is a licensed General Contractor and a member of Local Union 12, Operating Engineers and Local 300 Laborers Union that has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the Project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection.

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Sincerely,

ROBERT N. STICE
PRESIDENT
STICE COMPANY, INC.
CL # 515997 EX 4/30/26

Cc: L.A. County Board of Supervisors

VALLEY INDUSTRY ASSOCIATION
ADVOCATE.EDUCATE.INNOVATE.

July 28, 2025

Los Angeles County Regional Planning Commission
commission@planning.lacounty.gov
Yolanda Duarte-White, Commissioner Supervisorial District 1
David W. Louie, Chair, Supervisorial District 2
Pam O'Connor, Commissioner, Supervisorial District 3
Elvin W. Moon, Vice Chair, Supervisorial District 4
Michael R. Hastings, Commissioner, Supervisorial District 5
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150) – to be updated upon receipt of Agenda Item Number

Dear Commission Chair Louie and Commissioners,

The Valley Industry Association of Santa Clarita (VIA) extends its strong and emphatic support for the proposed continuation of the Valencia by FivePoint community in the Santa Clarita Valley.

VIA has represented business and industry stakeholders in the Santa Clarita Valley since 1981, promoting job growth, workforce training, and a strong economy through advocacy, education and collaboration. Valencia by FivePoint is an innovative master-planned community that combines adding critical housing supply and creating new job opportunities into one of the largest net-zero GHG communities in the nation, directly enhancing our region's continued prosperity.

Entrada South and the next stage of the Valencia Commerce Center (VCC) will extend the positive momentum generated by the Valencia community, benefiting all of L.A. County. Specifically, Entrada South will create more than 1,500 new homes of urgently needed new housing – including affordable units – along with new retail space, while the expansion of VCC will help support the growth and vitality of the Santa Clarita Valley economy, which has seen more than 23,000 additional jobs generated over the past 15 years alone. And importantly, the entire community will continue to be carbon-neutral, with an impressive

sustainable mobility program while also incorporating abundant open space, parks, and trails. No other community in California can make the same claim.

The Valencia by FivePoint team is an integral part of our community and deeply committed to our long-term success. We are fortunate to have partners of this caliber working for the long-term benefit of the Santa Clarita Valley. We eagerly await the continued development of this far-sighted project and support approval of this next phase of Valencia Commerce Center and Entrada South at this time.

Sincerely,

Kathy Norris
CEO/President
Valley Industry Association
of Santa Clarita

C: Elida Luna, Commission Secretary
Los Angeles County Board of Supervisors

TAFT ELECTRIC COMPANY

ELECTRICAL CONTRACTORS
STATE LICENSE NO. 772245, DIR# 1000000149
1694 EASTMAN AVENUE - VENTURA, CALIFORNIA 93003 - (805) 642-0121 - FAX (805) 650-9015

09/16/2025
Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Our company is a licensed General Contractor and a member of IBEW Local Union 11 & Laborer's local 300 that has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the Project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection.

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs urgently needed housing, and significant tax revenues for the region.

Sincerely,

Dave Norwine

Dave Norwine

VP of Traffic Operations
Taft Electric Company
(805)857-1695

Employee Owned
SERVING ALL OF CALIFORNIA

TAITRON
components incorporated

28040 West Harrison Parkway
Valencia, CA 91355-4162
Tel (661) 257 6060
Fax (661) 257 6415

August 12, 2025

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear L.A. County Regional Planning Commissioners,

As a business owner at Valencia Commerce Center (VCC) and a member of the VCC Association, I am an enthusiastic supporter of FivePoint's proposal for the next phase of the Valencia by FivePoint community.

VCC is a flourishing commercial park in the Santa Clarita Valley that powers our local economy and provides a meaningful source of high-quality jobs, tax revenue, and overall economic vibrancy. FivePoint's proposal would advance VCC to near completion by adding up to 3.4 million additional square feet of commercial and industrial space, enlarging the positive impact of this thriving economic hub.

FivePoint is also seeking approval for Entrada South, a mixed-use neighborhood that will help address our regional housing crisis by providing more than 1,000 additional housing units, alongside community-serving retail and other amenities. Importantly, Valencia by FivePoint will continue to be a leader in environmental sustainability, preserving abundant open space while achieving net zero greenhouse gas emissions.

The proposed effort aligns with the County's values of diversity, equity, and sustainability, and I commend your commitment to creating vibrant and resilient communities for all county residents.

Sincerely,

David Vanderhorst, CFO

cc: Los Angeles County Board of Supervisors

August 7, 2025

Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

Re: Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150) – SUPPORT

Dear Members of the Regional Planning Commission,

The Valley Industry and Commerce Association (VICA) supports the Entrada South and Valencia Commerce Center projects proposed by FivePoint. These developments are critical to addressing Los Angeles County's housing and economic development needs.

Entrada South will deliver 1,000 additional homes—including affordable and rental units—contributing to the broader Valencia community's long-term goal of 21,000 homes. With fewer than 7,500 housing units permitted in the County since 2021, far short of the 88,000-unit RHNA target by 2029, projects like Entrada are essential to ensuring the region can grow sustainably and affordably.

The expansion of the Valencia Commerce Center adds 3.4 million square feet of commercial space that will attract employers, create jobs, and strengthen the local tax base. At a time when the region needs to drive economic growth and opportunity, this kind of commercial development is a smart and strategic investment.

These projects also exemplify sustainable planning, with net-zero energy and zero-net greenhouse gas goals that align with state and regional environmental priorities. FivePoint has continued the legacy of responsible development established by the Newhall Land & Farming Company, and this next phase builds on that commitment.

For these reasons, VICA urges your support of Entrada South and the Valencia Commerce Center.

Sincerely,

Stuart Waldman
VICA President

Valley Industry & Commerce Association • 16600 Sherman Way, Suite 170 Van Nuys, CA 91406 • phone: 818.817.0545 • fax: 818.907.7934 • www.vica.com

9.19.25

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Regional Planning Commissioners:

Our company is a licensed General Contractor and is signatory to the Operating Engineers, Laborers International, and Teamsters Unions. Ward Corporation has worked on the community development to date at Valencia by FivePoint's Mission Village project. The next phase of the Valencia by FivePoint community includes Entrada South and Valencia Commerce Center.

Pursuant the CFD Acquisition Agreement with Los Angeles County, prevailing wage is required for all contracts for construction of public improvements for horizontal infrastructure within the Project's Community Facilities District, which will ultimately account for hundreds of millions of dollars in public infrastructure work. We as contractors comply with these prevailing wage requirements.

The Project also advances California's climate leadership and protects the environment. Valencia by FivePoint is the only Net Zero Greenhouse Gas master planned community project of its kind under construction that implements a comprehensive Net Zero program approved by the California Air Resources Board and State resource officials. The Project is consistent with and implements the County's Housing Element and General Plan, and it is consistent with the region's Sustainable Communities Strategy.

The Project also includes extensive open space, a commitment to clean energy, zero-emission transportation investments, comprehensive bike and pedestrian trails, off-site sustainability improvements in underserved communities, and scores of other features that protect the environment and advance health and wellness. Importantly, the

Project also complies with California's stringent fire codes to promote comprehensive fire prevention and protection.

Mission Village has already been a powerful economic driver for our company, our employees and our community. We believe Entrada South and Valencia Commerce Center will be an even stronger catalyst to promote prosperity throughout this region.

In conclusion, we urge this Commission and the County's Board of Supervisors to approve this Project now so our employees can get to work and seize this extraordinary opportunity for us to keep working - to create jobs, urgently needed housing, and significant tax revenues for the region.

Sincerely,

Michael Ward

Vice President

Ward Corporation

Cc: L.A. County of Board of Supervisors

WOLF CREEK
RESTAURANT & BREWING CO.

November 14, 2025

Members of the Los Angeles County Board of Supervisors
Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Board of Supervisors,

I am a Santa Clarita resident and business owner with a deep interest in the success and well-being of my community. That's why I am excited to voice my support for Entrada South and Valencia Commerce Center, the next stage of the Valencia by FivePoint community.

At my business, Wolf Creek Restaurant & Brewing Company, we are proud to be a place where people have come to gather and connect with their community since 1997. Valencia by FivePoint has created a similar hub for community connection through a variety of onsite amenities and events, including a farmers market and community garden, as well as miles of walking and biking paths. Valencia by FivePoint is already a resounding success with over 3,500 residents in its first neighborhood, Mission Village, as well as many community-serving amenities. Entrada South, a mixed-use neighborhood, will deliver an additional 1,500 new homes and retail space. This contribution will have a meaningful impact on the region's severe housing shortage. It will also be great for businesses like mine that depend on a vibrant local customer base to keep our doors open.

Valencia Commerce Center is a flourishing commercial park in the Santa Clarita Valley that powers the local economy and has for decades created high-quality jobs, tax revenue, and overall economic vibrancy. FivePoint's proposal would advance the center to near completion, adding 3.4 million square feet of industrial and commercial space for job generating uses in fields such as aerospace, healthcare, engineering, light manufacturing entertainment and more. Together, Entrada South and Valencia Commerce Center will strengthen Valencia's healthy jobs-housing balance.

Valencia by FivePoint is an admirable, innovative community that has helped the entire region flourish, and I encourage you to join me in supporting the next phase.

Sincerely,

Laina McFerren, Owner

LOZEAU DRURY LLP
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Oakland, CA 94612
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November 16, 2025

Via publiccomment.bos.lacounty.gov

Kathryn Barger, Chair
Hilda L. Solis, Chair Pro Tem
Holly J. Mitchell, Supervisor
Lindsey P. Horvath, Supervisor
Janice Hahn, Supervisor
Los Angeles County Board of Supervisors
500 West Temple Street
Los Angeles, CA 90012

Re: SAFER Comment
Entrada South Project (Project No. 00-210)
Valencia Commerce Center Project (Project No. 87-150)
Board of Supervisors Agenda Item 90 (Nov. 18, 2025)

To Chair Barger, Chair Pro Tem Solis, and Honorable Supervisors:

This comment is submitted on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") and its members living or working in and around the County of Los Angeles ("County") regarding the supplemental environmental impact report ("SEIR") (State Clearinghouse No. 2000011025) prepared for the Entrada South Project (Project No. 00-210) and Valencia Commerce Center Project (Project No. 87-150) (collectively, "Project") to be considered as Agenda Item 90 at the Board of Supervisors' November 18, 2025 meeting.

SAFER is concerned that approval of the Project and certification of the SEIR will violate the California Environmental Quality Act ("CEQA") by: (1) failing to adequately disclose the Project's significant and unavoidable impacts; (2) failing to require all feasible mitigation measures for the Project's significant and unavoidable impacts; and (3) failing to adequately disclose and mitigate the Project's significant impacts to biological resources.

SAFER's review of the SEIR was assisted by expert ecologist Dr. Shawn Smallwood, Ph.D. Dr. Smallwood's comment and CV are attached as **Exhibit A**.

Due to the SEIR's shortcomings, SAFER respectfully requests that the Board of Supervisors refrain from approving the Project at this time and instead direct the Planning Department to amend and recirculate the SEIR prior to further consideration of the Project.

PROJECT DESCRIPTION

The Project consists of two components. First, the Entrada South Project proposes 1,574 residential units (consisting of single-family detached condominiums as well as attached town homes and multi-family units) and 730,000 square feet of commercial/office uses within the Entrada South Planning Area, which consists of approximately 382.3 acres located west of I-5 and The Old Road and predominantly south of Six Flags Magic Mountain. Second, the Valencia Commerce Center ("VCC") proposes 3.4 million square feet of non-residential uses (industrial/business/office park) within the VCC Planning Area, which consists of approximately 328.5 acres of an undeveloped portion of the partially completed VCC non-residential center (industrial/business/office park) located west of I-5 and north of State Route 126.

The Entrada South Planning Area and VCC Planning Area are within the planning boundary of the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan ("RMDP/SCP"). CDFW approved the RMDP/SCS and certified its EIR in 2010. The 2010 EIR evaluated the impacts of the Newhall Ranch Specific Plan (2,550 acres of residential uses, 5.5 million sf of commercial), Entrada South (1,725 residential units, 450,000 sf of commercial), and the VCC (3.4 million sf of industrial/commercial).

Subsequently, the 2010 EIR was challenged in court, culminating in a Supreme Court decision holding that the 2010 EIR was deficient due to: (1) failure to support greenhouse gas findings with substantial evidence and (2) the EIR's mitigation measure for the unarmored threespine stickleback, by capturing and relocating it, was itself a prohibited taking of the species under the Fish and Game Code. (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 213, 231-32, 237.) In response to the Supreme Court's decision, CDFW was certified an Additional Environmental Analysis ("AEA") addressing greenhouse gases and unarmored threespine stickleback in 2017. Collectively, the 2010 EIR and 2017 AEA are referred to as the "2017 EIR" or "State-certified EIR."

The currently proposed Entrada South Project differs from the project analyzed in the 2017 EIR by reducing the amount of residential units (from 1,725 units to 1,574 units or from approximately 3,235,100 square feet to 2,951,913 square feet) and increasing the commercial/office uses (from 450,000 square feet to 730,000 square feet). The currently proposed Entrada South Project and VCC Project also include additional modifications, including drainage and wetland restoration.

To analyze the modifications to the project as analyzed in the 2017 EIR, the County prepared a Supplemental Environmental Impact Report ("SEIR"), consisting of a Draft SEIR, Revised Draft SEIR, and Final SEIR. The SEIR included the mitigation measures from the 2017 EIR as well as new or modified mitigation measures. The SEIR's stated purpose is to analyze whether the proposed Project would result in any new or substantially more severe significant impacts compared to the 2017 EIR.

LEGAL STANDARD

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109.)

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 CCR § 15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 (*Berkeley Jets*); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. (14 CCR § 15002(a)(2) and (3); see also *Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley,* 52 Cal.3d at 564.) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." (14 CCR § 15002(a)(2).) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." (Pub. Res. Code, § 21081; 14 CCR § 15092(b)(2)(A) and (B).)

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Jets*, 91 Cal.App.4th at 1355 [quoting, *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391, 409, n. 12.) "A prejudicial abuse of discretion occurs 'if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.'" (*Berkeley Jets*, *supra*, 91 Cal.App.4th at 1355.)

An EIR must "include[] sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises."

(*Sierra Club v. Cty. of Fresno* (2018) 6 Cal.5th 502, 510.) "Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document." (*Id*. at 516.) "The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency's factual conclusions." (*Id*.) As the Court emphasized:

> [W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

(*Id.* at 514.)

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (14 CCR § 15370.) Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. (14 CCR § 15126.4(a)(1)(B).) A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved.

Once an EIR has been prepared for a project, CEQA provides that no subsequent or supplemental environmental impact report shall be required by the lead agency or any responsible agency" unless: (1) substantial changes to the approved project will require major revisions to the certified EIR; (2) substantial changes occur with respect to the circumstances under which the approved project is being undertaken will require major revisions to the certified EIR; or (3) new information that was not known and could not have been known at the time the EIR for the approved project was certified becomes available. (Pub. Res. Code § 21166; 14 CCR § 15162.) A supplemental EIR may be prepared if a subsequent EIR is required but "[o]nly minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation." (14 CCR § 15163(a).)

DISCUSSION

I. The SEIR Fails to Adequately Disclose the Project's Significant and Unavoidable Impacts.

An EIR must describe any significant environmental effects that cannot be avoided if the project is implemented. (Pub. Res. Code § 21100(b)(2)(A).) Significant effects that cannot be mitigated must be described as well as effects that can be mitigated but not reduced to a level of insignificance. (14 CCR §15126.2(c).) If unavoidable impacts cannot be reduced or avoided

without changing the design of the project, the EIR must describe the reasons the project is being proposed despite the unavoidable impacts. (14 CCR §15126.2(c).)

Notably, the discussion of unavoidable impacts must be included in a separate section of the EIR. (Pub. Res. Code § 21100(b)(2)(A).) Here, the SEIR included its discussion of significant and unavoidable impacts in Section 7.0: Other Environmental Considerations. (DSEIR, p. 7.0-1.) In that section, the SEIR does not disclose *any* significant and unavoidable impacts. Instead, the SEIR merely states:

> Impacts associated with the Modified Project are evaluated in Section 5.0, Environmental Impact Analysis, of this SEIR. Based on that analysis, it was determined that the Modified Project would not result in new or substantially more severe significant impacts than previously identified for the 2017 Project in the State-certified EIR.

(*Id*.) The SEIR's discussion above is inadequate because it does not disclose which impacts remain significant and unavoidable *even if* they are not new or substantially more severe. (See *Communities for a Better Envt. v. California Resources Agency* (2002) 103 Cal.App.4th 98, 124-25 [Even though a prior EIR's *analysis* of environmental effects may be subject to being incorporated in a later EIR for a later, more specific project, the responsible public officials must still go on the record and explain specifically why they are approving the later project despite *its* significant unavoidable impacts."].) Although the SEIR contains a statement explaining why the Project is being considered despite significant and unavoidable impacts (DSEIR, pp. 7.0-1 to -2), the SEIR utterly fails to disclose what those impacts actually are.

Other sections of the SEIR do nothing to alleviate the confusion over which impacts remain significant and unavoidable. For example, Table 2.0-2 purports to show a "Summary of Environmental Impacts, Mitigation Measures, and Resulting Levels of Significance." (RDSEIR, pp. 2.0-29 to -192.) However, for each impact found significant and unavoidable in the 2017 EIR, Table 2.0-2 states the same conclusion for this Project's impacts: "No Substantial Increase in Severity of Impact." Again, this information does not tell the reader which impacts actually remain significant and unavoidable.

The SEIR's detailed sections on each impact are similarly confusing. For air quality, the SEIR does disclose that the 2017 EIR found construction-related, operational, and cumulative air quality impacts to be significant and unavoidable. However, even though the SEIR concedes that "emissions within the VCC Planning Area would be the same as reported in the State-certified EIR," there is ***no*** indication of whether impacts remain significant and unavoidable. Instead, the air quality section merely concludes that "the Modified Project would not result in new or substantially more severe significant impacts related to air quality as compared to the 2017 Project in the State-certified EIR." (DSEIR, p. 5.1-65.) Similarly for noise impacts, the SEIR fails to disclose whether cumulative operational traffic noise impacts remain significant and unavoidable despite the SEIR's conclusion that the Project would not cause a substantial increase

compared to the 2017 EIR. (RDSEIR, pp. 5.8-47, -53.)

The SEIR must be revised to clearly disclose which impacts are significant and unavoidable. As written, no reader of the SEIR could reasonably understand which impacts from the 2017 EIR remain significant and unavoidable. SAFER respectfully requests that the Board of Supervisors continue any consideration of the Project until the SEIR is revised to clearly disclose the Project's significant and unavoidable impacts.

II. The SEIR Fails to Adopt All Feasible Mitigation Measures for the Project's Significant and Unavoidable Impacts.

CEQA prohibits a lead agency from approving a project with significant environmental effects if there are feasible mitigation measures or alternatives that can substantially lessen or avoid those effects. (Pub. Res. Code § 21002; *Mountain Lion Found. v. Fish & Game Comm'n* (1997) 16 Cal.4th 105, 134; *Laurel Heights*, 47 Cal.3d at 403 ["The chief goal of CEQA is mitigation or avoidance of environmental harm"].) CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors." (PRC §21061.1; 14 CCR § 15364.) "The core of an EIR is the mitigation and alternatives sections." (*Citizens of Goleta Valley*, 52 Cal.3d at 564.) When an EIR concludes that a project will have significant impacts, the lead agency has two duties: to meaningfully consider feasible mitigation measures and alternatives, and to identify mitigation measures and alternatives rejected as infeasible. (See *Preservation Action Council v. City of San Jose* (2006) 141 Cal.App.4th 1336, 1353.)

The lead agency may not approve a project with significant impacts unless it makes one or more of three findings:

(1) that changes or alternations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment;

(2) that the agency making the findings lacks jurisdiction to make the change, but that another agency does have such authority, and either has made or can and should make, the change; and/or

(3) that specific economic, legal, social, technological, or other considerations … make infeasible the mitigation measures or project alternatives identified in the EIR.

(Pub. Res. Code §21081(a); 14 CCR §15091(a.).)

When a comment suggests "better ways to avoid or mitigate the significant environmental impacts" (14 CCR §§15088(c), 15204(a)), the lead agency must respond to the comment by either explaining why further consideration of the alternative or mitigation was rejected or by providing an evaluation of the alternative. (*Marin Mun. Water Dist. v. KG Land*

Cal. Corp. (1991) 235 Cal.App.3d 1652, 1666; *Cal. Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 992 (*CNPS*).) "'[A]n adequate EIR must respond to specific suggestions for mitigating a significant environmental impact unless the suggested mitigation is facially infeasible.' [citation omitted] 'While the response need not be exhaustive, it should evince good faith and a reasoned analysis.'" (*CNPS*, 177 Cal.App.4th at 992 [citing *L.A. Unified School Dist. v. City of L.A*. (1997) 58 Cal.App.4th 1019, 1029; see also, *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 442, fn. 8.)

As discussed above, the SEIR does not clearly disclose which impacts of the Project are significant and unavoidable. However, the Board is being asked to adopt a Statement of Overriding Considerations ("Statement"), which lists the following impacts as significant and unavoidable: aesthetics, agriculture, air quality, noise, solid waste, and wildfire. (Statement [BOS Staff Report, Attachment 2], pp. 57-67.) As a preliminary matter, it must be noted that the Statement of Overriding Considerations, like the SEIR itself, obscures the impacts of this Project. For each impact, the Statement states, "As described in the SEIR, the Modified Project does not result in a new or substantially more severe significant effect." (See, e.g., *id*. at pp. 58, 59, 60.) Moreover, the SEIR and Statement fail to comply with CEQA because the County has failed to apply all feasible mitigation measures to reduce the significant and unavoidable impacts to the extent possible prior to proceeding with the Project. (Pub. Res. Code §21081(a); 14 CCR §15091(a.).)

The 2017 EIR found that air quality impacts from construction and operation would remain significant and unavoidable due to emissions of VOC, NOx, CO, PM10, and/or PM2.5. (Statement, p. 59.) Although the SEIR adopts/modified mitigation measures from the 2017 EIR, there are additional feasible measures that must be applied prior to proceeding with this Project.

For construction emissions, the Project must adhere to ES/VCC-PDF-AQ-2, which provides:

> All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 4 emission standards, where available. At a minimum, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 3 emission standards for non-road diesel engines promulgated by the U.S. Environmental Protection Agency.

(MMRP, p. 6.) However, that measure does not take into account that two types of Tier 4 equipment are currently available: Tier 4 Final and Tier 4 Interim (See 40 C.F.R. § 86.1811-27.) By only requiring the use of Tier 4 without specifying "Final" or "Interim, " ES/VCC-PDF-AQ-2 fails to ensure that the impacts have been reduced to the extent feasible. The County must amend ES/VCC-PDF-AQ-2 to require "Tier 4 Final" equipment to ensure the maximum feasible mitigation for the Project's construction-related air quality impacts. Only then can the County make the findings required for approving the Project despite its significant and unavoidable impacts.

For operational emissions, the SEIR claims that the Project equipment/truck idling will be limited to 5 minutes in accordance with state law. (DSEIR, pp. 5.1-24, 5.1-62.) The California Attorney General has issued a guidance document titled "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act" ("DOJ's Best Practices"). A copy of the DOJ's Best Practices is attached hereto as **Exhibit B**. The DOJ's Best Practices explicitly state that operational impacts can be mitigated, in part, by "[f]orbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use." (DOJ's Best Practices, p. 9.) Clearly, it is feasible to reduce idling time below 5 minutes—and the County must do so prior to concluding that GHG impacts are significant and unavoidable.

The DOJ's Best Practices also recommends "[d]esigning all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible." (DOJ's Best Practices, p. 9.) Here, the Project will only provide the bare minimum required by state code. (See, e.g., Initial Study, p. 53.) There is no discussion or analysis in the SEIR of whether solar panels are being required to the maximum extent feasible. The SEIR must be revised to require the maximum feasible amount of solar power or otherwise explain why such mitigation is infeasible. prior to concluding that GHG impacts are significant and unavoidable.

The DOJ's Best Practices list numerous additional mitigation measures for air quality impacts that the EIR has failed to consider including:

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Running conduit to designated locations for future electric truck charging stations.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.

(DOJ's Best Practices, pp. 9-10.)

The County cannot approve the Project and its EIR until all feasible air quality mitigation measures have been applied to this Project, even if the impacts remain significant and unavoidable. SAFER respectfully requests that the Board of Supervisors continue further consideration of the Project until the EIR is revised to include all the mitigation measures

discussed above or otherwise to justify why such additional mitigation measures are infeasible.

III. The SEIR Fails to Disclose and Mitigate the Project's Significant Impacts to Biological Resources.

Expert wildlife ecologist Dr. Shawn Smallwood, Ph.D., found several deficiencies in the SEIR's analysis of the Project's impacts on wildlife. Dr. Smallwood's comment and CV are attached as **Exhibit A**. As discussed below, Dr. Smallwood concluded: (1) the SEIR underestimates the diversity of species at the Project site; (2) the SEIR fails to adequately analyze and mitigate the Project's impacts to habitat loss and fragmentation, wildlife movement, traffic collisions with wildlife, and domestic cat predation; and (3) the SEIR's mitigation measures are inadequate to reduce the Project's impacts to biological resources to less-than-significant levels.

A. The SEIR lacks substantial evidence of the Project's impacts to biological resources due to an underestimation of the diversity of species at the Project site.

Dr. Smallwood's associate conducted wildlife surveys in late September 2025 of the VCC site (two evening surveys and one nocturnal survey) and Entrada South site (one evening survey) by walking the sites' perimeters where accessible and scanning for wildlife with binoculars and an acoustic bat detector. (Ex. A, pp. 2-23) These surveys detected "52 species of vertebrate wildlife at or adjacent to the VCC Planning Area, and 36 species of vertebrate wildlife at or adjacent to the Entrada South Planning Area, for a total of 62 species detected collectively, including 14 species with special status." (*Id*., p. 4.) The special-status species observed include: (1) Western mastiff bat (California Species of Special Concern, Western Bat Working Group High Priority), (2) Southern California rufous-crowned sparrow (CDFW Taxa To Watch List, Los Angeles County Bird Watchlist), (3) Oak titmouse (US Fish & Wildlife Bird of Conservation Concern, Los Angeles County Bird Watchlist, and (4) Turkey vulture (Los Angeles County Sensitive Bird Species). (*Id*. A, pp. 17-19.)

Dr. Smallwood calculated that more thorough site visits would reveal an even greater diversity of wildlife. (Ex. A, pp. 20-23.) Given more time to survey the site, Dr. Smallwood's predicts that 149 species of vertebrate wildlife, including 28 special-status species, would be detected on site. (*Id*., p. 22.) Based on his review of the DEIR and the site visits, Dr. Smallwood concluded, "[T]he large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort." (*Id*., p. 23.)

Although the SEIR's Biological Report detected approximately 130 species on the Project site, including 36 special-status species, the SEIR fails "to contextualize the survey findings by comparing them to survey effort and to survey findings elsewhere." (Ex. A, p. 26.) As a result, the SEIR fails to inform the reader that the Entrada South and VCC sites are

ecologically-abundant areas with a diversity of wildlife, including special-status species, that is well-beyond that found in a typical project. (*Id*., pp. 26-27.)

Furthermore, the Biological Report's review of available wildlife databases to identify which species are known to have occurred at or near the Project site was inadequate. (Ex. A, pp. 27-36.) The Biological Report relied on the California Natural Diversity Data Base ("CNDDB") to determine which species have potential to occur in the Project area. (*Id.*, p. 28.) However, as Dr. Smallwood explains:

> By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, [the Biological Report] screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community.
> . . .
> Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence.

(*Id*.)

Based on available databases (including CNDDB, iNaturalist, and eBird) and site visits, Dr. Smallwood found that "146 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential." (Ex. A, p. 28.) The SEIR's Biological Report only analyzed the occurrence potential for 22 special-status species, which amounts to only 15% of the special-status species identified by Dr. Smallwood. (*Id*., p. 29.) Therefore, the SEIR screened out 124 of the special-status species known to occur at or near the Project site from further review. (*Id*.) Of those 124 special-status species, "34 have been documented on the project site, 25 have been within 1.5 miles, and 44 have been documented between 1.5 and 4 miles of the site." (*Id*.) Further analysis is needed in the SEIR to address possible impacts to those species before determining that the Project will not result in a more severe impacts than the 2017 State-certified EIR.

Every EIR must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. *Communities for a Better Envt. v. So. Coast Air Qual. Mgmt. Dist*. (2010) 48 Cal. 4th 310, 321; see 14 CCR § 15125(a). Due to the inadequate analysis on the Biological Report, the SEIR underestimates the biological baseline at the Project site and, as a result, cannot provide substantial evidence about the severity of the Project's impacts on biological resources. As a result, the SEIR should be revised to properly disclose the biological baseline and the impacts of this Project.

B. The SEIR fails to analyze, disclose, and mitigate the Project's impacts on wildlife due to habitat loss and fragmentation, wildlife movement, bird-window collisions, house cat predation, and traffic-wildlife collisions.

Dr. Smallwood found that the SEIR failed to adequately discuss numerous significant impacts that the Project may have on biological resources due to habitat loss and fragmentation, wildlife movement, bird-window collisions, house cat predation, and traffic-wildlife collisions. (Ex. A, pp. 39-50.) By failing to disclose and mitigate these impacts, the SEIR is inadequate. The SEIR must be revised to disclose and mitigate the impacts discussed below.

1. Habitat loss and fragmentation

Dr. Smallwood found that the SEIR downplays the impacts of habitat loss resulting from the Project by dividing impacts as either temporary or permanent. (Ex. A, p. 39.) However, as Dr. Smallwood explains, "[t]he site is proven to serve as habitat to at least 140 species of vertebrate wildlife." (*Id*.) Dr. Smallwood calculates that the Project site contains over 8,600 bird nests. (*Id*., p. 40.)

As a result of habitat loss and fragmentation from the Project, Dr. Smallwood predicts that the Project would result in a loss of 7,838 nest sites bird nests, which corresponds to an overall loss of ***31,562 fledglings per year***, most of which are protected by the federal Migratory Bird Treaty Act and California's Migratory Bird Protection Act . (Ex. A, p. 40.) which "would be both substantial and highly significant." (*Id*., p. 32.) Dr. Smallwood concludes that "[t]he loss of 35,481 birds would easily qualify as an unmitigated significant impact." The SEIR should be revised to analyze, disclose, and mitigate this impact to the extent possible.

2. Wildlife Movement

Dr. Smallwood found that the EIR applied an improper standard to analyze the Project's impacts to wildlife movement. (Ex. A, pp. 40-41.) The SEIR concluded that there would not be an impact to wildlife movement because the project site itself does not serve as a wildlife movement "corridor." (*Id*., p. 40.) However, as Dr. Smallwood explains,

> The CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. The primary phrase of the CEQA standard

> goes to wildlife movement regardless of whether the movement is channeled by a corridor. Wildlife are obviously using the site, which means wildlife are able to travel to and from the site. Most of the birds recorded at the site are migratory birds, and the site is one of the last remaining patches of open space available to birds that need to move through Santa Clarita. The project site is important to wildlife movement in the region.

(*Id*., p. 41.)

The SEIR fails to provide any evidence regarding how wildlife use actually uses the Project site for movement in the region and that the resulting impacts of the Project on such movement will be. As a result, the SEIR analysis of the Project's impacts on wildlife movement is "speculation." (Ex. A, p. 42.) The SEIR must be revised to accurately describe wildlife movement through the Project site prior to concluding that such impacts will not be significant.

3. Bird-Window collisions.

The SEIR fails to account for the impact to bird species from collisions with the Project's glass windows and facades. The impacts from window collisions are important because such collisions "are often characterized as either the second or third largest source or human-caused bird mortality." (Ex. A, p. 42.) Dr. Smallwood calculated that the Project would result in ***8,173 bird deaths per year*** due to collisions with the Project's windows and glass facades. (*Id*., p. 44.) The SEIR must be revised to disclose, discuss, or mitigate this impact to the extent feasible.

4. House Cat Predation

The SEIR fails to account for the impact to wildlife from the introduction of domestic cats resulting from Entrada South's massive residential development. As Dr. Smallwood explains:

> In 2012 there were 0.44 house cats per human in the USA, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. The SEIR reports there would be 1,574 residential units in the project, and it predicts there would be 4,958 new residents. ***The above rates of cat ownership applied to this number of new residents would predict 2,182 new cats, which based on the findings of Loss et al. (2013) would kill 266,204 vertebrate wildlife per year***.

(Ex. A, p. 45.)

Furthermore, cats introduce *Toxoplasma gondii*, which is "a parasite that can infect virtually all warm-blooded animals." (*Id*.) *Toxoplasma gondii* can cause toxoplasmosis, which in severe cases can damage the brain, eyes, or other organs. (Center For Disease Control, About

Toxoplasmosis, https://www.cdc.gov/toxoplasmosis/about/index.html.) Additionally, "[i]nfants infected [by *Toxoplasma gondii*] while still in the womb often have no symptoms at birth but can develop symptoms later in life." (*Id*.)

Dr. Smallwood concludes that "[i]mpacts to wildlife from the introduction of house cats into the environment would be highly significant, and yet these impacts are not considered in the SEIR. (Ex. A, p. 45.) The SEIR must be revised to disclose and analyze this impact. The revised SEIR should also consider whether mitigating this impact is feasible through requirements on future residents of Entrada South constraining house cat ownership by, for example, requiring cats to remain indoors. (See *id*.)

5. Traffic-Wildlife Collisions

The SEIR fails to address the impacts to wildlife from collisions with traffic generated by the Project. This omission is important because, as Dr. Smallwood explains,

> Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

(Ex. A, pp. 45-46.) According to the SEIR, the Project would result in 272,854 daily vehicle miles traveled ("VMT"), which amounts 99,592,805 annual VMT. (*Id*, p. 48.) Based on the Project's annual VMT, Dr. Smallwood estimates that traffic from the Project will kill at least 42,362 vertebrates annually. (*Id*.) Especially due to the special-status species occurring and likely to occur at or near the Project, these collisions represent a significant impact to wildlife that must addressed, discussed, and mitigated in a revised SEIR.

C. The SEIR's mitigation measures for biological resources are inadequate.

Dr. Smallwood critiqued the SEIR's proposed mitigation measures as being inadequate to reduce the Project's impacts to biological resources. (Ex. A, pp. 50-54.) For example, many of the mitigation measures are requirements to preform wildlife surveys. (*Id*, pp. 51, 53.) However, as Dr. Smallwood explains, these surveys should have been conducted *prior to* preparing the SEIR in order to inform the SEIR's analysis. (*Id*., p. 38.)

Dr. Smallwood provides a list of feasible mitigation measures that should be incorporated into the Project to reduce impacts to biological resources. (Ex. A, pp. 54-55.) These measures include: (1) adhering to Bird-Safe Design Guidelines to reduce bird-window collisions; (2)

compensatory mitigation for wildlife killed/injured by vehicles and window collisions; and (3) a requirement for native landscaping. (*Id*.) The SEIR should be revised to adopt these feasible mitigation measures prior to approval of the Project.

CONCLUSION

Approval of the Project and the SEIR would violate CEQA by: (1) failing to adequately disclose the Project's significant and unavoidable impacts; (2) failing to require all feasible mitigation measures for the Project's significant and unavoidable impacts; and (3) failing to adequately disclose and mitigate the Project's significant impacts to biological resources. For those reasons, SAFER requests that the Board of Supervisors refrain from approving the Project at this time and, instead, direct the Planning Department to revise and recirculate the SEIR to ensure compliance with CEQA.

Sincerely,

Brian B. Flynn
Lozeau Drury LLP

cc: Edward Yen, Executive Officer, executiveoffice@bos.lacounty.gov
Jodie Sackett, Senior Planner, jsackett@planning.lacounty.gov

EXHIBIT A

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012-3208

10 November 2025

RE: Entrada South and Valencia Commerce Center

To Whom It May Concern,

I write to comment on potential impacts to biological resources that would result from development of the proposed Entrada South and Valencia Commerce Center, which herein I refer to together as the project site. I understand the project would add 1,574 single-family dwelling units and 4,130,000 sf of industrial, business, office and commercial buildings on 70.8 acres in Santa Clarita, California. My comments that follow address my concerns that the Supplemental Environmental Impact Report (SEIR), supported by Dudek's biological resources report (Dudek 2024). I am concerned that Dudek (2024) and the SEIR mischaracterize the existing environmental setting, and that its impacts analysis is flawed and its mitigation measures are inadequate.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

THE WILDLIFE COMMUNITY AS A BIOLOGICAL RESOURCE

Most environmental reviews pursuant to the California Environmental Quality Act (CEQA) focus on special-status species because CEQA's Checklist Evaluation of Environmental Impacts specifies that such evaluation includes potential impacts to special-status species. However, an important policy of CEQA is "to prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." Pub. Res. Code § 21001(c). This policy is not restricted to special-status species, but it also applies to wildlife populations and plant

and animal communities. In fact, the CEQA Guidelines Section 21155.1 defines wildlife habitat as "the ecological communities upon which wild animals, birds, plants, fish, amphibians, and invertebrates depend for their conservation and protection." This definition is consistent with the scientific definition of habitat, which is that portion of the environment that is used by members of a species for survival and reproduction (Hall et al. 1997). An essential portion of the environment used by any special-status species is composed of the collection of other species of plants and wildlife, because these species are forage, provisioners of refugia and nest substrates, and ecological mutualists; no special-status species can exist in a vacuum of other wildlife. The CEQA Checklist Evaluation assigns priority to special-status species to balance information and cost, but it does not exclude the need to evaluate environmental impacts to other species, which, after all, are members of the very communities within which special-status species inter-depend for survival and reproduction.

All wildlife species should be of concern in a CEQA review, but the CEQA prioritizes special-status species. The species I consider to be special-status species are those listed in California's Special Animals List inclusive of threatened and endangered species under the California and federal Endangered Species Acts, candidates for listing under CESA and FESA, California's Fully Protected Species, California species of special concern, and California's Taxa to Watch List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406), continental and region-specific US Fish and Wildlife Service Birds of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf), and naturally rare species such as raptors protected by California's Birds of Prey laws, Fish and Game Code Sections 3503, 3503.5, 3505 and 3513 (see https://wildlife.ca.gov/Conservation/ Birds/Raptors).

What follows is a summary of a site visit to detect as many of the species of wildlife as possible within the short time available. The survey was also intended to detect as many of the special-status species as possible, but with the understanding that most special-status species are less readily detectable due to rarity and crypticity. Nonetheless, the species detected can indicate the ecological integrity of the site and thus the likelihood of occurrence of special-status species not yet detected.

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master of Science Degree from California State University Los Angeles, visited the Valencia Commerce Center (VCC) Planning Area to conduct evening surveys for 3.6 hours from 16:28 to 20:04 hours on 26 September 2025 and for 3.92 hours from 16:46 to 18:02 hours, and she conducted a nocturnal survey from 18:21 to 21:00 hours on 14 October 2025. Noriko also visited the Entrada South Planning Area for 3.18 hours from 06:41 to 09:52 hours on 27 September 2025. Noriko walked the site's perimeter where accessible, stopping to scan for wildlife with use of binoculars. On the night of 14 October 2025, shee strapped a Pettersson M500 acoustic bat detector atop a 7.6-m pole, and cabled the detector to her computer, which ran Sonobat Live. Sonobat Live identifies bats to species based on the bats' sonograms that are detected by the M500. Noriko recorded all species of vertebrate wildlife she detected, including those whose members flew over the site or were seen

just off the site. Animals of uncertain species identity were either recorded to the Genus or higher taxonomic level.

Conditions were cloudy to partly cloudy with 7 MPH southwest wind and temperatures of 77-69° F on 26 September 2025, and cloudy with 3 MPH south wind and temperatures of 64-67° F on 27 September 2025. On 14 October 2025, conditions were cloudy with 6 MPH south wind and temperatures of 58-66° F during the diurnal survey and cloudy with 5 MPH south wind and temperatures of 55-52° F during the nocturnal survey. The VCC Planning Area overlaps Castaic Creek and is primarily riparian and scrub (Photos 1-2). The Entrada South Planning Area is primarily annual grassland, oak grassland, and scrub (Photos 20, 21, and 22).

Photos 1 and 2. *Views of the VCC Planning Area, 26 September 2025 and 14 October 2025. Photos by Noriko Smallwood.*

At the VCC Planning Area, Noriko saw great blue heron and great egret (Photos 3 and 4), red-shouldered hawk and Nuttall's woodpecker (Photos 5 and 6), Costa's hummingbird and Anna's hummingbird (Photos 7 and 8), common raven (Photo 9), black phoebe and mourning dove (Photos 10 and 11), red-winged blackbird and California scrub-jay (Photos 12 and 13), house finch and lesser goldfinch (Photo 14), Wilson's warbler and California towhee (Photos 15 and 16), song sparrow and common yellowthroat (Photos 17 and 18), Canada goose (Photo 19), among other species listed in Table 1. At the Entrada South Planning Area, Noriko saw Cooper's hawk and red-tailed hawk (Photos 23 and 24), turkey vulture and great egret (Photos 25 and 26), California quail (Photo 27), Anna's hummingbird and Brewer's blackbird (Photos 28 and 29), common raven and California scrub-jay (Photos 30 and 31), mourning dove (Photo 32),

bushtit and house finch (Photos 33 and 34), California thrasher and lark sparrow (Photos 35 and 36), white-crowned sparrow and lesser goldfinch (Photos 37 and 38), Bewick's wren and Southern California rufous-crowned sparrow (Photos 39 and 40), California towhee and spotted towhee (Photos 41 and 42), California ground squirrel (Photo 43), Mexican free-tailed bat and western mastiff bat (Photos 44 and 45), among other species listed in Table 1. Noriko detected 52 species of vertebrate wildlife at or adjacent to the VCC Planning Area, and 36 species of vertebrate wildlife at or adjacent to the Entrada South Planning Area, for a total of 62 species detected collectively, including 14 species with special status (Table 1).

Photos 3 and 4. *Great blue heron (top left), great egret (top right), red-shouldered hawk (bottom left), and Nuttall's woodpecker (bottom right) on the VCC Planning Area, 26 September and 14 October 2025. Photos by Noriko Smallwood.*

Photos 7 and 8. *Costa's hummingbird (left), and Anna's hummingbird (right) on the VCC Planning Area, 26 September 2025. Photos by Noriko Smallwood.*

Photo 9. *Common raven on the VCC Planning Area, 26 September 2025. Photo by Noriko Smallwood.*

Photos 10 and 11. *Black phoebe (left), and mourning dove (right) on the VCC Planning Area, 14 October and 26 September 2025. Photos by Noriko Smallwood.*

Photos 12 and 13. *Red-winged blackbird (left), and California scrub-jay (right) on the VCC Planning Area, 26 September 2025. Photos by Noriko Smallwood.*

Photo 14. *House finch and lesser goldfinch on the VCC Planning Area, 26 September 2025. Photo by Noriko Smallwood.*

Photos 15 and 16. *Wilson's warbler (left), and California towhee (right) on the VCC Planning Area, 26 September 2025. Photos by Noriko Smallwood.*

Photos 17 and 18. *Song sparrow (left), and common yellowthroat (right) on the VCC Planning Area, 14 October 2025. Photos by Noriko Smallwood.*

Photo 19. *Flock of Canada geese on the VCC Planning Area, 14 October 2025. Photo by Noriko Smallwood.*

Photos 20, 21, and 22. *Views of the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 23 and 24. *Cooper's hawk (left), and red-tailed hawk (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 25 and 26. *Turkey vulture (left), and great egret (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photo 27. *California quail on the Entrada South Planning Area, 27 September 2025. Photo by Noriko Smallwood.*

Photos 28 and 29. *Anna's hummingbird (left), and Brewer's blackbird (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 30 and 31. *Common raven with a food item (left), and California scrub-jay with an acorn (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photo 32. *Mourning doves on the Entrada South Planning Area, 27 September 2025. Photo by Noriko Smallwood.*

Photos 33 and 34. *Bushtit (left), and house finch (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

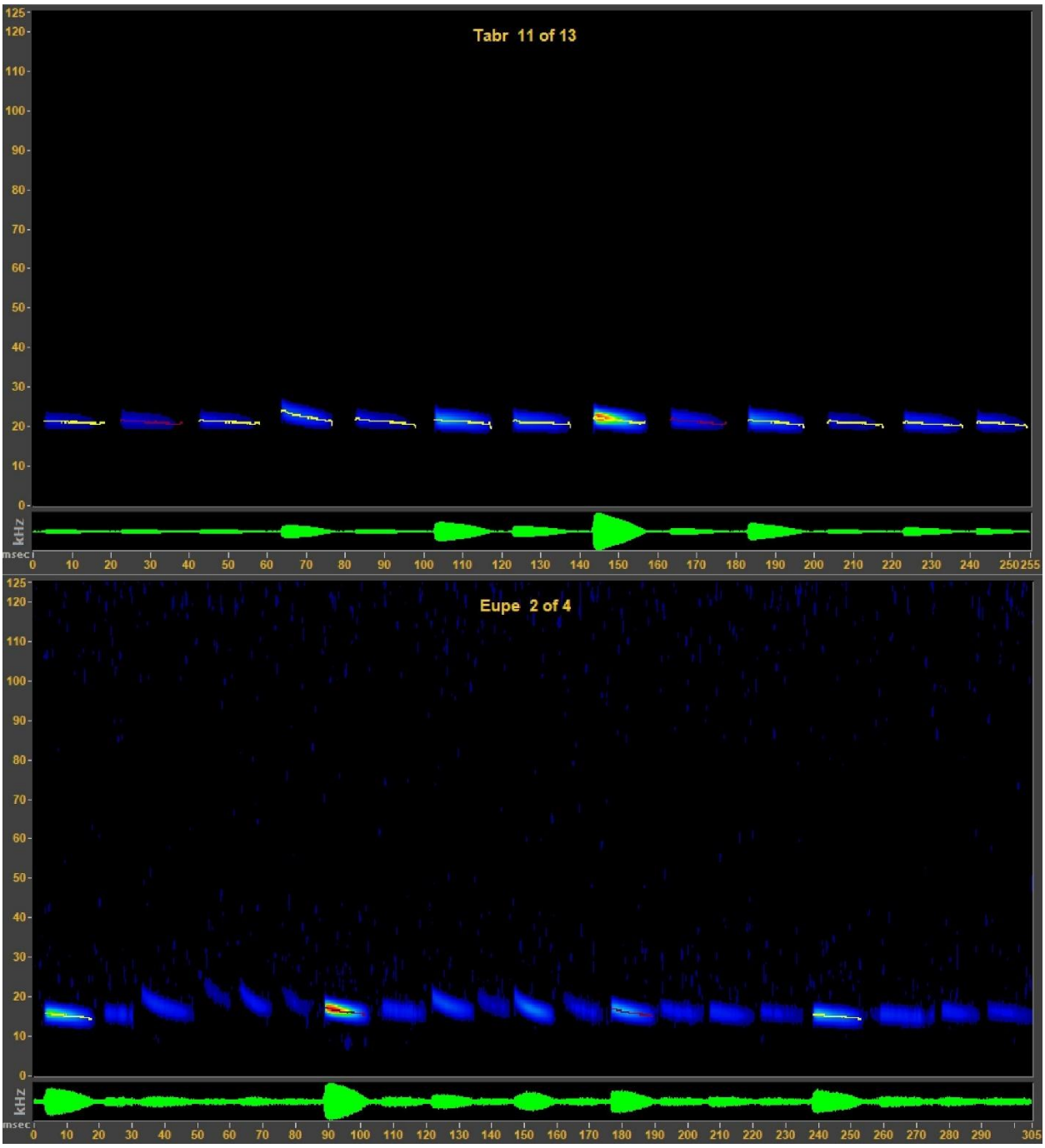
Photos 35 and 36. *California thrasher just off of the Entrada South Planning Area (left), and lark sparrow on the Entrada South Planning Area (right), 27 September 2025. Photos by Noriko Smallwood.*

Photos 37 and 38. *White-crowned sparrow (left), and lesser goldfinch (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 39 and 40. *Bewick's wren (left), and Southern California rufous-crowned sparrow (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 41 and 42. *California towhee (left), and spotted towhee (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photo 43. *California ground squirrel on the Entrada South Planning Area, 27 September 2025. Photo by Noriko Smallwood.*



Photos 44 and 45. *Sonogram of Mexican free-tailed bat (top) western mastiff bat (bottom) detected on site using Sonobat Live and a Pettersson M500, 14 October 2025.*

Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood

Table 1. *Species of wildlife Noriko observed during 3.6 hours of survey on 26 September 2025, during 3.18 hours of survey on 27 September 2025, during 1.27 hours of diurnal survey and during 2.65 hours of nocturnal survey on 14 October 2025.*

Common name	***Species name***	**Status[1]**	**VCC**	**Entrada South**	**Notes**
Great Basin fence lizard	*Sceloporus occidentalis longipes*		X		
Canada goose	*Branta canadensis*		X		Flock flew over
Mallard	*Anas platyrhynchos*			X	Flew over
California quail	*Callipepla californica*			X	Many
Rock pigeon	*Columba livia*	Non-native	X	X	
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	X		Just off site
Mourning dove	*Zenaida macroura*		X	X	
Swift sp.	*Apodidae*		X		Flew over
Anna's hummingbird	*Calypte anna*		X	X	
Costa's hummingbird	*Calypte costae*		X	X	
Allen's hummingbird	*Selasphorus sasin*	BCC	X	X	
Killdeer	*Charadrius vociferus*		X		
Great blue heron	*Ardea herodias*		X		Foraged in Castaic Creek
Great egret	*Ardea alba*		X	X	
Black-crowned night-heron	*Nycticorax nycticorax*		X		
Turkey vulture	*Cathartes aura*	BOP, LACSBS	X	X	
Cooper's hawk	*Accipiter cooperii*	WL, BOP		X	Flew over
Red-shouldered hawk	*Buteo lineatus*	BOP	X		Perched and flew over
Red-tailed hawk	*Buteo jamaicensis*	BOP	X	X	Perched and flew over
American barn owl	*Tyto furcata*	BOP	X		Called in evening

Common name	***Species name***	**Status[1]**	**VCC**	**Entrada South**	**Notes**
Great horned owl	*Bubo virginianus*	BOP	X		Called in evening
Acorn woodpecker	*Melanerpes formicivorus*			X	
Nuttall's woodpecker	*Picoides nuttallii*	BCC	X		
Hairy woodpecker	*Dryobates villosus*		X		
Cassin's kingbird	*Tyrannus vociferans*		X	X	
Black phoebe	*Sayornis nigricans*		X	X	Foraged
Say's phoebe	*Sayornis saya*		X	X	
California scrub-jay	*Aphelocoma californica*		X	X	Many
American crow	*Corvus brachyrhynchos*		X	X	
Common raven	*Corvus corax*		X	X	
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW	X		
Bushtit	*Psaltriparus minimus*		X	X	Many
Wrentit	*Chamaea fasciata*	BCC	X	X	Just off site
Ruby-crowned kinglet	*Regulus calendula*		X		
Blue-gray gnatcatcher	*Polioptila caerulea*		X		
Bewick's wren	*Thryomanes bewickii*		X	X	
California thrasher	*Toxostoma redivivum*	BCC		X	Just off site
Northern mockingbird	*Mimus polyglottos*		X		
European starling	*Sturnus vulgaris*	Non-native	X		
Western bluebird	*Sialia mexicana*		X		
House finch	*Haemorphous mexicanus*		X	X	Many
Lesser goldfinch	*Spinus psaltria*		X	X	
Lark sparrow	*Chondestes grammacus*			X	
White-crowned sparrow	*Zonotrichia leucophrys*		X	X	Just off site
Song sparrow	*Melospiza melodia*		X	X	
California towhee	*Melozone crissalis*		X	X	Foraged
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW		X	Foraged
Spotted towhee	*Pipilo maculatus*			X	Foraged
Red-winged blackbird	*Agelaius phoeniceus*		X	X	
Brewer's blackbird	*Euphagus cyanocephalus*			X	

Common name	*Species name*	Status[1]	VCC	Entrada South	Notes
Orange-crowned warbler	*Oreothlypis celata*		X		
Common yellowthroat	*Geothlypis trichas*		X		
Yellow-rumped warbler	*Setophaga coronata*		X	X	
Wilson's warbler	*Cardellina pusilla*		X		Foraged
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L	X		
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	X		
California ground squirrel	*Otospermophilus beecheyi*			X	
Raccoon	*Procyon lotor*		X		Deceased just off site, likely hit by car
Coyote	*Canis latrans*		X	X	Called in evening
Skunk sp.	*Mephitidae*		X		
California vole	*Microtus californicus*		X	X	Burrows
Botta's pocket gopher	*Thomomys bottae*		X		Burrows

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID =109406) as BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); SSC_i = California Species of Special Concern with *i* = priorities 1, 2 and 3; WL = CDFW's Taxa to Watch List; BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), and LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

All the species in Table 1 would lose habitat as the result of the project. Even the species associated with riparian environments would be adversely affected, because they would lose access to forage sourced from surrounding uplands, and because they would be vulnerable to the intrusive effects of artificial light and noise from neighboring industrial and office buildings and homes, and from house cats, dogs and people.

ANALYSIS OF RECONNAISSANCE SURVEY DATA

Noriko detected 62 species of vertebrate willdife, which was a large number for the brevity of her survey effort. However, the species of wildlife Noriko detected at the project site were not the only species that were present during her surveys, as there are always species that are not detected. To demonstrate this, I fit nonlinear regression models to Noriko's cumulative numbers of vertebrate species detected with time into her daytime surveys to predict the number of species that she would have detected with longer surveys or perhaps with additional biologists available to assist her. The type of model is a logistic growth model, which reaches an asymptote that corresponds with the theoretical maximum number of vertebrate wildlife species that could have been detected during the survey. The models fit to Noriko's survey data from the evenings of 26 September and 14 October predict 55 and 59 species of vertebrate wildlife were available to be detected, respectively, and the model fit to Noriko's survey data from the morning of 27 September also predicts 59 species of vertebrate wildlife (Figure 1). These predictions numbered 19 to 29 more species than she detected per survey. Her morning survey results were within the 95% confidence interval estimated from morning surveys Noriko has completed throughout the region.

Unknown are the identities of the species Noriko missed, but the species that Noriko did and did not detect composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence, some require more survey effort because they are highly cryptic, and the members of other species would visit the site only periodically while patrolling large home ranges. Surveys on only two or three days cannot possibly detect all of the species of the local wildlife community.

At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's two surveys. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. This analytical bridge draws inference from the pattern of species detections more than it does from the research site, and I note that the pattern, i.e., rate, of species detections is consistent from site to site.

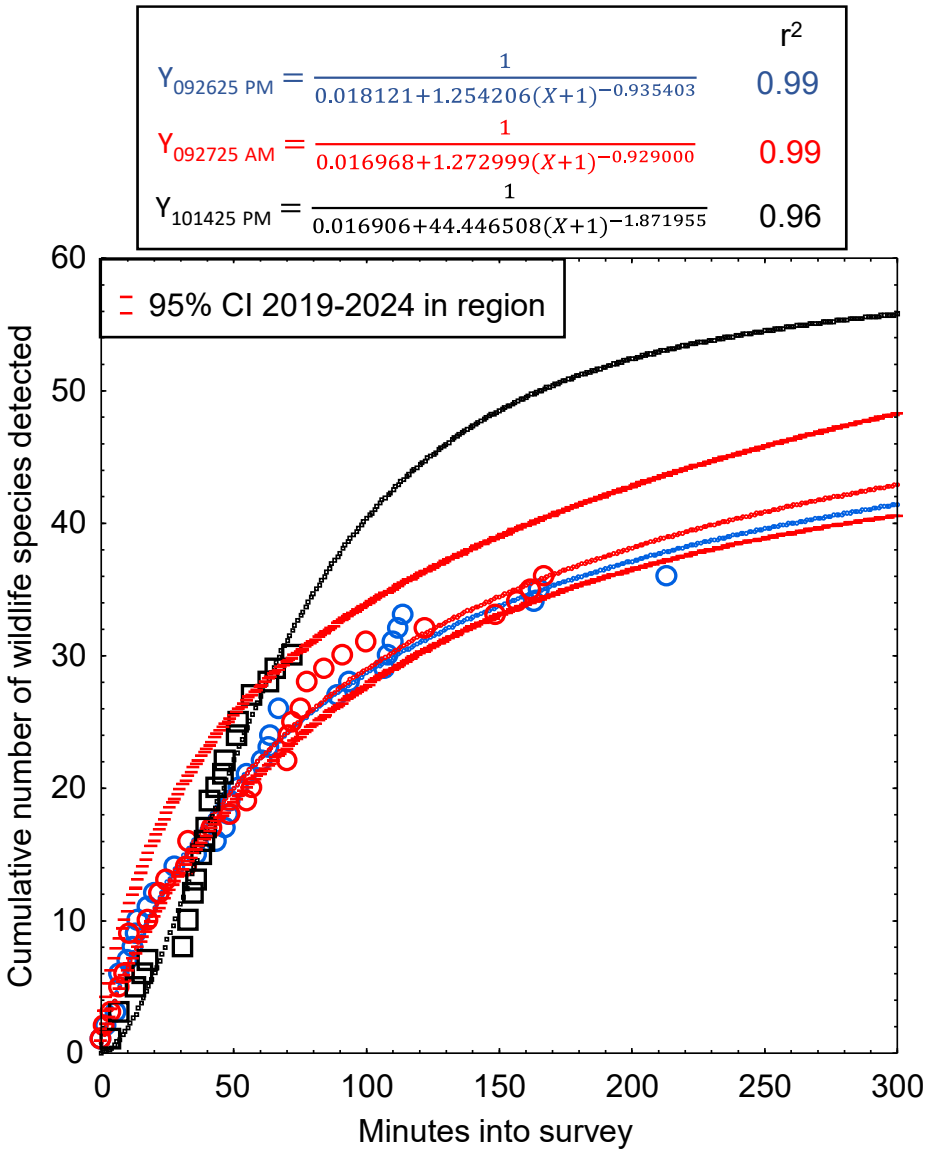
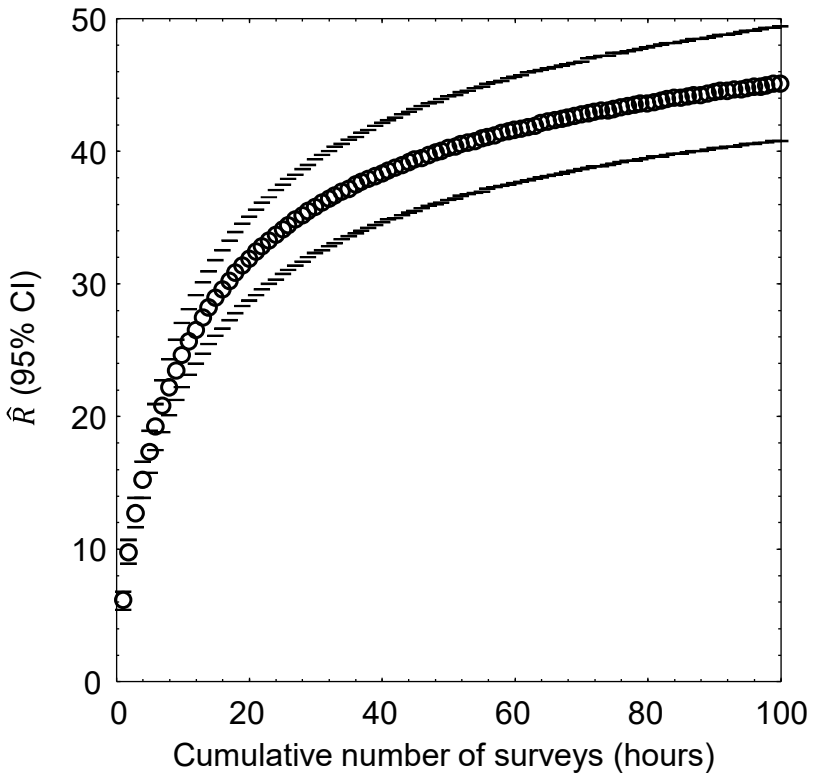


Figure 1. *Actual and predicted relationships between the numbers of vertebrate wildlife species detected and the elapsed survey time based on Noriko's visual-scan surveys on 26 and 27 September, and on 14 October 2025.*

As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 22.2 species over my first 8 hours of diurnal surveys at my research site in the Altamont Pass (8 hours to match the 8 hours Noriko surveyed during daylight hours at the project site), which composed 38.9% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 58 diurnally active species Noriko detected after her 8 hours of daylight survey at the project site likely represented 38.9% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, Noriko would likely detect $^{58}/_{0.389} = 149$ species of diurnally active vertebrate wildlife at the site. Assuming Noriko's ratio of special-status to non-special-status species was to hold through the detections of all 149 predicted species, then continued surveys would eventually detect 28 special-status species of diurnally active vertebrate wildlife.

Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.*



Because my prediction of 149 species of vertebrate wildlife, including 28 special-status species, is derived from daytime visual-scan surveys, and would detect few nocturnal mammals such as bats, the true number of species composing the wildlife community of the site must be larger. Noriko's reconnaissance surveys should serve only as a starting point toward characterization of the site's wildlife community, but they certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than

her three surveys to produce an inventory the project site's wildlife community. Nevertheless, the large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort.

EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the wildlife community and any key ecological relationships and known and ongoing threats to special-status species. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of the CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these steps were taken, though not with sufficient rigor and not interpreted in furtherance of an accurate characterization of the wildlife community.

Environmental Setting informed by Field Surveys

To the CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources. In the case of this project, however, not only are more surveys needed, but the methods and results of past surveys and any future surveys need to be fully reported and much more carefully interpreted.

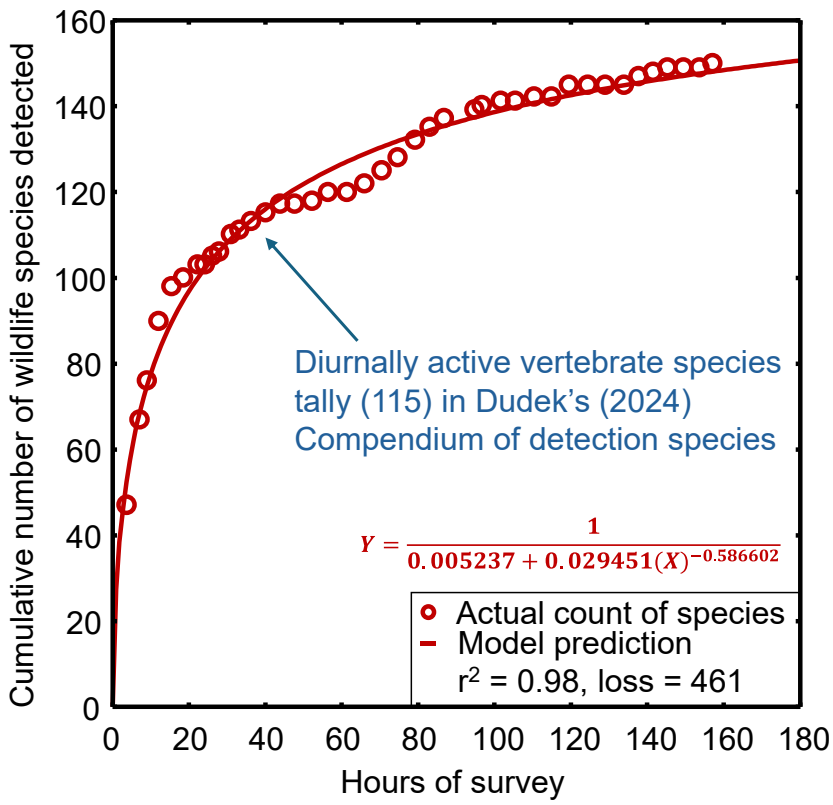
Without full reporting of methods and results of all past surveys, both Dudek (2024) and the SEIR can report on patterns of findings that cannot be checked for veracity by the reader. It would have helped to attach the reports of surveys to the SEIR. The SEIR (p. 5.2-33) reports, "common wildlife species observed within the Entrada South Planning Area since 2010 remain similar to those observed prior to that time, as reflected in the results of the surveys summarized in Table 1 of the Entrada South Bio Report included in Appendix 5.2a." In fact, Table 1 of the Bio Report reflects no such thing, as survey results are not reported nor compared in Table 1 of Appendix 5.2a. Table 1 of App. 5.2a merely summarizes the methods of past survey efforts. Again, without producing the reports of past surveys, and because Table 1 of App. 5.2a does not report what the SEIR claims it reports, the reader has no way of checking whether it is true that "common wildlife species" remain similar to whatever it was they were supposed to be in past surveys. I say "whatever it was they were supposed to be" because the SEIR is ambiguous about what is similar: Species composition? Species richness? Species diversity? Animal abundance? Without specifying the metric under comparison, the SEIR's statement makes little sense.

Dudek (2024) and the SEIR include many additional unfounded conclusions, such as the following. Dudek (2024:16) states, "…more intensive wildlife surveys have been conducted since 2010. As a result, it would not be appropriate to draw the conclusion that the status of biological resources on the Entrada South Project Site has changed, compared to conditions described in the State-Certified EIR, based solely on a comparison of the number and diversity of the wildlife species on the Entrada South Project Site reported in the State-Certified EIR and those observed since then. However, the survey data do provide useful information for evaluating whether wildlife species previously documented to occur, or assumed to occur, within the Entrada South Project Site continue to be present or have a high likelihood of occurring. In some cases, more recent surveys confirm the occurrence of a species that was previously assumed to occur." Regarding the claim that more intensive surveys followed 2010, the reader can only take Dudek's word on this because Dudek (2024) fails to present the survey methods and results of any and all surveys in any manner that would enable the reader to compare the surveys. The survey efforts are insufficiently described, and the survey results are not provided in any form other than an overall compendium of species detected on the project site.

That additional surveys resulted in additional species detections is not surprising, but it is indicative of the past surveys having not been sufficient for characterizing the wildlife community. There should be no doubt, however, that a respectable survey effort has been completed, because otherwise Dudek's compendium would not have numbered 130 vertebrate species of wildlife having been detected. But these 132 species nevertheless represent only a portion of the species composition of the wildlife community (Figure 3). The 115 diurnally active species of vertebrate wildlife detected at the Entrada South project site would have taken about 35 hours of my time had I been doing the surveys (Figure 3), but it would take another 123.5 hours to detect the more cryptic or rare of the diurnally active species I detected at the study site I use for comparison in Figure 3. But again, Dudek (2024) and the SEIR fail to report how much survey time has been committed to the project site.

That additional surveys result in additional species detections is also evident in the focused surveys completed on the project site. Dudek (2024) reports that focused surveys were conducted for Crotch's bumble bee, Coastal California gnatcatcher, grasshopper sparrow, and western spadefoot. Crotch's bumble bee and Coastal California gnatcatcher were detected; these species likely would not have been detected without the focused surveys. On the other hand, grasshopper sparrow and western spadefoot were not detected, but the western spadefoot surveys were reportedly conducted under less-than-ideal conditions, and the surveys were never repeated in later years under more suitable conditions. To detect special-status species that are rare or highly cryptic, detection survey protocols need to be followed, or many additional reconnaissance surveys need to be completed. There is no shortcut to learning of the species composition of the wildlife community.

Figure 3. *Compared to my 41 reconnaissance-level surveys over three years in Rancho Cordova, California, the survey effort at Entrada South ended before it could achieve a wildlife species inventory of diurnally active vertebrae wildlife species, and coming up 23% short of the number of species I tallied after 158.5 hours of survey at another site.*



Dudek (2024) explains that no focused surveys were conducted for wildlife species that were not found during previous surveys or that were considered to have low likelihoods of occurrence, or for high-mobility species such as puma or "cryptic species that are unlikely to be detected even if present, as such surveys were not likely to produce meaningful data. The analysis regarding such species in the State-certified EIR remains valid…" None of this explanation makes sense. Focused surveys are absolutely in need for those special-status species that have yet to be detected, such as for western spadefoot. And, of course, it is for the cryptic species that detection survey protocols have been prepared, and for which focused surveys are in greatest need. Regarding meaningful data, to not survey for a species is the surest way to generate meaningless data, as null data are meaningless data. Dudek's explanation is inconsistent with the scientific method, as well as with the primary objectives of the CEQA.

Dudek (2024) states that surveys for rare plants were conducted through 2019, and it claims that it is very unlikely that additional surveys would generate different results. However, I see no evidence in Dudek (2024) or the SEIR that the plant surveys completed to date achieved the minimum standards of the CDFW (2018) survey guidelines for rare plants, which are not even cited in Dudek (2024).

Regarding rare plants, the SEIR (p. 5.2-27) claims that "for special-status plant species that have not been the subject of recent focused surveys, Project mitigation measures require either that the number of plants impacted be assessed and mitigated at the time of Project construction … or that impacts be assessed and mitigated based on loss of suitable habitat, rather than the number of plants affected." However, this approach is

inconsistent with the first tenant of CDFW (2018), which states "These protocols are meant to help people meet California Environmental Quality Act (CEQA) requirements for adequate disclosure of potential impacts to plants and sensitive natural communities." The detecting and enumerating of rare plant species put at risk of harm by a proposed project needs to be disclosed to the public by completing appropriate surveys to the minimum standards of CDFW (2018).

Neither Dudek (2024) nor the SEIR attempt to contextualize the survey findings by comparing them to survey effort and to survey findings elsewhere. Dudek's (2024) Appendix B lists 130 species of vertebrate wildlife having been detected, including 36 special-status species of vertebrate wildlife and another 2 species of invertebrates (omitted from Appendix B were two more special-status species – northern California legless lizard and two-striped gartersnake). Nothing is made of these numbers, which are not compared to numbers of species detected elsewhere. Are these numbers typical? In my experience, these numbers are exceptional. Of consultant survey outcomes at 198 project sites I have reviewed as an expert, the 132 vertebrate species at the Entrada South site is the second most I have seen (Figure 4), and the 38 special-status species of vertebrate wildlife is the most I have seen (Figure 5). Comparisons of the survey findings to the survey findings at other project sites clearly identify the Entrada South site as exceptional.

Figure 4. *Histogram of consultants' tallies of vertebrate wildlife species resulting from surveys among project sites in California. The red line denotes the normal curve fit to the data. Entrada South falls within the right-skewed portion of the normal curve with 132 species detected.*

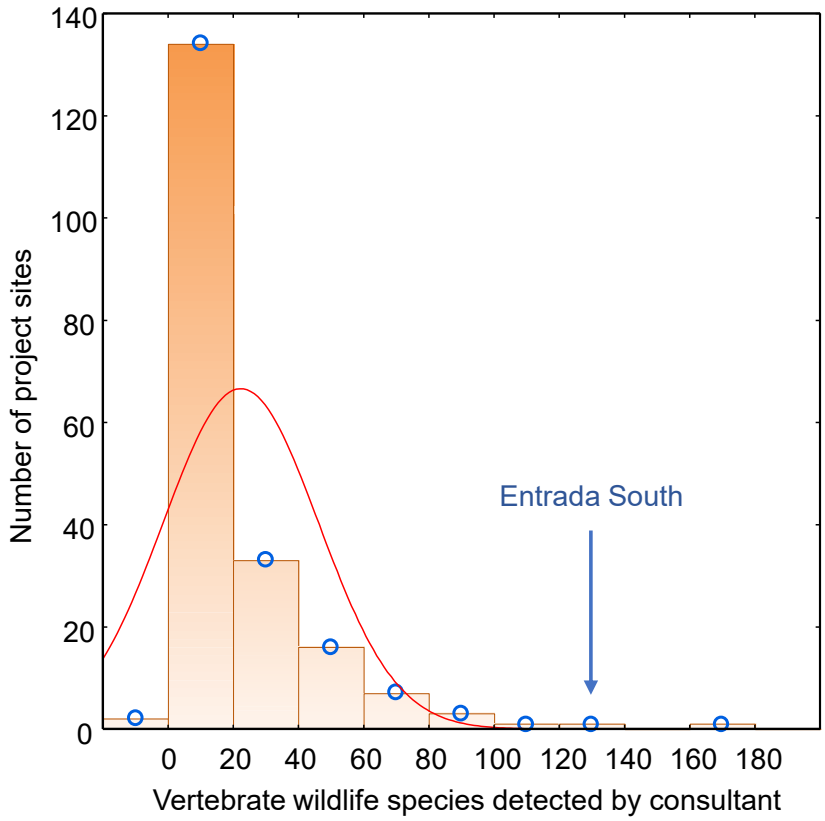
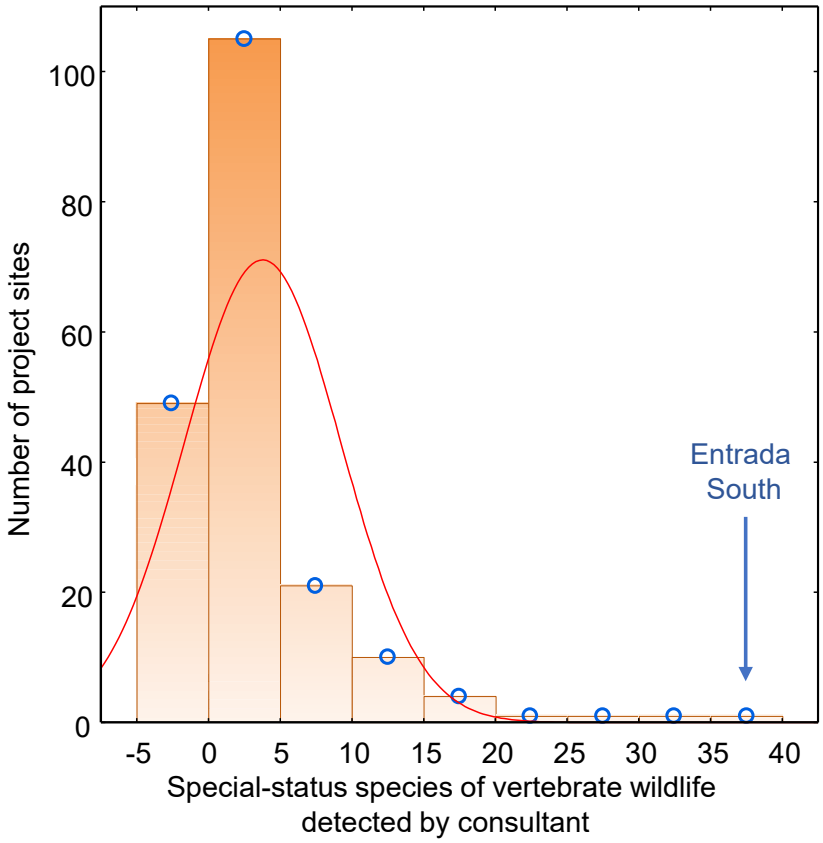


Figure 5. *Histogram of consultants' tallies of special-status species of vertebrate wildlife species resulting from surveys among project sites in California. The red line denotes the normal curve fit to the data. Entrada South falls far to the right of the right-skewed portion of the normal curve with 38 special-status species of vertebrate wildlife detected.*



I will point out that Noriko detected an additional 8 species of vertebrate wildlife that the consultants had not detected, including the western mastiff bat, which is another special-status species that brings to total 140 species of vertebrate wildlife and 39 special-status species of vertebrate wildlife documented on the project site. Noriko's additional species serve as additional evidence that the inventory of species composing the wildlife community on the project site remains incomplete. Additional surveys would result in additional species detections.

Environmental Setting informed by Desktop Review

The purpose of literature and database reviews and of consulting with local experts is to inform the field survey, and to augment interpretation of its outcome. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and migration flight paths. In the case of this project, the desktop review was incomplete, and the review that was completed was distorted to minimalize the likelihoods of occurrence of special-status species.

According to the SEIR (p. 5.2-24), "the State-certified EIR contained the best available information about the Project Site, including vegetation mapping and results of special-status plant and wildlife surveys." However, the 2017 EIR is eight years old, and its supporting surveys preceded the CDFW (2018) rare plant survey guidelines. Furthermore, the environmental review leading to the 2017 EIR made no use of eBird or

iNaturalist as part of its first step to establish the pool of special-status species for habitat assessment in its desktop review. Moreover, 25 species of wildlife in Table 2 have been designated with special status or a higher level of special status since the 2017 EIR, including monarch, Crotch's bumble bee, willet, tricolored blackbird, western gull, northern harrier, burrowing owl, California thrasher, wrentit, Bullock's oriole, and others. If the 2017 EIR is the best available information about the project site, then insufficient survey effort and an inadequate desktop review has since followed from the 2017 EIR. In fact, Dudek (2024:25) acknowledges that "many recent occurrences have been added to CNDDB since 2019." Along with this acknowledgement, Dudek and the SEIR should have also acknowledged that the 2017 EIR no longer provides the best information about the wildlife community on the project site.

To establish the pool of special-status species for assessment of occurrence likelihoods, Dudek (2024) queried the CNDDB for occurrence records within the nine nearest USGS Quadrangles inclusive of the project site. By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, Dudek (2024) screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." Dudek (2024) and hence the SEIR misuse the CNDDB.

The CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence. And again, the screening out of a species due to lack of occurrence records in the CNDDB is the same as an absence determination, and this step is being taken without adequate support of field surveys.

In my assessment based on a database review and site visits, 146 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 2). Not all these species should be expected to occur at the project site,

but each of them should be given a closer look to determine occurrence likelihoods and whether additional surveys are needed, or implementation of detection surveys, or whether it would be reasonable to assume presence. Of these 146 species, 39 (27%) were recorded on the project site, and another 29 (20%) species have been documented within 1.5 miles of the site (Very close), another 13 (9%) within 1.5 and 4 miles (Nearby), and another 55 (38%) within 4 to 30 miles (In region). More than half (55%) of the species in Table 2 have been reportedly documented within 4 miles of the project site. The site therefore supports at least 39 special-status species of wildlife, and it carries the potential for supporting many more special-status species of wildlife based on the proximities of recorded occurrences. Evidence certainly suggests that habitat assessments are needed for many more special-status species than have been performed in the SEIR.

Dudek (2024) considers the occurrence likelihoods of 22 (15%) of the special-status species listed in Table 2, which means that 124 (85%) of the special-status species in Table 2 were screened out of the analysis in the first step of the desktop review. Of the 22 special-status species it assesses, Dudek (2024) determines nine of the special-status species to be present, having not recognized the special status of an additional 27 species that had been detected by past surveys. Dudek (2024) assumes five more are present, and Dudek determines the other eight to have potential to occur. Due to its misuse of the CNDDB to screen species for inclusion in the habitat assessments, Dudek (2024) omits most of the special-status species that could occur on the project site.

Of the 124 special-status species in Table 2 omitted from habitat assessment, 34 have been documented on the project site, 25 have been within 1.5 miles, and 44 have been documented between 1.5 and 4 miles of the site. In summary, Dudek's determinations of occurrence likelihoods comport only poorly with survey results and with available occurrence records in the region.

All the special-status species in Table 2 that have been documented on site, most of those documented within four miles of the site, and some documented within the region would be adversely affected by the project. All these special-status species concentrate on and around the project site can only mean that the project site has maintained a high degree of ecological integrity. Many of these species undoubtedly benefit from the juxtaposition of riparian vegetation and upland environments. Lee and Rotenberry (2015) found that whereas the occurrences of some bird species in riparian forests correlated with local variables defined by percent tree cover versus percent shrub cover, the occurrences of twice as many riparian bird species correlated with landscape variables such as adjacency and extent of upland land uses such as agriculture, shrubland or forest. Much of the functionality of the riparian environment as a concentrator of wildlife is lost when this environment is isolated from natural upland environments. The project would indeed isolate and degrade the riparian environments within the project's footprint.

Table 2. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species detected by Noriko Smallwood during her site visit. Species highlighted in light orange have been assigned special status since the 2017 EIR.*

Common name	***Species name***	**Status[1]**	**SEIR occurrence**	**Databases, Surveys**	
				VCC	**Entrada South**
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT		In region	In region
Riverside fairy shrimp	*Streptocephalus woottoni*	FE		In range	In range
Arroyo chub	*Gila orcuttii*	SSC	Potential VCC	In region	In region
Santa Ana sucker	*Catostomus santaanae*	FT, SSC	Potential VCC	In region	In region
Unarmored threespine sickleback	*Gasterosteus aculeatus williamsoni*	FE, CE, CFP	Potential VCC	In region	In region
Monarch	*Danaus plexippus*	FC		Nearby	On site
Crotch's bumble bee	*Bombus crotchii*	CCE	Present ES, VCC	Very close	On site
Coast Range newt	*Taricha torosa*	SSC		In region	In region
Western spadefoot	*Spea hammondii*	FC, SSC	Assumed present ES, VCC	In region	In region
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Potential present VCC	In region	In region
California red-legged frog	*Rana draytonii*	FT, SSC		In region	In region
Southwestern pond turtle	*Actinemys pallida*	FC, SSC	Potential VCC	Very close	Nearby
Coast horned lizard	*Phrynosoma blainvillii*	SSC		In region	In region
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC		Very close	Nearby
Northern California legless lizard	*Anniella pulchra*	SSC	Present ES, assumed present VCC	In region	On site
San Diegan legless lizard	*Anniella stebbinsi*	SSC		Nearby	Very close
California glossy snake	*Arizona elegans occidentalis*	SSC	Assumed present ES, VCC	In region	In region
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region	In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC	Present ES	In region	On site
South coast gartersnake	*Thamnophis sirtalis pop. 1*	SSC		In region	In region

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Brant	*Branta bernicla*	SSC2		In region	In region
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL		Very close	Very close
Redhead	*Aythya americana*	SSC2		Nearby	Nearby
Western grebe	*Aechmophorus occidentalis*	BCC		Nearby	Nearby
Clark's grebe	*Aechmophorus clarkii*	BCC		Nearby	In region
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	Potential VCC	Nearby	Nearby
Black swift	*Cypseloides niger*	SSC3, BCC		Very close	Very close
Vaux's swift	*Chaetura vauxi*	SSC2		On site	On site
Calliope hummingbird	*Selasphorus calliope*	BCC		In region	In region
Rufous hummingbird	*Selasphorus rufus*	BCC		Very close	Very close
Allen's hummingbird	*Selasphorus sasin*	BCC		On site/**On site**	On site/**On site**
Light-footed Ridgway's rail	*Rallus obsoletus levipes*	FE, CE, CFP		In range	In range
Mountain plover	*Charadrius montanus*	SSC2, BCC		In region	In region
Snowy plover	*Charadrius nivosus*	BCC		In region	In region
Western snowy plover	*Charadrius n. nivosus*	FT, SSC		In region	In region
Long-billed curlew	*Numenius americanus*	WL, LACSBS		Very close	Very close
Marbled godwit	*Limosa fedoa*	BCC		Nearby	In region
Red knot (Pacific)	*Calidris canutus*	BCC		In region	In region
Pectoral sandpiper	*Calidris melanotos*	BCC		In region	In region
Short-billed dowitcher	*Limnodromus griseus*	BCC		In region	In region
Lesser yellowlegs	*Tringa flavipes*	BCC		In region	In region
Willet	*Tringa semipalmata*	BCC		Very close	Very close
Laughing gull	*Leucophaeus atricilla*	WL		In region	In region
Franklin's gull	*Leucophaeus pipixcan*	BCC		In region	In region
Heermann's gull	*Larus heermanni*	BCC		In region	In region
Western gull	*Larus occidentalis*	BCC		On site	Very close
California gull	*Larus californicus*	BCC, WL		On site	Very close
California least tern	*Sternula antillarum browni*	FE, CE, CFP		In region	In region

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Black tern	*Chlidonias niger*	BCC, SSC2		In region	In region
Elegant tern	*Thalasseus elegans*	BCC, WL, LACSBS		In region	In region
Black skimmer	*Rynchops niger*	BCC, SSC3		In region	In region
Common loon	*Gavia immer*	SSC		Nearby	In region
Double-crested cormorant	*Phalacrocorax auritus*	WL		On site	Very close
American white pelican	*Pelacanus erythrorhynchos*	BCC, SSC1		Very close	Very close
Least bittern	*Ixobrychus exilis*	SSC2		Nearby	In region
Reddish egret	*Egretta rufescens*	BCC		In region	In region
White-faced ibis	*Plegadis chihi*	WL, LACSBS		Very close	Very close
California condor	*Gymnogyps californianus*	FE, CE, CFP	Potential opportunistic forager ES, VCC	Nearby	Nearby
Turkey vulture	*Cathartes aura*	BOP, LACSBS		On site/**On site**	On site/**On site**
Osprey	*Pandion haliaetus*	WL, BOP		Very close	Very close
White-tailed kite	*Elanus luecurus*	CFP, BOP		On site	On site
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL		Very close	Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP, LACBW		Very close	Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		On site	Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP		On site	On site/**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP		Very close	Very close
Red-shouldered hawk	*Buteo lineatus*	BOP		On site/**On site**	On site
Swainson's hawk	*Buteo swainsoni*	CT, BOP		On site	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP		On site	On site/**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP, LACSBS		Very close	Very close
Zone-tailed hawk	*Buteo albonotatus*	BOP		In region	In region
Harris' hawk	*Parabuteo unicinctus*	WL, BOP		In region	In region

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Rough-legged hawk	*Buteo lagopus*	BOP		Very close	Nearby
American barn owl	*Tyto furcata*	BOP		On site	Very close/**On site**
Western screech-owl	*Megascops kennicotti*	BCC, BOP		Very close	Very close
Great horned owl	*Bubo virginianus*	BOP		On site/**On site**	On site
Burrowing owl	*Athene cunicularia*	BCC, CCE, SSC2, BOP	Potential ES, VCC	Very close	Very close
Long-eared owl	*Asio otus*	BCC, SSC3, BOP, LACSBS		In region	In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP, LACSBS		In region	In region
Northern saw-whet owl	*Aegolius acadicus*	BOP		In region	In region
Northern pygmy-owl	*Glaucidium gnoma*	BOP, LACBW		In region	In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		Very close	Very close
Nuttall's woodpecker	*Picoides nuttallii*	BCC		On site/**On site**	On site
White-headed woodpecker	*Dryobates albolarvatus*	BCC		Nearby	In region
American kestrel	*Falco sparverius*	BOP		On site	Very close
Merlin	*Falco columbarius*	WL, BOP		On site	On site
Peregrine falcon	*Falco peregrinus*	BOP		On site	On site
Prairie falcon	*Falco mexicanus*	WL, BOP, LACSBS		Very close	Very close
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		On site	Very close
Willow flycatcher	*Empidonax trailii*	CE		On site	Very close
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE	Assumed present VCC	In region	In region
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Very close	Very close
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	Present VCC	On site	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2, LACSBS		Very close	Very close

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW		On site/**On site**	On site
California horned lark	*Eremophila alpestris actia*	WL, LACSBS		On site	On site
Bank swallow	*Riparia riparia*	CT		Very close	Very close
Purple martin	*Progne subis*	SSC2		Very close	Very close
Wrentit	*Chamaea fasciata*	BCC		On site	On site/**Just off site**
California gnatcatcher	*Polioptila c. californica*	FT, SSC2	Assumed present ES, VCC	In region	In region
California thrasher	*Toxostoma redivivum*	BCC		In region	In region/ **Just off site**
Cassin's finch	*Haemorhous cassinii*	BCC		Very close	Very close
Lawrence's goldfinch	*Spinus lawrencei*	BCC		On site	On site
Grasshopper sparrow	*Ammodramus savannarum*	SSC2		Very close	Very close
Black-chinned sparrow	*Spizella atrogularis*	BCC, LACBW		Very close	On site
Gray-headed junco	*Junco hyemalis caniceps*	WL		Nearby	In region
Bell's sparrow	*Amphispiza b. belli*	WL, LACBW		Nearby	Nearby
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, LACSBS		In range	In range
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW		On site	On site/**On site**
Yellow-breasted chat	*Icteria virens*	SSC3		On site	On site
Yellow-headed blackbird	*X. xanthocephalus*	SSC3		On site	Very close
Bullock's oriole	*Icterus bullockii*	BCC		On site	On site
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Assumed present ES, VCC	Very close	Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3		In region	In region
Virginia's warbler	*Leiothlypis virginiae*	BCC, WL		In region	In region
Prothonotary warbler	*Protonotaria citrea*	BCC		In region	In region
Prairie warbler	*Setophaga discolor*	BCC		In region	In region
Yellow warbler	*Setophaga petechia*	SSC2		On site	On site
Summer tanager	*Piranga rubra*	SSC1		Very close	Very close

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Little brown bat	*Myotis lucifugus*	WBWG:M		In region	In region
Yuma myotis	*Myotis yumanensis*	WBWG:LM	Present ES	In region	In region
Long-eared myotis	*Myotis evotis*	WBWG:M		In region	In region
Fringed myotis	*Myotis thysanodes*	WBWG:H		In range	In range
Long-legged myotis	*Myotis volans*	WBWG:H		In range	In range
California myotis	*Myotis californicus*	WBWG:L		In region	In region
Small-footed myotis	*Myotis ciliolabrum*	WBWG:M		In region	In region
Canyon bat	*Parastrellus hesperus*	WBWG:M		Nearby	Nearby
Big brown bat	*Episticus fuscus*	WBWG:L		In region	Nearby
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M		In region	In region
Hoary bat	*Lasiurus cinereus*	WBWG:M		In region	In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H	Present ES	In region	In region
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H		In range	In range
Spotted bat	*Euderma maculatum*	SSC, WBWG:H		In range	In range
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H		In range	In range
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H		In region	In region
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L		In region	In region/**On site**
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG:M	Present ES	In region	In region
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG:MH		In region	In region
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	Present ES	In region	In region/**On site**
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC		In range	In range
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC		In region	In region
San Diego Bryant's woodrat	*Neotoma bryanti (formerly lepida intermedia)*	SSC		In region	In region
Ringtail	*Bassariscus astutus*	CFP		In region	In region
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC		In range	In range

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
American badger	*Taxidea taxus*	SSC		Nearby	Very close
Mountain lion	*Puma concolor*	CCT	Present ES, assumed present VCC	Very close	Very close

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC_i = California Species of Special Concern with *i* = priorities 1, 2 and 3; WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), and LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

BIOLOGICAL IMPACTS ASSESSMENT

The impacts analysis in CEQA review involves prediction. Predictions are necessary because measuring a project's impacts directly could not happen until after the impacts occur, and the timing of this type of measurement would come too late for the formulations of avoidance and minimization mitigation strategies that are prioritized by the CEQA. Impact predictions are necessary as part of the environmental review. The accuracy of the predictions of impacts and their significance ultimately relies on the degree of accuracy in the characterization of the existing environmental setting (Figure 6).

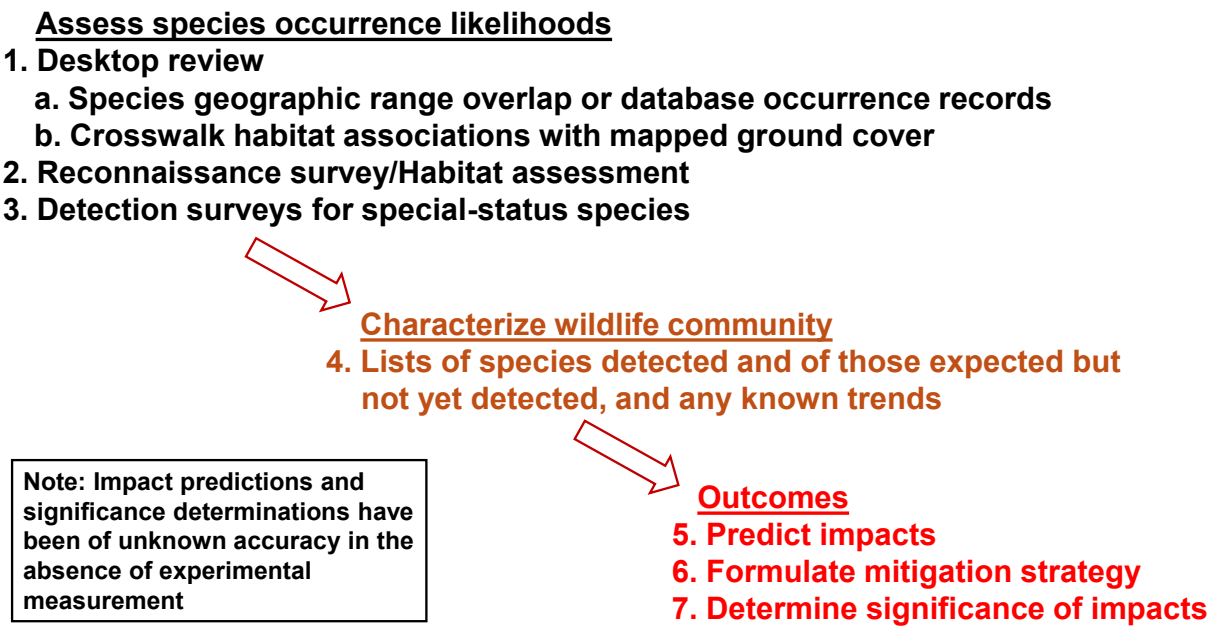


Figure 6. *General flow of information from the gathering stage through the characterization of the existing environment to predictions of impacts and their significance.*

Impact predictions can derive from speculation or from experience (Figure 7). Speculation is repeatedly discouraged in the CEQA Guidelines, because speculation is an inconclusive guess or ponderance on a phenomenon without the benefit of data. Prediction accuracy improves with experience, though the experience that can be brought to bear on impact predictions ranges from anecdotes to careful use of scientific inference. Inference is a conclusion derived logically from data that are available about a phenomenon. Any type of experience is usually better than relying on speculation, but careful scientific inference, especially inference drawn from experiments, has proven most effective. An analogy would be predicting the boiling temperature of water at a certain place with a known atmospheric pressure after having measured it hundreds of times at other places under various atmospheric pressures. The experience of measuring the boiling temperature at all these other places would certainly result in a more accurate prediction of the boiling point as compared to a speculative prediction. We know that use of inference in this example is *certainly* more predictive, and not

potentially more predictive, because we have a long successful history with the application of this type of experimentation to draw predictive inference.

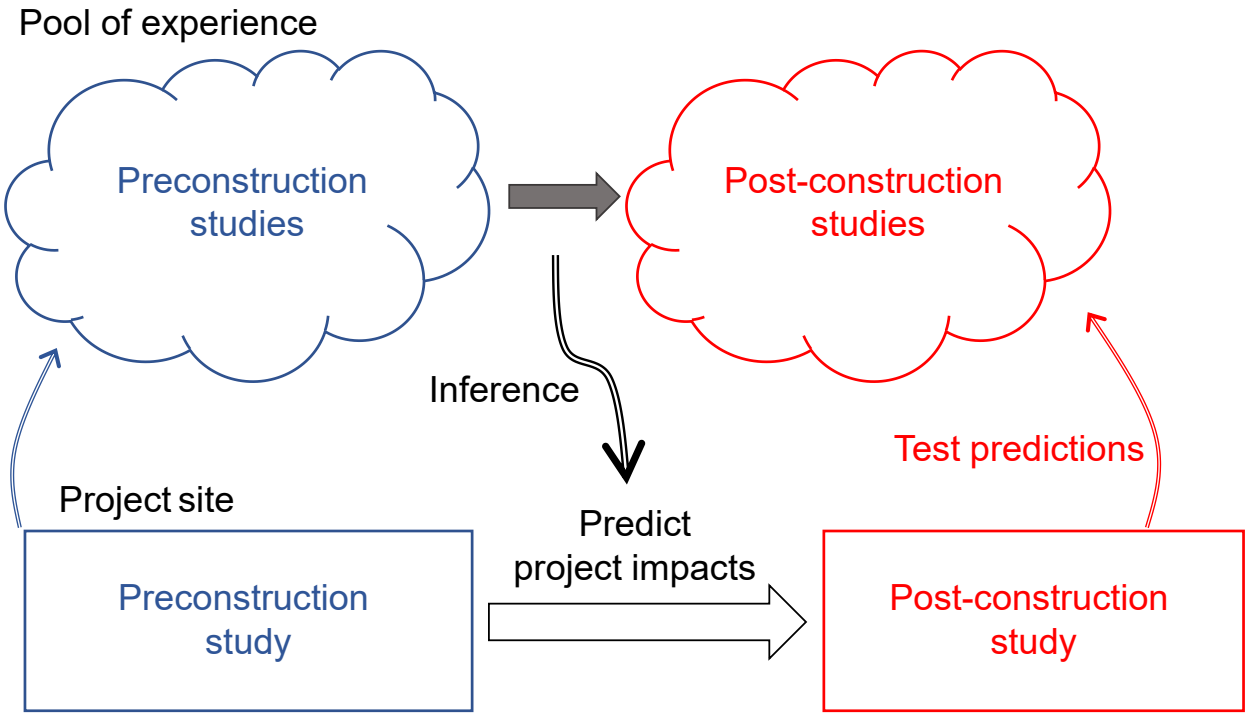


Figure 7. *A framework for arriving at predicted project impacts based on experience with other project sites. Ideally, there is a pool of similar projects in similar circumstances where predicted impacts were compared to realized impacts, and into which the proposed project can also contribute to experience.*

The many projects that have undergone CEQA review provide a comparative basis for drawing inferences needed to predict the impacts of the next proposed project (Figure 7). Reconnaissance survey results that are not compared to survey results from other project sites miss the opportunity to interpret the results for the purpose of predicting impacts. The same is true of CDNNB occurrence records. For example, it would be helpful to know how often a species lacking CNDDB occurrence records on a site is nevertheless detected onsite by reconnaissance survey(s). It would be helpful to know how often the impact predictions of other projects are proven accurate, and how often the required mitigation measures are proven effective. The comparative method enables the use of scientific inference over speculation and the blind confidence of simply repeating impact conclusions of unknown accuracy and mitigation strategies of unknown efficacy.

In the following, I analyze several types of impacts likely to result from the project, none of which are analyzed adequately or at all in the SEIR.

REDUCED PRODUCTIVE CAPACITY FROM HABITAT LOSS

The SEIR divides impacts between permanent and temporary, which might give the impression that, compared to 2017 DEIR, project impacts on habitat loss would be smaller because some would only be temporary. According to the SEIR (p. 5.2-130), temporary impact areas would be "restored with similar vegetation following construction." However, only vague success criteria and monitoring is proposed, and determinations of restoration success would be made subjectively by a single individual outside the public's view. This restoration lacks objective criteria, and it is therefore unenforceable as a means to qualify impacts as truly temporary. I therefore regard all habitat impacts as permanent.

Habitat loss results in a reduced productive capacity of affected wildlife species. The site is proven to serve as habitat to at least 140 species of vertebrate wildlife which were detected on site by the consultants and Noriko Smallwood. Most of these species confirmed on site were bird species, but the number of avian nest sites remains unknown. Because none of the surveys were suitable for detecting and counting all bird nests on the site, estimating total nest density of birds was not possible. The alternative method would be to infer productive capacity from estimates of total nest density elsewhere. A few estimates of total nest density have been published, and Noriko and I have been studying total avian nest density at various locations in California. Table 3 summarizes vegetation cover types mapped on the project site, and associates each with representative total nest density estimates needed to estimate the avian breeding capacity of the project site. Parallel analyses can be performed for other types of wildlife, but I address only birds here, as an example.

Table 3. *Mapped areas of vegetation cover and representative estimates of nest density used to estimate the annual average number of nest sites on the project site (Source: SEIR Tables 5.2-10 and 5.2-11).*

Vegetation cover	Entrada South	VCC	Total	Nests/ac	Estimated number of nest sites
Annual grassland	35.5	48.8	84.3	4.17 [a]	351.5
Coastal scrub, chapparal	148.6	46.2	194.8	1.82 [b]	354.5
Oak woodland	1.7	1.8	3.5	13.56 [c]	47.5
Riparian, wetland	19.1	28.1	47.2	25.20 [d]	1,189.4
Ornamental, developed	122.7	100.6	223.3	29.95 [e]	6,687.8
Total	327.6	225.5	553.1		8,630.7

[a] Noriko estimated 5.56 nests/acre on a 3.6-acre site of ruderal grassland bordering a woodland strip in Murrieta, and 1.86 nests/acre on another 4.83-acre grassland site bordering a strip of woodland in Murietta. I estimated 5.08 nests/acre on 2.95 acres of perennial grassland east of Davis California in 2024. The average of these three estimates is 4.17 nests/acre.

[b] Noriko estimated 1.63 nests/acre on 1.23 acres of coastal sage scrub in Murietta, and 2 nests/acre on 2 acres of chapparal in the Cleveland National Forest, both estimates in 2023, averaging 1.82 nests/acre.

[c] I estimated 14.38 nests/acre on 9.42 acres of an abandoned walnut orchard in Rancho Cordova in 2023, and Noriko estimated 12.73 nests/acre in 0.55 acres of oak woodland in Murietta in 2024, averaging 13.56 nests/acre.
[d] I estimated 28.79 nests/acres on 1.32 acres of riparian forest in Rancho Cordova in 2023; Noriko estimated 12.7 nests/acre on 0.63 acres in Temecula in 2023, and 15.9 nests/acre on 0.44 acres in Murietta in 2024; Young (1948), Yahner (1982)
[e] I estimated 21.25 nests/acre on 2 acres of ornamental tree and shrub vegetation in Rancho Cordova in 2023; Young (1948), Yahner (1982).

I estimate there are on average 8,630.7 nest sites on the project site, including 7,441.3 outside the riparian zone (Table 3). Assuming 1.39 broods per nest site based on a review of 322 North American bird species, which averaged 1.39 broods per year, then I estimate 11,997 nest attempts per year on the project site, including 10,343 outside the riparian zone. Assuming Young's (1948) study site typifies bird productivity of 2.9 fledged birds per nest attempt, then I predict 34,791 fledglings/year at the project site, including 29,948 outside the riparian zone. Assuming two-thirds of the nest sites would be lost from the riparian zone due to the project, as nesting birds in this zone would lose their forage in the upland areas, then the project would result in the losses of 7,838 nest sites, 10,894 nest attempts, and 31,562 fledglings.

The annual losses of 7,838 nest sites, 10,894 nest attempts would qualify as significant impacts that have not been analyzed by the SEIR. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The project would prevent the production of 31,562 fledglings per year. Assuming an average bird generation time of 4 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 35,481 birds per year denied to California.

The loss of 35,481 birds per year would be a loss of significant habitat value that is currently provided by the project site. Most if not all these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which are intended to most strongly protect breeding migratory birds. The loss of 35,481 birds would easily qualify as an unmitigated significant impact.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Unfortunately, the SEIR resorts to wild speculation in favor of the notion that the project site no longer functions as a wildlife movement corridor. According to the SEIR (p. 5.2-51), because of the Mission Village Project, "the Magic Mountain Canyon likely no longer serves as a corridor for high- and moderate-mobility species that were presumed to use this location." It goes on to argue that the corridor is further limited by surrounding development and I-5. It summarizes, "Overall, there are no habitat linkages or wildlife corridors within or in the vicinity of the Entrada South Planning Area under current conditions." At p. 5.2-52, the SEIR characterizes reptiles, small mammals and birds as

less mobile than mule deer, as if this distinction bears on the functionality of a corridor (it does not). And it claims that a camera trap study provides evidence that the corridor has become limited due to development; the evidence was lack of mountain lion in the photos. However, all this speculation is flawed.

One of the few widely-recognized corridors in natural settings is the riparian corridor (Andy 2020). The existence of riparian corridors serves as a stabilizing force on wildlife movement and persistence on larger landscapes (Andy 2020), regardless of the alleged mobility of the species that move along riparian corridors. The SEIR's mobility distinction is contrived, as it has no scientific foundation in the corridor concept (Smallwood 2015). All species of vertebrate wildlife rely on movement for foraging, finding mates or breeding sites, home range patrol, dispersal, and migration, and to meet these needs, any perceived differences in mortality between deer and salamanders are irrelevant to the functionality of a riparian corridor.

Another flaw in the speculation goes to the camera trap study, which is not attached to the SEIR. The SEIR fails to explain how lack of mountain lion detections has anything to do with the functionality of the riparian corridor. I predict that most of the species that occur on the project site were similarly not captured in photos taken by camera traps. Camera traps are not known for detecting more than a fraction of the wildlife species that compose the wildlife community; and if it was otherwise, then the use of camera traps would be pervasive. In my use of camera traps over 18 months at a research site, my co-investigators and I obtained photos of a number species of birds and mammals, but in no way did we expect that we photographed all the species that occur on the site. Specifically, we did not get any mountain lion photos, despite knowing that mountain lions were at least occasionally present. The EIR's reliance on the outcome of a camera trap study to claim that the project site lacks functionality as a movement corridor is unfounded and not credible.

Moreover, whether the site includes a wildlife movement corridor is not the only consideration when it comes to the standard CEQA Checklist question of whether the project would interfere with wildlife movement in the region. The primary phrase of the CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. Wildlife are obviously using the site, which means wildlife are able to travel to and from the site. Most of the birds recorded at the site are migratory birds, and the site is one of the last remaining patches of open space available to birds that need to move through Santa Clarita. The project site is important to wildlife movement in the region.

What is needed but has not been provided is a program of observation to characterize how wildlife use the site for movement in the region. Biologists should have already observed how wildlife utilize the project site to achieve their needs to move in the region. For example, patterns of bird flights could have been quantified from visual-scan surveys, and patterns of mammalian travel could have been revealed by use of a thermal-imaging camera at night, or a search for tracks during daytime. Biologists know how to detect patterns of wildlife movement; they were just not assigned the task in the case of this environmental review. A consequence is that Dudek and the SEIR lack an

empirical basis for predicting project impacts to wildlife movement in the region, nor for measuring impacts. Hence, the SEIR relies on speculation.

BIRD-WINDOW COLLISION MORTALITY

The project would introduce glass windows into an essential portion of avian habitat – that portion of the gaseous atmosphere that is referred to as the aerosphere (Davy et al. 2017, Diehl et al. 2017). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate. Birds are some of the many types of animals that evolved wings as a morphological adaptation to thrive by moving through the medium of the aerosphere. The aerosphere is habitat, to which an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008).

Many special-status species of birds have been recorded at or near the aerosphere of the project site. My database review and Noriko's site visit indicate there are 101 special-status species of birds with potential to use the site's aerosphere (Table 2). All the birds represented in Table 2 can quickly fly from wherever they have been documented to the project site, so they would all be within brief flights to the proposed project's windows. The consultants and Noriko have confirmed 74 vertebrate wildlife species on the project site, some of them flying across the site.

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but they are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and by not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found in searches, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also,

the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only two of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species

for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The SEIR does not report the extent of exterior glass in the project, but it does report 2,951,913 sf of floor space among 1,574 dwelling units, and 4,130,000 sf of floor space among industrial, business, office and commercial buildings. Based on my database of the rates of exterior glass to sf of floor space, the mean of five projects was 0.015192956 m^2/sf, which applied to the total sf of residential floor space predicts 44,848 m^2 of exterior glass windows. The SEIR does not report the allocation of 4,130,000 sf of non-residential floor space to industrial, business, office, and commercial uses, so I assumed an even split of sf and relied on my database to predict window extents. The predictions are 2,083 m^2 of windows among industrial buildings, 48,128 m^2 of windows among business and office buildings, and 16,740 m^2 of windows among commercial buildings. My prediction of total exterior glass windows in the project is 111,799 m^2. This extent of windows multiplied by the above-reported average of bird collision deaths per m^2 of glass per year applied predicts 8,173 (95% CI: 4,852–11,493) bird collision fatalities per year.

The vast majority of predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds and other sensitive species. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the project's airspace into a lethal collision trap to birds.

WILDLIFE DEPREDATION BY HOUSE CATS

Considering national trends, it is safe to assume that house cats would be introduced to the project area by residents of the proposed residential units. This is significant because house cats serve as one of the largest sources of avian mortality in North America (Dauphiné and Cooper 2009, Blancher 2013, Loss et al. 2013, Loyd et al. 2017). Loss et al. (2013) estimated 139 million cats in the USA in 2013 (range 114 to 164 million), which killed an estimated 16.95 billion vertebrate wildlife annually (range 7.6 to 26.3 billion). In 2012 there were 0.44 house cats per human in the USA, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. The SEIR reports there would be 1,574 residential units in the project, and it predicts there would be 4,958 new residents. The above rates of cat ownership applied to this number of new residents would predict 2,182 new cats, which based on the findings of Loss et al. (2013) would kill 266,204 vertebrate wildlife per year.

House cats also contribute to downstream loading of *Toxoplasma gondii*. According to a UC Davis wildlife health research program, "*Toxoplasma gondii is a parasite that can infect virtually all warm-blooded animals, but the only known definitive hosts are cats – domesticated and feral house cats included. Cats catch the parasite through hunting rodents and birds and they offload it into the environment through their feces… and …rain that falls on cement creates more runoff than rain that falls on natural earth, which contributes to increased runoff that can carry fecal pathogens to the sea*" (The original link is no longer active, but the quote came from the program described at: https://whc.vetmed.ucdavis.edu/programs-projects/ca-conservation/sea-otter).

Impacts to wildlife from the introduction of house cats into the environment would be highly significant, and yet these impacts are not considered in the SEIR. An obvious mitigation measure would be to constrain house cat ownership such as requiring cats to remain indoors.

TRAFFIC IMPACTS ON WILDLIFE

The SEIR neglects to address one of the project's most obvious, substantial impacts to wildlife, and that is wildlife mortality and injuries caused by project-generated traffic. Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic (Photos 46–49), including along roads far from the

project footprint but which would nevertheless by traversed by automobiles head to or from the project's building. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

Photo 46. *A white-tailed antelope squirrel runs across the road just in the Coachella Valley, 26 May 2022. Such road crossings are usually successful, but too often prove fatal to the animal.*

Photo 47. *A coyote uses the crosswalk to cross a road on 2 February 2023. Not all drivers stop, nor do all animals use the crosswalk. Too often, animals are injured or killed when they attempt to cross roads.*

Photos 48 and 49. *Raccoon killed on Road 31 just east of Highway 505 in Solano County (left; photo taken on 10 November 2018), and mourning dove killed by vehicle on a Bakersfield road (right; photo by Noriko Smallwood, 21 June 2020.)*

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 9,462 animals killed by traffic on the road. This fatality number projected over 1.25 years and 2.5 miles of road translates to 3,028 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 188,191 animals killed per 100 km of road per year, or 22 times that of Loss et al.'s (2014) upper bound estimate and 53 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,028 animals killed per mile along a county road in Contra Costa County. The estimated numbers of fatalities were 1.75% birds, 26.4% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 67.4% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs,

western toads, arboreal salamanders, slender salamanders and others), and 4.4% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts on wildlife

The SEIR predicts 272,854 mitigated daily VMT, which translates to 99,592,805 annual VMT would be generated by the project. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road in Contra Costa County daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 9,462 wildlife fatalities, or 2,351 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 42,362 vertebrate wildlife fatalities per year due to project-generated traffic. This would be an excessive take of wildlife caused by project-generated traffic.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The SEIR does not address this potential impact, let alone propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, and that, as the SEIR is currently written, these impacts would be unmitigated.

CUMULATIVE IMPACTS

The SEIR's cumulative impacts analysis is flawed. The SEIR fails to list past, ongoing and future projects in the area that would provide context for the analysis. Its analysis is entirely speculative, and its standards are contrived. The analysis falls far short for a project that would take 553.1 of a complex mosaic of wildlife habitat of high ecological integrity and inclusive of a major riparian corridor, and in which 140 species of vertebrate wildlife have been documented, including 39 special-status species, 25 of which have been designated special status or a greater level of special status since the 2017 EIR. The analysis falls far short in the face of predictable impacts such as the loss of 35,481 birds per year due to habitat destruction, 8,173 (95% CI: 4,852–11,493) bird collision fatalities per year caused by the installations of glass windows, 42,362 vertebrate animal fatalities per year caused by project-generated traffic, and 266,204 wildlife fatalities per year caused by free-ranging house cat predation. These predictable impacts and others warrant a serious cumulative impacts analysis.

The SEIR states (p. 5.2-136) that "compared to the 2017 project, the modified project would result in incremental reductions in the development footprint … including reduction of permanent impacts…" However, the areas of temporary impacts are small,

and as I commented earlier, the temporary nature of the impacts is not credible because the SEIR requires only vague success criteria for the habitat restoration needed to qualify impacts as temporary. Also, the determinations of restoration success would be made subjectively by a single individual outside the public's view, and they would lack the objective criteria needed to make it enforceable as means to qualify impacts as truly temporary. There is no reduction of the development footprint since 2017.

The SEIR argues that because there are no incremental increases in impacts from the 2017 EIR, the proposed modified project would not contribute significantly to cumulative impacts. However, as I commented earlier, there are now 25 species with new special status since 2017 and which occur on the project site. With all these changes in status, there are certainly incremental increases in impacts since 2017. The SEIR recognizes that there have been changes to species' status, resulting in special status that had not been analyzed in the 2017 EIR, but its argument for dismissing potential impacts as less than significant is flawed. The SEIR claims that because species such as California glossy snake shares habitat with other species that were analyze in the 2017 EIR, its contribution to cumulative impacts is no different from the species that were already analyzed in 2017. However, no two species share the same habitat, as habitat is defined by use of that portion of the environment that is needed for survival and reproduction by members of a species (Hall et al. 1997), and every habitat is unique to a species. The notion that two or more species share the same habitat is contrary to the habitat concept. This same flaw in the SEIR's argument also applies to Crotch's bumble bee and to any other special-status species that was not analyzed in the 2017 EIR but which the SEIR claims shares habitat with other species.

The SEIR then claims that mitigation for direct impacts to a species would prevent cumulative impacts. If this was the case, then the CEQA would not need to require cumulative impacts analysis, because most CEQA documents require mitigation for project-specific impacts. However, I have seen this argument many times while species of wildlife have continued to decline (e.g., Rosenberg et al. 2019, Miller 2024). In response to this common argument, my co-investigator and I performed an experiment to measure the effects of the purported efficacy of existing project-specific mitigation strategies. We revisited the project sites we had surveyed as experts to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration in order to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. All the developed sites had included mitigation measures to avoid, minimize or compensate for impacts on wildlife. Nevertheless, we found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. We reported that "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds (-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the

cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite the mitigation measures directed to project-specific impacts on wildlife. The reasoning of the SEIR is not supported by data.

MITIGATION STRATEGY

As I commented earlier, the mitigation strategy needs to be based on a sound understanding of the existing wildlife community. It needs to be known which species occur or are likely to occur on the project site as well as the nature of their occurrences. Are the occurrences of resident species? Migratory? For particular species such as special-status species, detection surveys should have been performed to either detect the species or to obtain evidence of absence. Surveys should have been performed to understand how wildlife use the site in their movement patterns. And what was found of wildlife species needs to be carefully interpreted by comparing the finding to the findings from other survey efforts at other sites. The mitigation strategy needs to follow the steps under Assess species occurrence likelihoods and Characterize wildlife community, followed by Step 7: Predict impacts (Figure 6). The SEIR's mitigation strategy does not follow from these steps. This pointed out, my comments follow in regular font the summary of each required mitigation measure in italics.

Any mitigation measures formulated in past documents such as the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) need re-evaluation before they are applied to this project, because this project includes 25 species with new assignments of special status since the 2017 EIR. Circumstances have changed.

SP-4.6-1 and **SP-4.6-2** *Restoration would be located in areas that have been disturbed … and adjacent to existing native habitat that support sensitive species…*

Problems with this measure include the lack of any objective criteria for what conditions qualify as "disturbed," what qualifies as "native habitat," and which species are sensitive species. As noted above, there are new assignments of special status to 25 additional species since 2017. This measure needs to be specific in its definitions and criteria, or else it would not be enforceable.

SP-4.6-3 – SP-4.6-15 *Restoration plans would be formulated, including monitoring and success criteria …*

There is no requirement for responding to restoration failures. There is no requirement of a performance bond, and no assurances that meaningful restoration would be completed.

SP-4.6-16 – SP-4.6-63 *These measures require habitat banking, restoration of oaks, and incidental take permit acquisition for wetlands…*

None of these measures go directly to take of wildlife, and there is no nexus provided between the conservation benefits of these measures and potential project impacts on the 25 species assigned new or additional special status since 2017.

RMDP/SCP-BIO-1 *Restates that **SP-4.6-1 – SP-4.6-16** would be required.*

This measure is redundant. See my comments above.

RMDP/SCP-BIO-2 – RMDP/SCP-BIO-49

None of these measures go directly to take of wildlife, and there is no nexus provided between the conservation benefits of these measures and potential project impacts on the 25 species assigned new or additional special status since 2017.

RMDP/SCP-BIO-52 *Conduct a Worker Environmental Awareness Program (WEAP) prior to initiation of construction activities.*

A WEAP should be implemented should the project go forward. However, it needs to be remembered that construction workers operate heavy machinery and otherwise work around heavy machinery and moving vehicles. Workers need to be aware primarily of their job performance and safety. It is misleading to imply that a measure entitled Worker Environmental Awareness Training is going to result in increased worker vigilance for any mouse or lizard in harm's way. This is not what should be expected or desired of construction workers. The conservation benefit of the WEAP would be *de minimis*.

RMDP/SCP-BIO-53 *Conduct preconstruction survey for western spadefoot, and mitigate for take at 2:1 ratio if the species is detected.*

Preconstruction surveys generally do not carry the same detection probabilities as do detection surveys. Moreover, the requirement of a preconstruction survey instead of a detection survey fails to disclose potential project impacts to the public and decision-makers. This measure is inappropriate.

RMDP/SCP-BIO-53 *Conduct preconstruction survey for coast horned lizard, silver legless lizard … coast patch-nosed snake.*

My comments on RMDP/SCP-BIO-52 apply to this measure, as well. Furthermore, it is unlikely that such a survey would find more than a tiny fraction of the populations of each of the 6 targeted species. Moreover, relocating the members of these species that are found would not change the carrying capacities of conspecifics in the receiving areas to where they are translocated. The net loss would be the same with or without translocations. The conservation benefits of this measure would be between *de minimis* and negative.

RMDP/SCP-BIO-54 and RMDP/SCP-BIO-55 *Conserve least Bell's vireo and coastal California gnatcatchers at higher ratios …*

I concur with these measures, but I note that there is no requirement for alternative prescriptions should these measures fail to achieve a no-net-loss of these birds. Nor is there any requirement of a performance bond.

RMDP/SCP-BIO-56 *Preconstruction surveys for nesting birds, with additional measures taken if active nests are found.*

There should be no doubt implied over the question of whether nesting birds would be found on the project site. I predict 8,631 nest sites on the project site; this is many more nests than biologists assigned to preconstruction surveys are ever going to be able to find. Should the project go forward, I concur with the need to perform preconstruction surveys, but it needs to be understood that most nest sites would not be found or salvaged.

Surveys to detect all nest sites consist of two steps, both of which are very difficult. First, the biologist(s) performing the survey must identify birds that are breeding. Second, the biologist(s) must locate the breeding birds' nests. The first step is typically completed by observing bird behaviors such as food deliveries and nest territory defense. To be successful these types of observations typically require many surveys on many dates spread throughout the breeding season even for a single species. To identify and locate the birds of all species nesting on a site requires a much greater survey effort four surveys in four weeks.

The SEIR fails to cite evidence of the efficacy of this measure where it has been applied elsewhere. The County needs to convince the public and decision-makers that the measure has already proven effective at other projects. It certainly has not prevented the permanent losses of nest sites, which are more important than nests because birds show much stronger fidelity to nest sites than to nest structures, and nest sites rather than just active nests compose the productive capacity of the project site.

Considering the importance of nest sites over nest structures, it needs to be understood that the conservation benefits of this measure would be *de minimis* compared to the project's potential impacts on breeding birds. This measure would not prevent the permanent loss of the avian productive capacity that I predict in my letter herein. Even assuming all the predicted 8,631 nest sites could be found (not likely), the mitigation measure would apply only to the breeding season of the survey. After the breeding season of the preconstruction survey, California would be denied the production of birds from the project site during all subsequent years. The project's impact on birds would be permanent and of large magnitude.

Finally, the mitigation language allows a single individual to make a subjective decision, outside the public's view, to determine the buffer area for any nest of a given species. This measure lacks objective criteria, and it is therefore unenforceable.

RMDP/SCP-BIO-57 *Preconstruction surveys for burrowing owls.*

Unlike in 2017 when the previous EIR was certified, the burrowing owl is now a candidate for listing under the California Endangered Species Act. Therefore, the applicant needs to consult with the CDFW as a first step and before the SEIR is certified. Furthermore, the CDFW (2012) survey guidelines need to be implemented in full, meaning that breeding-season detection surveys must be completed. A preconstruction survey cannot stand in for breeding season detection surveys, because preconstruction surveys carry nowhere near the same detection probabilities as do breeding-season detection surveys. For these reasons, this measure is flawed and deficient.

RMDP/SCP-BIO-58 *Preconstruction surveys for San Diego black-tailed jackrabbit and San Diego desert woodrat…*

Again, preconstruction surveys are not surrogates for detection surveys. Moreover, the requirement of a preconstruction survey instead of a detection survey fails to disclose potential project impacts to the public and decision-makers. This measure is inappropriate.

RMDP/SCP-BIO-60 *Preconstruction surveys for mountain lion natal den*

Scent-detection dogs would be needed for this survey. But again, preconstruction surveys are not surrogates for detection surveys. Moreover, the requirement of a preconstruction survey instead of a detection survey fails to disclose potential project impacts to the public and decision-makers. This measure is inappropriate.

RMDP/SCP-BIO-61 *Preconstruction surveys for bat maternity roosts and if necessary, provision of alternative roosts…*

It needs to be understood that the conservation benefits of this measure would be *de minimis* compared to the project's potential impacts on bats. It has been established that numerous bat species occur on the project site, including western mastiff bat. The project would destroy hundreds of acres of bat habitat, which cannot be replaced by provision of alternative maternity roosts. There would be the need for compensatory mitigation. I suggest a 5:1 mitigation ratio.

RMDP/SCP-BIO-63 *Homeowners' Association shall supply educational materials to future residents regarding pets, wildlife and open spaces, and stray dogs and cats might be rounded up and deposited with the local Society for the Prevention of Cruelty to Animals.*

Future residents ought to be educated about the impacts of free-ranging cats on wildlife, but many cat owners wrongly believe their cats would never take wildlife. Education alone has not worked and it will not work. The measure is noncommittal with regards to trapping cats, and as such it is unenforceable.

RMDP/SCP-BIO-68 *Day-roost sites of bats found during preconstruction surveys shall be mitigated with the provision of alternative roost sites.*

See my comments under RMDP/SCP-BIO-61. The conservation benefits of this measure would be *de minimis* compared to the project's potential impacts on bats.

RMDP/SCP-BIO-70 – RMDP/SCP-BIO-72 *Protection of vegetation from construction impacts…*

These measures should be implemented, but again their conservation benefits would be *de minimis* compared to the project's potential impacts on wildlife.

NEEDED MITIGATION MEASURES

Bird-Window Collision Mortality: If the project goes forward, it should at a minimum adhere to available Bird-Safe Guidelines, such as those prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced.

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Van Doren et al. (2021) found that nocturnal migrants contributed most of the collision fatalities in their study, and the largest predictors of fatalities were peak migration and

lit windows. Van Doren et al. (2021) predicted that a light-out mitigation measure could reduce bird-window collision mortality by 60%.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by collisions with windows of homes and with automobiles traveling to and from the project site, and by attempted predation by free-ranging house cats.

Landscaping: If the project goes forward, California native plant landscaping (i.e., grassland and locally appropriate scrub plants) should be considered to be used as opposed to landscaping with lawn and exotic shrubs and trees. Native plants offer more structure, cover, food resources, and nesting substrate for wildlife than landscaping with lawn and ornamental trees. Native plant landscaping has been shown to increase the abundance of arthropods which act as important sources of food for wildlife and are crucial for pollination and plant reproduction (Narango et al. 2017, Adams et al. 2020, Smallwood and Wood 2022.). Further, many endangered and threatened insects require native host plants for reproduction and migration, e.g., monarch butterfly. Around the world, landscaping with native plants over exotic plants increases the abundance and diversity of birds, and it is particularly valuable to native birds (Lerman and Warren 2011, Burghardt et al. 2008, Berthon et al. 2021, Smallwood and Wood 2022). Landscaping with native plants is a way to maintain or to bring back some of the natural habitat and lessen the footprint of urbanization by acting as interconnected patches of habitat for wildlife (Goddard et al. 2009, Tallamy 2020). Lastly, not only does native plant landscaping benefit wildlife, it requires less water and maintenance than traditional landscaping with lawn and hedges.

Thank you for your consideration,

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Shawn Smallwood, Ph.D.

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Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 762 professional reports, including:
- 90 peer reviewed publications
- 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science, *U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. Journal of Wildlife Management: e22216. https://doi.org/10.1002/jwmg.22216

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. Diversity 13, 540. https://doi.org/10.3390/d13110540.

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Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel Micnemidocoptes mite in a Golden Eagle (*Aquila chrysaetos*). Journal of Avian Medicine and Surgery 29(3):231-237.

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EXHIBIT B

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DEPARTMENT OF JUSTICE

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

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In carrying out its duty to enforce laws across California, the California Attorney General's Bureau of Environmental Justice (Bureau)[1] regularly reviews proposed warehouse projects for compliance with the California Environmental Quality Act (CEQA) and other laws. When necessary, the Bureau submits comment letters to lead agencies regarding warehouse projects, and in rare cases the Bureau has filed litigation to enforce CEQA.[2] This document builds upon the Bureau's work on warehouse projects, collecting information gained from the Bureau's review of hundreds of warehouse projects across the state.[3] It is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development as they confront warehouse project proposals.[4] While CEQA analysis is necessarily project-specific, this document provides information on feasible best practices and mitigation measures, nearly all of which have been adapted from actual warehouse projects in California.

I. Background

In recent years, the proliferation of e-commerce and rising consumer expectations of rapid shipping have contributed to a boom in warehouse development.[5] California, with its ports, population centers, and transportation network, has found itself at the center of this trend. In 2020, the Ports of Los Angeles, Long Beach, and Oakland collectively accounted for over 34% of all United States international container trade.[6] The Ports of Los Angeles and Long Beach alone generate about 35,000 container truck trips every day.[7] Accordingly, the South Coast Air Basin now contains approximately 3,000 warehouses of over 100,000 square feet each, with a total warehouse capacity of approximately 700 million square feet, an increase of 20 percent over the last five years.[8] This trend has only accelerated, with e-commerce growing to

[1] https://oag.ca.gov/environment/justice.
[2] https://oag.ca.gov/environment/ceqa; *People of the State of California v. City of Fontana* (Super. Ct. San Bernardino County, No. CIVSB2121829); *South Central Neighbors United et al. v. City of Fresno et al.* (Super. Ct. Fresno County, No. 18CECG00690).
[3] This September 2022 version revises and replaces the prior March 2021 version of this document.
[4] Anyone reviewing this document to determine CEQA compliance responsibilities should consult their own attorney for legal advice.
[5] As used in this document, "warehouse" or "logistics facility" is defined as a facility consisting of one or more buildings that stores cargo, goods, or products on a short- or long-term basis for later distribution to businesses and/or retail customers.
[6] Data from the Bureau of Transportation Statistics, Container TEUs (Twenty-foot Equivalent Units) (2020), https://data.bts.gov/stories/s/Container-TEU/x3fb-aeda/ (Ports of Los Angeles, Long Beach, and Oakland combined for 14.157 million TEUs, 34% of 41.24 million TEUs total nationwide) (last accessed September 18, 2022).
[7] U.S. Dept. of Transportation, Federal Highway Administration, *FHWA Operations Support – Port Peak Pricing Program Evaluation* (2020), available at https://ops.fhwa.dot.gov/publications/fhwahop09014/sect2.htm (last accessed September 18, 2022).
[8] South Coast Air Qual. Mgmt. Dist., *Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305*, at 7-8, 41 (May 2021).

13% of all retail sales and 2021 being a second consecutive record year for new warehouse space leased.[9] The latest data and forecasts predict that the next wave of warehouse development will be in the Central Valley.[10]

When done properly, these activities can contribute to the economy and consumer welfare. However, imprudent warehouse development can harm local communities and the environment. Among other pollutants, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[11] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[12] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate contribute to traffic jams, deterioration of road surfaces, and traffic accidents.

These environmental impacts also tend to be concentrated in neighborhoods already suffering from disproportionate health impacts and systemic vulnerability. For example, a comprehensive study by the South Coast Air Quality Management District found that communities located near large warehouses scored far higher on California's environmental justice screening tool, which measures overall pollution and demographic vulnerability.[13] That

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[9] U.S. Census Bureau News, Quarterly Retail E-Commerce Sales 4th Quarter 2021 (February 22, 2022), https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf (last accessed September 18, 2022); CBRE Research, *2022 North America Industrial Big Box Report: Review and Outlook*, at 2-3 (March 2022), *available at* https://www.cbre.com/insights/reports/2022-north-america-industrial-big-box#download-report (last accessed September 18, 2022).

[10] CBRE Research, *supra note* 9, at 4, 36; New York Times, *Warehouses Are Headed to the Central Valley, Too* (Jul. 22, 2020), *available* at https://www.nytimes.com/2020/07/22/us/coronavirus-ca-warehouse-workers.html.

[11] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (last accessed September 18, 2022) (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts (last accessed September 18, 2022); Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (last accessed September 18, 2022) (DPM).

[12] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (last accessed September 18, 2022) (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

[13] South Coast Air Quality Management District, "Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305" (May 2021), at 4-5.

study concluded that, compared to the South Coast Air Basin averages, communities in the South Coast Air Basin near large warehouses had a substantially higher proportion of people of color; were exposed to more diesel particulate matter; had higher rates of asthma, cardiovascular disease, and low birth weights; and had higher poverty and unemployment rates.[14] Each area has its own unique history, but many of these impacts and vulnerabilities reflect historic redlining practices in these communities, which devalued land and concentrated poverty, racial outgroups, and pollution into designated areas.[15]

II. Proactive Planning: General Plans, Local Ordinances, and Good Neighbor Policies

To systematically guide warehouse development, we encourage local governing bodies to proactively plan for logistics projects in their jurisdictions. Proactive planning allows jurisdictions to prevent land use conflicts before they materialize and direct sustainable development. Benefits also include providing a predictable business environment, protecting residents from environmental harm, and setting consistent expectations jurisdiction-wide.

Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors[16] can help attract investment while avoiding conflicts between warehouse facilities and residential communities. Transition zones with lighter industrial and commercial land uses may also help minimize conflicts between residential and industrial uses.

In addition, general plan policies, local ordinances, and good neighbor policies should set minimum standards for logistics projects. General plan policies can be incorporated into existing economic development, land use, circulation, or other related general plan elements. Many jurisdictions alternatively choose to consolidate policies in a separate environmental justice element. Adopting general plan policies to guide warehouse development may also help

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[14] *Id*. at 5-7.

[15] Beginning in the 1930s, federal housing policy directed investment away from Black, immigrant, and working-class communities by color-coding neighborhoods according to the purported "riskiness" of loaning to their residents. In California cities where such "redlining" maps were drawn, nearly all of the communities where warehouses are now concentrated were formerly coded "red," signifying the least desirable areas where investment was to be avoided. *See* University of Richmond Digital Scholarship Lab, Mapping Inequality, https://dsl.richmond.edu/panorama/redlining/#loc=12/33.748/-118.272&city=los-angeles-ca (Los Angeles), https://dsl.richmond.edu/panorama/redlining/#loc=13/32.685/-117.132&city=san-diego-ca (San Diego), https://dsl.richmond.edu/panorama/redlining/#loc=11/37.81/-122.38&city=oakland-ca (Oakland), https://dsl.richmond.edu/panorama/redlining/#loc=13/37.956/-121.326&city=stockton-ca (Stockton), https://dsl.richmond.edu/panorama/redlining/#loc=12/36.751/-119.86&city=fresno-ca (Fresno) (all last accessed September 18, 2022).

[16] In this document, "sensitive receptors" refers to residences, schools, public recreation facilities, health care facilities, places of worship, daycare facilities, community centers, or incarceration facilities.

jurisdictions comply with their obligations under SB 1000, which requires local government general plans to identify objectives and policies to reduce health risks in disadvantaged communities, promote civil engagement in the public decision making process, and prioritize improvements and programs that address the needs of disadvantaged communities.[17]

Local ordinances and good neighbor policies that set development standards for all warehouses in the jurisdiction are a critical and increasingly common tool that serve several goals. When well-designed, these ordinances direct investment to local improvements, provide predictability for developers, conserve government resources by streamlining project review processes, and reduce the environmental impacts of industrial development. While many jurisdictions have adopted warehouse-specific development standards, an ordinance in the City of Fontana provides an example to review and build upon.[18] Good neighbor policies in Riverside County and by the Western Riverside Council of Government include additional measures worth consideration.[19]

The Bureau encourages jurisdictions to adopt their own local ordinances that combine the strongest policies from those models with measures discussed in the remainder of this document.

III. Community Engagement

Early and consistent community engagement is central to establishing good relationships between communities, lead agencies, and warehouse developers and tenants. Robust community engagement can give lead agencies access to community residents' on-the-ground knowledge and information about their concerns, build community support for projects, and develop creative solutions to ensure new logistics facilities are mutually beneficial. Examples of best practices for community engagement include:

- Holding a series of community meetings at times and locations convenient to members of the affected community and incorporating suggestions into the project design.
- Posting information in hard copy in public gathering spaces and on a website about the project. The information should include a complete, accurate project description, maps and drawings of the project design, and information about how the public can provide input and be involved in the project approval process. The

[17] For more information about SB 1000, *see* https://oag.ca.gov/environment/sb1000.
[18] https://oag.ca.gov/system/files/attachments/press-docs/Final%20Signed%20Fontana%20Ordinance.pdf (last accessed September 18, 2022).
[19] For example, the Riverside County policy requires community benefits agreements and supplemental funding contributions toward additional pollution offsets, and the Western Riverside Council of Governments policy sets a minimum buffer zone of 300 meters between warehouses and sensitive receptors. https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf (last accessed September 18, 2022) (Riverside County); http://www.wrcog.cog.ca.us/DocumentCenter/View/318/Good-Neighbor-Guidelines-for-Siting-Warehouse-Distribution-Facilities-PDF?bidId= (last accessed September 18, 2022) (Western Riverside Council of Governments).

information should be in a format that is easy to navigate and understand for members of the affected community.

- Providing notice by mail to residents and schools within a certain radius of the project and along transportation corridors to be used by vehicles visiting the project, and by posting a prominent sign on the project site. The notice should include a brief project description and directions for accessing complete information about the project and for providing input on the project.
- Providing translation or interpretation in residents' native language, where appropriate.
- For public meetings broadcast online or otherwise held remotely, providing for access and public comment by telephone and supplying instructions for access and public comment with ample lead time prior to the meeting.
- Partnering with local community-based organizations to solicit feedback, leverage local networks, co-host meetings, and build support.
- Considering adoption of a community benefits agreement, negotiated with input from affected residents and businesses, by which the developer provides benefits to the affected community.
- Creating a community advisory board made up of local residents to review and provide feedback on project proposals in early planning stages.
- Identifying a person to act as a community liaison concerning on-site construction activity and operations, and providing contact information for the community liaison to the surrounding community.
- Requiring signage in public view at warehouse facilities with contact information for a local designated representative for the facility operator who can receive community complaints, and requiring any complaints to be answered by the facility operator within 48 hours of receipt.

IV. Warehouse Siting and Design Considerations

The most important consideration when planning a logistics facility is its location. Warehouses located in residential neighborhoods or near sensitive receptors expose community residents and those using or visiting sensitive receptor sites to the air pollution, noise, traffic, and other environmental impacts they generate. Therefore, placing facilities away from sensitive receptors significantly reduces their environmental and quality of life harms on local communities. The suggested best practices for siting and design of warehouse facilities does not relieve lead agencies' responsibility under CEQA to conduct a project-specific analysis of the project's impacts and evaluation of feasible mitigation measures and alternatives; lead agencies' incorporation of the best practices must be part of the impact, mitigation and alternatives analyses to meet the requirements of CEQA. Examples of best practices when siting and designing warehouse facilities include:

- Per California Air Resources Board (CARB) guidance, siting warehouse facilities so that their property lines are at least 1,000 feet from the property lines of the nearest sensitive receptors.[20]
- Providing adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- Establishing setbacks from the property line of the nearest sensitive receptor to warehouse dock doors, loading areas, and truck drive aisles, and locating warehouse dock doors, loading areas, and truck drive aisles on the opposite side of the building from the nearest sensitive receptors—e.g., placing dock doors on the north side of the facility if sensitive receptors are near the south side of the facility.
- Placing facility entry and exit points from the public street away from sensitive receptors—e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- Ensuring heavy duty trucks abide by the on-site circulation plans by constructing physical barriers to block those trucks from using areas of the project site restricted to light duty vehicles or emergency vehicles only.
- Preventing truck queuing spillover onto surrounding streets by positioning entry gates after a minimum of 140 feet of space for queuing, and increasing the distance by 70 feet for every 20 loading docks beyond 50 docks.
- Locating facility entry and exit points on streets of higher commercial classification that are designed to accommodate heavy duty truck usage.
- Screening the warehouse site perimeter and onsite areas with significant truck traffic (e.g., dock doors and drive aisles) by creating physical, structural, and/or vegetative buffers that prevent or substantially reduce pollutant and noise dispersion from the facility to sensitive receptors.
- Planting exclusively 36-inch box evergreen trees to ensure faster maturity and four-season foliage.
- Requiring all property owners and successors in interest to maintain onsite trees and vegetation for the duration of ownership, including replacing any dead or unhealthy trees and vegetation.
- Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- Including signs and drive aisle pavement markings that clearly identify onsite circulation patterns to minimize unnecessary onsite vehicle travel.
- Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

[20] CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted in some scenarios. CARB, Concept Paper for the Freight Handbook (December 2019), *available at* https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf (last accessed September 18, 2022).

V. Air Quality and Greenhouse Gas Emissions Analysis and Mitigation

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of logistics facilities and adoption of all feasible mitigation of significant impacts. Although efforts by CARB and other authorities to regulate the heavy-duty truck and off-road diesel fleets have made excellent progress in reducing the air quality impacts of logistics facilities, the opportunity remains for local jurisdictions to further mitigate these impacts at the project level. Lead agencies and developers should also consider designing projects with their long-term viability in mind. Constructing the necessary infrastructure to prepare for the zero-emission future of goods movement not only reduces a facility's emissions and local impact now, but it can also save money as demand for zero-emission infrastructure grows. In planning new logistics facilities, the Bureau strongly encourages developers to consider the local, statewide, and global impacts of their projects' emissions.

Examples of best practices when studying air quality and greenhouse gas impacts include:

- Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts. In general, new warehouse developments are not ministerial under CEQA because they involve public officials' personal judgment as to the wisdom or manner of carrying out the project, even when warehouses are permitted by a site's applicable zoning and/or general plan land use designation.[21]
- When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.
- Preparing a quantitative air quality study in accordance with local air district guidelines.
- Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.
- Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA.
- Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.

[21] CEQA Guidelines § 15369.

- Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

Examples of measures to mitigate air quality and greenhouse gas impacts from construction are below. To ensure mitigation measures are enforceable and effective, they should be imposed as permit conditions on the project where applicable.

- Requiring off-road construction equipment to be hybrid electric-diesel or zero-emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

Examples of measures to mitigate air quality and greenhouse gas impacts from operation include:

- Requiring all heavy-duty vehicles engaged in drayage[22] to or from the project site to be zero-emission beginning in 2030.

[22] "Drayage" refers generally to transport of cargo to or from a seaport or intermodal railyard.

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of

trucks.

- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

VI. Noise Impacts Analysis and Mitigation

The noise associated with logistics facilities can be among their most intrusive impacts to nearby sensitive receptors. Various sources, such as unloading activity, diesel truck movement, and rooftop air conditioning units, can contribute substantial noise pollution. These impacts are exacerbated by logistics facilities' typical 24-hour, seven-days-per-week operation. Construction noise is often even greater than operational noise, so if a project site is near sensitive receptors, developers and lead agencies should adopt measures to reduce the noise generated by both construction and operation activities.

Examples of best practices when studying noise impacts include:

- Preparing a noise impact analysis that considers all reasonably foreseeable project noise impacts, including to nearby sensitive receptors. All reasonably foreseeable project noise impacts encompasses noise from both construction and operations, including stationary, on-site, and off-site noise sources.
- Adopting a lower significance threshold for incremental noise increases when baseline noise already exceeds total noise significance thresholds, to account for the cumulative impact of additional noise and the fact that, as noise moves up the decibel scale, each decibel increase is a progressively greater increase in sound

pressure than the last. For example, 70 dBA is ten times more sound pressure than 60 dBA.

- Disclosing and considering the significance of short-term noise levels associated with all aspects of project operation (i.e. both on-site noise generation and off-site truck noise). Considering only average noise levels may mask noise impacts sensitive receptors would consider significant—for example, the repeated but short-lived passing of individual trucks or loading activities at night.

Examples of measures to mitigate noise impacts include:

- Constructing physical, structural, or vegetative noise barriers on and/or off the project site.
- Planning and enforcing truck routes that avoid passing sensitive receptors.
- Locating or parking all stationary construction equipment as far from sensitive receptors as possible, and directing emitted noise away from sensitive receptors.
- Verifying that construction equipment has properly operating and maintained mufflers.
- Requiring all combustion-powered construction equipment to be surrounded by a noise protection barrier
- Limiting operation hours to daytime hours on weekdays.
- Paving roads where truck traffic is anticipated with low noise asphalt.
- Orienting any public address systems onsite away from sensitive receptors and setting system volume at a level not readily audible past the property line.

VII. Traffic Impacts Analysis and Mitigation

Warehouse facilities inevitably bring truck and passenger car traffic. Truck traffic can present substantial safety issues. Collisions with heavy-duty trucks are especially dangerous for passenger cars, motorcycles, bicycles, and pedestrians. These concerns can be even greater if truck traffic passes through residential areas, school zones, or other places where pedestrians are common and extra caution is warranted.

Examples of measures to mitigate traffic impacts include:

- Designing, clearly marking, and enforcing truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- Installing signs in residential areas noting that truck and employee parking is prohibited.
- Requiring preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should include measures for preventing truck queuing, circling, stopping, and parking on public streets, such as signage, pavement markings, and queuing analysis and enforcement. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license

is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.
- Constructing new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- Consulting with the local public transit agency and securing increased public transit service to the project area.
- Designating areas for employee pickup and drop-off.
- Implementing traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals.
- Placing facility entry and exit points on major streets that do not have adjacent sensitive receptors.
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors.
- Constructing roadway improvements to improve traffic flow.
- Preparing a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

VIII. Other Significant Environmental Impacts Analysis and Mitigation

Warehouse projects may result in significant environmental impacts to other resources, such as to aesthetics, cultural resources, energy, geology, or hazardous materials. All significant adverse environmental impacts must be evaluated, disclosed and mitigated to the extent feasible under CEQA. Examples of best practices and mitigation measures to reduce environmental impacts that do not fall under any of the above categories include:

- Appointing a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the lead agency, to be updated annually.
- Creating a fund to mitigate impacts on affected residents, schools, places of worship, and other community institutions by retrofitting their property. For example, retaining a contractor to retrofit/install HVAC and/or air filtration systems, doors, dual-paned windows, and sound- and vibration-deadening insulation and curtains.
- Sweeping surrounding streets on a daily basis during construction to remove any construction-related debris and dirt.
- Directing all lighting at the facility into the interior of the site.
- Using full cut-off light shields and/or anti-glare lighting.
- Requiring submission of a property maintenance program for agency review and approval providing for the regular maintenance of all building structures, landscaping, and paved surfaces.
- Using cool pavement to reduce heat island effects.

- Planting trees in parking areas to provide at least 35% shade cover of parking areas within fifteen years to reduce heat island impacts.
- Using light colored roofing materials with a solar reflective index of 78 or greater.
- Including on-site amenities, such as a truck operator lounge with restrooms, vending machines, and air conditioning, to reduce the need for truck operators to idle or travel offsite.
- Designing skylights to provide natural light to interior worker areas.
- Installing climate control and air filtration in the warehouse facility to promote worker well-being.

IX. Conclusion

California's world-class economy, ports, and transportation network position it at the center of the e-commerce and logistics industry boom. At the same time, California is a global leader in environmental protection and environmentally just development. The guidance in this document furthers these dual strengths, ensuring that all can access the benefits of economic development. The Bureau will continue to monitor proposed projects for compliance with CEQA and other laws. Lead agencies, developers, community advocates, and other interested parties should feel free to reach out to us as they consider how to guide warehouse development in their area.

Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

COUNTY of VENTURA
Board of Supervisors

SUPERVISOR
KELLY LONG
Third District

MEMBERS OF THE BOARD
JANICE S. PARVIN, CHAIR
MATT LAVERE
JEFF GORELL
KELLY LONG
VIANEY LOPEZ

November 7, 2025

Supervisor Kathryn Barger
Los Angeles County Board of Supervisors
383 Kenneth Hahn Hall of Administration
Los Angeles, California 90012

Re: Entrada South (PROJECT NO. 00-210) and Valencia Commerce Center ("VCC") (PROJECT NO. 87-150):

Dear Supervisor Barger,

As the Supervisor representing the 3rd District in Ventura County, I wanted to acknowledge the outreach my office has received from FivePoint regarding their proposed Entrada South and Valencia Commerce Center projects currently under consideration in Los Angeles County. Sandy Sanchez from FivePoint provided a comprehensive briefing, and I appreciate the effort they have made to keep regional leaders informed and engaged.

FivePoint's proactive communication reflects a thoughtful approach to regional collaboration and transparency. Their willingness to engage neighboring jurisdictions demonstrates good stewardship and recognition of the interconnected nature of our communities and economies across county lines.

I value the opportunity to have been briefed on their plans and commend their commitment to open dialogue with stakeholders beyond their immediate project area. Thank you for your consideration as you review this matter.

Sincerely,

Kelly Long

Kelly Long, Supervisor 3rd District
County of Ventura

Cc: Supervisor Hilda Solis, 1st District
Supervisor Holly Mitchell, 2nd District
Supervisor Lindsey Horvath, 3rd District
Supervisor Janice Hahn, 4th District

1203 Flynn Road, Suite 220 • Camarillo, CA 93012 • Tel. (805) 654-2276 • Fax (805) 654-2226
BOSDistrict3@ventura.org

Re:SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Board of Supervisors,

Valencia by FivePoint is part of the solution to L.A. County's ongoing housing crisis. I support the plans for Entrada South because it will provide over 1,000 new homes, including designated affordable options, in a thoughtful and well-designed community.

At a time when housing prices are pushing working families out of the region, this project brings real, attainable options to a high-opportunity area. Many of the existing homes in Valencia by FivePoint have sold below the L.A. County median, and this next phase will continue to provide a variety of much needed new housing.

In addition, voting to support the new entitlements for Valencia by FivePoint, Entrada South and Valencia Commerce Center, is a vote to support sustainable development. Valencia by FivePoint is a net-zero GHG community – one of the largest in the nation – and will bring thousands of homes to the region to address the housing crisis. It will also expand a successful commercial center that helps sustain our regional economy. This is exactly the kind of master-planned community that deserves our support.

I respectfully urge your support of Entrada South and the Valencia Commerce Center as a meaningful step forward in addressing our region's housing needs.

Kind regards,

Michael Grisanti

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY
AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386
www.scope.org

Friends of the Santa Clara River
PO Box 7713 Ventura, California 90006 (805) 320-2265
fscr.org

11-13-25

Honorable Board of Supervisors
Los Angeles County Board of Supervisors
Attn: Jodie Sackett, Planner
5000 W. Temple St.
Los Angeles, CA 90012

Sent via email to: executiveoffice@bos.lacounty.gov, jsackett@planning.lacounty.gov

Re: Agenda #90, Entrada South and Valencia Commerce Center
Please copy to all Supervisors

SCOPE, Friends of the Santa Clara River and their respective members have commented extensively on Fivepoint's westside projects, including the Newhall Ranch Specific Plan, the Resource Management Plan and the previous draft Entrada South EIR released in 2015. These current comments are timely filed via email on Sept. 29th, 2025.

Development Agreement comments
We concur with the County planning department regarding the proponent's request for early grading. In the Santa Clarita Valley, some developers have started early grading and removed oaks only to fail to find a buyer or be delayed by other issues. Then if changes are requested the damage to the oaks and the natural habitat has already occurred and can not be restored. An example of this is the grading by Newhall Land several decades ago on the Mesa near the Earl Schmidt Water Treatment Plant in Castaic. The project was never built but the top of the mountain was graded flat. We also object to allowing off sight affordable housing. The project must include affordable housing in the current plan, not an added area which is in a flood plain and on which no CEQA review has been prepared.

EIR Process Issues
We continue to object to the EIR process for this project. According to the County's website regarding this project[1]:

[1] https://planning.lacounty.gov/long-range-planning/newhall-ranch-specific-plan/

> *The Newhall Ranch Specific Plan consists of comprehensive plans, development regulations, design guidelines, and implementation program consistent with the Los Angeles County General Plan and Santa Clarita Valley Area Plan. Newhall Ranch Specific Plan considers the changes in society and the economy that may occur over the 25-year buildout of the community. The Specific Plan also establishes the protection of open areas next to the community and two large special resource management areas totaling approximately 6,170 acres. The Newhall Ranch Specific Plan was adopted on May 27, 2003.*

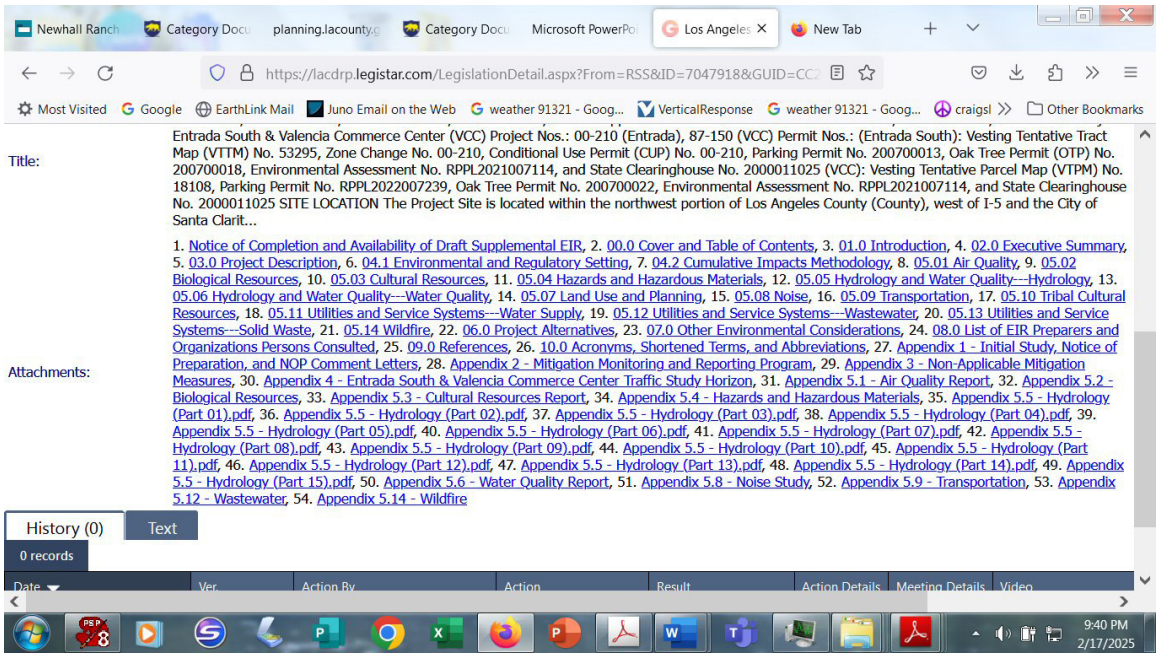
Neither the Valencia Commerce Center Plan nor Entrada South were or are a part of the Newhall Ranch Specific Plan, nor were zone changes or reviews processed through this Specific Plan. Further, the Specific Plan and its approval did not anticipate that it would be the final review document for ANY tract, instead spelling out that further tracts would require further review as they were brought for individual approvals.

The EIR refers to the OVOV Area Santa Clarita Area Plan update throughout the document, but Entrada was not considered in that document. While the Newhall Ranch specific Plan was listed among the specific plans, as previously stated, this Entrada project was not part of the Newhall Ranch Specific Plan and is not included in the OVOV plan.

The Entrada South area was included as part of the River Management Plan for Newhall Ranch, a joint State and Federal document focused on river management. Due to the size of the area affected, all impacts were required to be reviewed in order to comply with Clean Water Act requirements. While we agree that this vast overview analysis serves well to address cumulative impacts for the massive amount of development proposed, it does not serve at all as an adequate disclosure of project level impacts or as a means of determining County mitigation requirements.

Tiering on the Resource Management Plan

As we stated in out NOP and DEIR comments, we believe that reliance on the 15-year-old Resource Management Plan for information on climate change/GHG emissions, aesthetics, traffic and any other omitted area is inappropriate. The Resource Management Plan was an overview document produced for a federal and state river alteration approval, and should not be substituted for the detailed project level study that provides public disclosure and ensures the development of mitigation measures that will be enforced by the County. According to CEQA, **mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development**." (*Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261 ((quoting Pub. Res. Code § 21081.6(b)).) We note that while the title page of the document claims to include a development agreement, that document was not included in the DEIR materials on the County website (see screen shot below)



The FEIR/EIS for the River Management Plan on which these project-tiering requests are made, was completed in 2010, 15 years ago, and those documents relied on data that was even older than that. An additional focused state/federal document was prepared and circulated and approved in 2017 to address the direction of CA Supreme Court which set the EIR/EIS aside for its failure to follow CA law and to address and mitigate for the GH Gas emissions and climate heating. Since that time many changes have occurred that were not previously predicted. These included year after year of record-breaking temperature[2] increases, reduced rainfall for groundwater recharge-water supply and massive wildfires caused by drought and dried vegetation. While we appreciate the additional detailed information provided in this EIR, we still assert that the County must be able to enforce all mitigation measures in all CEQA review areas, and provide additional mitigation to address these new facts. Accurate up to date data must be provided which cannot be accomplished by tiering on an old document.

We note that the previously released draft EIR for Entrada South (2015)[3] did not attempt to tier on the Resource Management Plan even though it was an approved document at the time. Further, the developer did not attempt to and the County and the City did not allow tiering for its San Francisquito Creek projects on a similar overview plan, the Natural River Management Plan, as part of the review for those projects. It is now just as inappropriate to allow an outdated overview document to be used for the detailed project specific analysis and mitigation required for the current proposal.

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[2] **Climate Change: Global Temperature**
By Rebecca Lindsey AND LuAnn Dahlman Reviewed By Jessica Blunden Published January 18, 2024
Earth's temperature has risen by an average of 0.11° Fahrenheit (0.06° Celsius) per decade since 1850, or about 2° F in total. The rate of warming since 1982 is more than three times as fast: 0.36° F (0.20° C) per decade. 2023 was the warmest year since global records began in 1850 by a wide margin. It was 2.12 °F (1.18 °C) above the 20th-century average of 57.0°F (13.9°C).It was 2.43 °F (1.35 °C) above the pre-industrial average (1850-1900). The 10 warmest years in the historical record have all occurred in the past decade (2014-2023).

[3] The EIR fails to mention this document, but it is available in county files or we can provide it upon request.

Combining of two separate non-contiguous projects in one EIR

It is well established that the purpose of an EIR is to provide public agency decision-makers and members of the public with an informational document that explains potentially significant environmental impacts and feasible mitigation measures. (Pub. Res. Code §§ 21002.1, 21061; CEQA Guidelines §§ 15121, 15151; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 426-27; *Carmel Valley View, Ltd. v. Board of Supervisors* (1976) 58 Cal.App.3d 817, 821-822.) An EIR must include the full range of potentially significant impacts, as well as reasonably prudent avoidance, minimization, and mitigation measures in the EIR to comply with CEQA's information disclosure requirements. (Pub. Res. Code § 21000 et seq.) CEQA requires the planning agency to "mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." (Pub. Res. Code §§ 21002.1(b); 15126.4.) Mitigation of a project's significant impacts is one of the "most important" functions of CEQA. (*Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41.) Importantly, mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development." (*Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261 ((quoting Pub. Res. Code § 21081.6(b)).)

Combining two non-contiguous and unrelated projects, then not describing individual characteristics and impacts, but instead comparing them to a large State and Federal River Management Plan approved 15 years ago makes it nearly impossible to understand what the impacts of these individual projects will be.

Take for example, the impact to oak woodlands and oak trees in the Entrada South portion of the EIR. The 2015 project described the impact to oaks as follows:

> *The proposed Project would remove 29 valley oaks, 35 scrub oaks, one coast live oak, and two valley oak–scrub oak hybrids. Of the 67 oak trees to be removed, three are heritage oak trees. The Project would encroach on up to 11 other oak trees, including two heritage oak trees. The proposed Project would result in permanent direct impacts to 4.4 acres of valley oak/grass on-site. These direct impacts would be significant. (DEIR p.5.4-77). The DEIR states that this is a significant impact.*

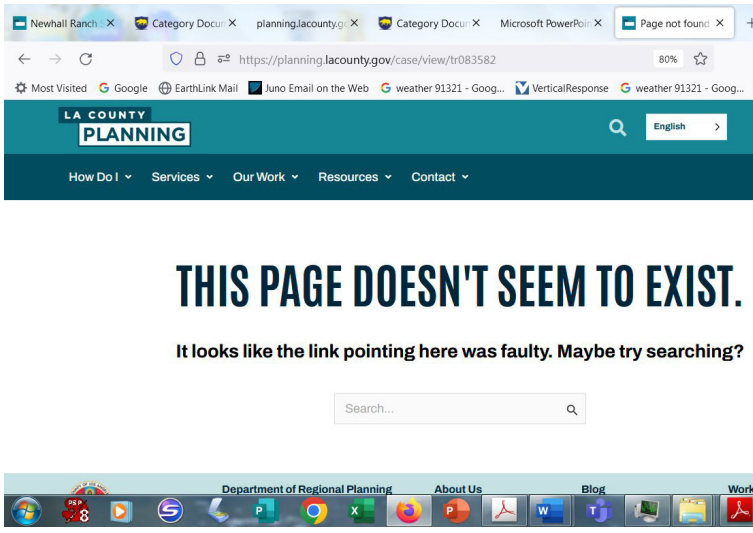
In contrast, we are unable to find in the current document any clear description of the number of oaks and the genus that will be removed for the current reduced housing project. This is because the project is merely compared to the River Management Plan which covered the whole Newhall Ranch Specific Plan and additional projects, some 15,000 acres and 30,000 units. The EIR states that the developer must follow the County Oak Ordinance, but disclosing the number of proposed removals is a requirement of this ordinance. There is not a way to determine if the developer is making an effort to avoid oaks as required by the ordinance and CEQA or even providing suitable habitat for mitigation trees or even if there will be mitigation trees. There is no plain disclosure of impacts but rather an obfuscation that makes it nearly impossible for the public to understand the impacts to the oaks on this project or suggest mitigation.

This same complaint holds true for the impact jurisdictional waters, where the EIR merely states that the impact acreage has increased in the VCC area, but no details are provided in the body of the document. Instead, a comparison is made to the impacts in the state document. The original impacts for the VCC area and how this new proposal will add to them are not laid out in detail so that the public is informed and can provide input, and mitigation or avoidance proposals.

This document is uninformative and confusing throughout, as described above and thus does not meet the CEQA informational requirements. As in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 659, "[t]he decision makers and general public should not be forced to sift through obscure minutiae or appendices in order to ferret out the fundamental baseline assumptions that are being used for purposes of the environmental analysis."

Improper Notice of Preparation

The NOP for this document issued In October 2021, referenced tract map #083592. However, an entirely different tract map (#053295) is discussed In the EIR document. The NOP noticed map has been removed from the County website, so it is impossible to compare the two maps to understand the differences (see below)



Utilities - Water Supply

While the Initial Study lists Utilities as an area which must be addressed in this document, we note that the DEIR states it did not prepare a new Water Supply Assessment, instead relying on the Urban Water Management Plan. These projects may not do relay simply on the UWMP for several reasons, primarily because they are requesting a plan amendment. In addition, the water supply agreement between Newhall Land/Five Points and Santa Clarita Water states that additional water for their developments would not be made available from Newhall's Nickel Water Acquisition (currently stored in Kern County) will not be supplied until the last tract map of Newhall Ranch has been approved and all litigation settled. (See attached agreement. section 6.8) This is a complicated legal agreement, but it essentially means that the water supply would be quite short for other projects in the event that water was not timely supplied as needed and as represented that it would be, per the Newhall Ranch Specific Plan. Further, Newhall, now FivePoint agreed that farming acreage would be retired in order to supply Newhall Ranch's first two tracts, Landmark and Mission Village. (see water section of the Specific Plan, 2003). While many homes In Mission Village have been built, occupied and are now receiving water, no farmland seems to have been retired per the

requirements of the Newhall Ranch Specific Plan[4]. Because of these anomalies and to ensure adequate water supply for existing and future residents, a Water Supply Assessment must be conducted in accordance with state law (SB610) as noted in our NOP comment. No such analysis was provided in the EIR. This is an EIR deficiency that must be addressed to ensure water availability for existing residents and firefighting needs. Also, there are not water availability letters in the EIR for these projects as required by the County Code.

We are especially adamant that this information be included after reading and commenting on the SCV Sustainable Ground Water Agency's Ground Water Sustainability Plan[5] which forecasts severe drops in water level due to future development

"But the *Groundwater Management Plan, Santa Clara River Valley Groundwater Basin, East Subbasin, Los Angeles County, California* (Basin Operating Plan) described in Section 6 contemplates groundwater levels lower than historical levels during dry years, to accommodate future buildout, conjunctive use operating strategies, and climate change (LSCE, 2003). (emphasis added) (p. 8-4)

……. groundwater pumping may temporarily cause groundwater level declines of up to 150 feet in the future. (page 9-15)

As one of the plaintiffs in the litigation over the original 1999 Newhall Ranch Specific Plan, we have not forgotten that a major reason that document was set aside by the Court in 2000 was that it predicted a 10-foot drop in ground water levels, meaning downstream users and environmental needs would be receiving substantially less water. No such water level drop was disclosed or contemplated in the Resource Management Plan. This is obviously changed information and must be addressed in a new EIR.

Also, since the previous Urban Water Management Plan on which this document purports to rely, the Santa Carita Valley Water Agency wells have been impacted with a new pollutant, PFAS, causing the water agency to remove from service around 45% of its wells[6] to ensure public health until such time that expensive well head treatment facilities can be funded and built. In a 2004 2nd appellate Decision, the Court found that polluted water cannot be relied upon as a supply.[7] It is therefore imperative that a Water Supply Assessment be provided for these two projects along with the requisite will-serve letters.

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[4] included by reference and in County files

[5] Santa Clarita Valley Ground Water Sustainability Plan, included by reference, may be accessed here: https://share.gsiws.com/index.php/s/CrynwfbbiHFCqqT

[6] https://yourscvwater.com/sites/default/files/SCVWA/your-water/pfas/SCV-Water-PFAS-Fact-Sheet-May-2024.pdf *"Under the current response levels set in 2020, 28 of the 45 active agency wells were removed from service. This accounted for approximately 45% of the Agency's groundwater supply and 31% of the total water used in our service area in 2022. Since 2020, four wells are back in service with treatment systems to remove PFAS. These wells restored approximately 11% of the supply and additional groundwater treatment facilities are scheduled to be back online at the rate of one per year for the next 5-7 years."*

[7] *Friends of the Santa Clara River v. Castaic Lake Water Agency*123 Cal.App.4th 1 (Cal. Ct. App. 2004) 9 Cal. Rptr. 3d 625

In a 2008 appellate ruling *CA Water Impact Network v. Newhall County Water District*, the Court found that Water Supply Assessments (and in this case, a lack thereof) cannot be litigated separately, but only as a part of a CEQA challenge.[8]

Obligation to Address the Public Trust

Since the Ground Water Sustainability Plan predicts a major drop in ground water levels due in part to future demands from huge projects such as this as well as climate change, we believe the County and the developer are obligated to consider and disclose how such projects will affect the public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to surface waters is also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (*Environmental Law Foundation v. State Water Resources Control Board* (2018), 26 Cal. App. 5th 844; *National Audubon Society v. Superior Court* (1983), 33 Cal. 3d419).

Evaluation of water supply impacts should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters. Public Trust Doctrine considerations should carefully evaluate and protect environmental beneficial uses and users of groundwater, including fish and wildlife and their habitats, groundwater dependent ecosystems, and interconnected surface waters.

Inclusion of GHG/Climate Change Analysis

Although requested in our NOP comments this document excludes a GHG analysis, instead relying on the Resource Management Plan. We believe that the impacts to climate change from auto-oriented projects such as Entrada South and the proposed commercial additions have substantially changed since the previous EIR, including increased emissions, occurrences of wildfire and reduced precipitation. While this document updates the traffic study and air quality sections which relate to GHG, it fails to update or even provide a GHG section. Air pollution including GHG such as NOX and other pollutants from new sources such as delivery truck traffic that have become a substantial source of emissions, should be analyzed and mitigated.

This DEIR failed to calculate the impact of the loss of oak trees on greenhouse gas emissions. It is a scientific fact that oaks absorb a significant amount of CO2 from the atmosphere and re-process it into oxygen. The DEIR should make these calculations and disclose the impacts in the DEIR. Mitigation for this loss should be replacement of the same capacity of trees needed for an equal amount of CO2 absorption.

Also, as part of the GHG section, the DEIR should include an analysis and inclusion of the mitigation report describing the outcomes for the existing GHG mitigation requirements for the approved Mission tract. This information is necessary so that the public and the decision makers may evaluate whether the proposed mitigation from this previously approved project is in actuality producing reduced climate emissions. Base line assumptions such as the assumption that only 27% of residents will commute out of the Valley for work, and the percentage of EV use, may need to be revaluated regarding air pollution and GHG emissions to comply with new attainment goals.

[8] 161 Cal.App.4th 1464 (Cal. Ct. App. 2008)75 Cal. Rptr. 3d 393

A new EIR must be prepared for review and comment whenever significant new information becomes known to the lead agency. Under such circumstances the lead agency is specifically required to re-notice the environmental review document to the public and all responsible agencies, and is required to obtain comments from the same, before certifying the document's impacts, its alternatives analyses, and any mitigation measures. (*See id.*; *see also*, Cal Pub. Res. Code § 21153.) A lead agency's decision not to include a required section of an EIR must be supported by substantial evidence. (CEQA Guidelines § 15088.5(e).)

"Significant new information" includes any information regarding changes in the environmental setting of the project under review. (CEQA Guidelines § 15088.5(a).) It also includes information or data that has been added to the EIR and is considered "significant" because it deviates from that which was presented in the document on which it is being tiered, depriving the public from a meaningful opportunity to comment upon a significant environmental effect of the project, or a feasible way to mitigate or avoid such an effect at the time of circulation of the draft. (*Id.*)

Some examples of when a lead agency may not rely on tiering an EIR:
(1) When the new information shows a new, substantial environmental impact resulting either from the project or from a mitigation measure;
(2) When the new information shows a substantial increase in the severity of an environmental impact
(3) When the new information shows a feasible alternative or mitigation measure that clearly would lessen the environmental impacts of a project and the project proponent declines to adopt the mitigation measure;

Utilities – Waste Service

This section provides inaccurate and out of date information regarding the availability of landfill space at Chiquita Canyon Landfill, which was closed by the operator on January 1st 2025. While this date is after the release of the DEIR, FivePoint was aware and therefore the DEIR Preparer must have been aware of the ongoing heating event, release of leachate into the air and water[9] and Regional Water Quality Control Board's denial of the landfill's expansion into Cell B which occurred well before the release of the DEIR.[10]

[9] https://calepa.ca.gov/chiquita-canyon-response/

[10] D**enial of request:** On Sept. 25, 2024, to protect groundwater under the landfill in Castaic, the Los Angeles Regional Water Quality Control Board reaffirmed its June decision denying Chiquita Canyon LLC's request to place waste in Cell 8B. The board determined that information submitted by the landfill operator was inadequate to address impacts from the ongoing development of individual cells within the landfill.
Notice of Violation: On June 27, 2024, the board issued a Notice of Violation to the landfill operator for alleged violations of the investigative order issued on March 20, 2024, including the

Solid waste has now become an emergency in the Santa Clarita Valley with Antelope Valley and Sunshine Canyon landfills stating they cannot take in more waste. This problem and mitigation to address it must be disclosed in the DEIR.

The heating/burning event at the landfill has now been going on for two years. Nearby residents in Val Verde and Castaic are suffering major health issues from this event which has caused the release of increased odors and irritating pollutants. They have suffered from asthma and an increased rate of cancer. This information should have been disclosed in the DEIR and a study conducted as to whether residents in the Entrada or workers in the VCC area will be exposed to noxious fumes from the landfill.

Oaks

The 2015 DEIR found the impact to oaks and the oak woodlands on the project to be a significant impact, though it is hard to know since as previously stated, it is not clear how many oaks are being removed. The proponent proposed to bring this significant impact to a less than significant level by providing a new, enhanced, and/or restored valley oak/grass area(s) that seems to be located off site, although it is unclear whether that is still the plan.

That is the performance criteria established in the Oak Resource Management Plan. It cites examples of successful completion of each woodland creation or enhancement site as 1) it must not involve any irrigation, planting, or re-seeding for a minimum of three years; 2) oak trees must be within 5 percent of the plan target density for surviving, healthy oak trees; 3) and non-native grass cover must not exceed the target amount of woodland non-native grass cover. While this may be sufficient mitigation for a significant impact, one cannot know that because no such plan has been completed, nor have any specific sites been identified. This precludes the public from reviewing and

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failure to submit certain technical reports and monitoring and reporting data. The notice directs the landfill to submit the late and missing information to establish compliance.

Notice of Violation: On April 9, 2024, the Los Angeles Regional Water Quality Control Board issued a Notice of Violation to the landfill operator after investigating multiple complaints from citizens. The notice documents violations of the company's industrial stormwater permit, including unauthorized discharges. Videos and pictures from citizen complaints show water being pumped from the south detention basin into a local waterway that flows into the Santa Clara River. Violations for failing to fully complete the Stormwater Pollution Prevention Plan were also cited. The notice directs the landfill operators to cease the unauthorized discharges, undertake corrective measures and, by May 9, 2024, submit a written response identifying those actions.

Notice of Violation: On March 28, 2024, the board issued a Notice of Violation to the landfill operator for failing to comply with its industrial stormwater permit. The notice documents violations observed by staff during Jan. 29 and Feb. 20 inspections, along with those identified through sampling data submitted by the landfill. The notice directs the landfill operator to take immediate action to correct the alleged permit noncompliance, including the installation of additional best management practices.

Investigative Order: On March 20, 2024, the Los Angeles board issued an investigative order requiring the landfill operator to submit technical reports and additional monitoring and reporting. The order also required the landfill operator to install additional groundwater monitoring wells and conduct sampling of all discharges into the sedimentation basin.

commenting on the adequacy of such a plan. I therefore urge the County not to approve this project without a completed Oak Resource Plan included in the DEIR that the public has had the opportunity to review. I remind the County of recent proposed projects that would have severely impacted another Valley Oak resource area, SEA 64, had not strong requirements, including dedicated open space, been put in place at the time of the project approval.

Also, the previous 2015 DEIR stated that the plan shall be subject to the requirements of County of Los Angeles Oak Tree Ordinance ("CLAOTO") and shall address impacts to oak resources, including oak trees of the sizes regulated under CLAOTO. Because loss of oaks on this project was determined to be significant by the DEIR, merely following the replacement requirements of the ordinance would not sufficient mitigation. The oak ordinance also requires that the applicant provide the burden of proof as to why he must cut the oaks. That burden of proof was not disclosed and has not been met here, as an alternative providing avoidance was not included in the DEIR.

In fact, California state law requires additional mitigation for loss of the oak woodlands in this project. Section 21083.4. of the CA Resources Code states that:

" (b) As part of the determination made pursuant to Section 21080.1, a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require one or more of the following oak woodlands mitigations alternatives to mitigate the significant effect of the conversion of oak woodlands:

(1) Conserve oak woodlands, through the use of conservation easements.

(2) (A) Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.

(B) The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted…etc."

Since the 2015 DEIR determined that this project would have a significant impact to oak woodlands, this similar project must also have a significant impact. A deferred oak resource plan, if that is what is proposed, is not adequate mitigation to meet state law.

Biological Resources

Since the release of the NOP in 2021, the Southern California mountain lion and the Southwestern Pond Turtle are both now being considered for listing under the CA Endangered Species Act due to the increasing loss of the numbers and diminishing habitat. This constitutes a change since the River Management Plan was released. On page 5.2-41 of the Biological Resources section, the DEIR blatantly mis-represents this fact, stating that there has been no change in status. As a candidate for listing, mountain lions living in the proposed Evolutionarily Significant Unit (ESU) of which this project is a part, are now a candidate species, as is the pond turtle and are temporarily afforded the same protections as a state-listed endangered or threatened species. Mitigation for impacts to these species in the River Management Plan is not sufficient to address this new status and the current EIR fails to discuss it.

Comments Specific to VVC Planning Area

The grading of the existing hill violates the Castaic CSD since the hill is listed as a red line ridge. We ask that the proposed grade is lowered by 1/2 and that the cut south face be graded to look natural allowing the area to become a hiking park area. The required oaks removed from this site should be moved if possible and replaced by the required oak replacement on the existing remaining hill. A further reason to minimize the hill grading is that there are 2 schools and 2 daycare facilities that would be impacted negatively by diesel fumes and dust adding to the already major impacts caused by the landfill fumes and gasses. The addition of a hiking / walking park would be advantages to the existing residents and the commerce center and create a positive life experience.

Conclusion

We believe that the Resource Plan, is not sufficient to address project level impacts for the above stated reasons, i.e. it is based on outdated or inapplicable studies and data. Significant new information will substantially change the DEIR's analyses of the Project's impacts, alternatives and required mitigation, so these areas must be covered in this new document. (*Laurel Heights Improvement Assn. v. Regents of Univ. of Cal*. (1993) 6 Cal.4th 1112, 1132 (*Laurel Heights*).)

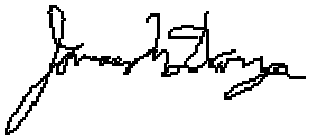
We believe the DEIR should have included updated studies on CO2 emissions and other GHG gases and water supply that include an evaluation of a significant ground water level drop, and other safety hazards (such as a study regarding the safety of building on or near existing oil wells with a disclosure of County requirements and how they will be monitored and enforced) should have been included in this new document in order for it to be informative and impacts properly mitigated.

We do not concur that the Climate/GHG chapter may be excluded.

Thank you in advance for your consideration of these concerns and thank you for your time. We will be providing additional comments on the Water Supply Assessment.

Sincerely,

President



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November 17, 2025

Via Web Portal & Overnight Mail
Board of Supervisors
Los Angeles County
Kathryn Barger, Chair
Hilda L. Solis, Chair Pro Tem
Lindsey P. Horvath, Supervisor
Holly J. Mitchell, Supervisor
Janice Hahn, Supervisor
Edward Yen, Executive Officer
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Re: Comments **on Agenda Item 90 - Entrada South and Valencia Commerce Center Project Final Supplemental Environmental Impact Report (Project Nos. 00-210-(5), 87-150-(5); DA No. RPPL2025003357; VTTM No. 53295; Zone Change No. 00-210; CUP No. 00-210)**

Dear Chair Barger, Chair Pro Tem Solis, Supervisors: Horvath, Mitchell, Hahn, Mr. Yen, Ms. Sackett, and Ms. Bodek:

We submit these comments on behalf of Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA"), in response to the Staff Report[1] and responses to CREED LA's September 30, 2025 comments ("Responses")[2] prepared for the November 18, 2025 Los Angeles County Board of Supervisors ("Board") hearing on Agenda Item 90, the Entrada South and Valencia Commerce Center Project ("Project") proposed by Hunsaker Associates ("Applicant") and the

[1] Los Angeles County, Report to the Honorable Board of Supervisors, Entrada South VCC Project (VTPM NO. 18108, PP NO. RPPL2022007239, OTP NO. 200700022) (Nov. 18, 2025), available at: https://file.lacounty.gov/SDSInter/bos/supdocs/209387.pdf (hereinafter "Staff Report").
[2] Los Angeles County, Entrada South and Valencia Commerce Center Project, Regional Planning Commission, Responses to public comments post-deadline opposition letters, available at: https://lacdrp.legistar.com/View.ashx?M=F&ID=14832151&GUID=E21C898D-413A-404F-B529-CB5303B9354B (hereinafter "Responses").

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Final Supplemental Environmental Impact Report ("FSEIR")[3] prepared pursuant to the California Environmental Quality Act ("CEQA").[4]

CREED LA submitted written comments on the Draft Supplemental Environmental Impact Report ("DSEIR") on February 18, 2025, including expert comments, which identified significant errors, omissions, and evidentiary defects in the County's environmental analysis ("DSEIR Comments"). Responses to CREED LA's DSEIR Comments were included in the FSEIR Section 2.0 Responses to Written Comments ("Responses to FSEIR Comments").[5] CREED LA submitted comments to the Regional Planning Commission ("Commission") on September 30, 2025, which provided substantial evidence that the Project results in significant environmental impacts that were not analyzed in the FSEIR and are more severe than analyzed in the State-certified EIR.

These comments were prepared with the assistance of technical consultants, air quality and health risk expert James J. Clark, Ph.D., and acoustics expert Jack Meighan, M.S. Their technical comments are attached hereto as **Exhibit A**, and **Exhibit B**, respectively and incorporated by reference herein.[6] Our review demonstrates that the FSEIR's air quality, public health, noise, and GHG analyses remain substantially inaccurate and incomplete. The FSEIR, Staff Report, and Responses fail to meaningfully respond to many of CREED LA's technical comments, and failed to resolve many of the legal and evidentiary deficiencies we identified in the DSEIR. As a result, the FSEIR still fails to adequately disclose the Project's potentially significant impacts related to air quality, public health, noise, and GHG emissions, as required by CEQA. The FSEIR lacks substantial evidence to support the Project's proposed approval findings and Statement of Overriding Considerations. The Board cannot approve the Project in reliance on a legally inadequate FSEIR.

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[3] Los Angeles County, Entrada South and Valencia Commerce Center (VCC) Project Final Supplemental Environmental Impact Report SCH No 2000011025 (August 2025) (hereinafter "FSEIR").
[4] Pub. Res. Code ("PRC") §§ 21000 et seq.; 14 Cal. Code Regs ("CCR") §§ 15000 et seq.
[5] FSEIR, Section 2.0, Response to Written Comments (August 2025), available at: https://lacdrp.legistar.com/View.ashx?M=F&ID=14732642&GUID=2EE4FED3-3988-4A1D-B5E5-8C371D152E7E.
[6] **Exhibit A,** James Clark, Comments On Final Supplemental Environmental Impact Report For Entrada South and Valencia Commerce Center (VCC) SCH No. 2000011025 (Nov. 17, 2025) (hereinafter "Clark Comments"); **Exhibit B**, Jack Meighan, Wilson Ihrig, Entrada South and VCC Project Staff Report, Los Angeles County, California, Response to Comments on Noise Analysis (Nov. 17, 2025) (hereinafter "Meighan Comments").

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CREED LA respectfully requests the Board remand the Project to Staff to prepare a legally adequate EIR which adequately analyzes and mitigates the Project's significant environmental and public health impacts. CREED LA's comments and those of our expert consultants provided the County with substantial evidence that the Project will result in significant environmental impacts that were not analyzed in the FSEIR and are more severe than analyzed in the State-certified EIR. The Board cannot make the necessary findings to approve the Project's entitlements, due to the Project's significant air quality, public health, noise and vibration impacts, and the Project's violation of the General Plan Air Quality, Noise, and Economic Development Elements.

CREED LA urges the Board to carefully consider these comments and to remand the Project to Staff for the reasons stated herein. The Project should not be rescheduled for a further public hearing until all of the issues raised in these comments, and in the comments of other members of the public, have been addressed in a revised EIR.

I. PROJECT DESCRIPTION

The Project is located within the planning boundary of the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan approved by the California Department of Fish and Wildlife ("CDFW") for which an EIR was certified in 2017 (SCH No. 2000011025) ("State-certified EIR"). As used herein, the "2017 Project" refers to resource management activities and development facilitated by the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan. The Project proposes to develop 1,574 residential units and 730,000 square feet of commercial development. This represents a reduction of 151 units from the 2017 Project and an additional 280,000 square feet of commercial floor area as compared to the 2017 Project.[7] The State-certified EIR concluded that impacts associated with the 2017 Project would result in significant and unavoidable project level impacts related to air quality and land use, and cumulative impacts to air quality, and noise.

II. STATEMENT OF INTEREST

CREED LA is a non-profit organization formed to ensure that the construction of major urban projects in the Los Angeles region proceeds in a manner

[7] DSEIR, p. 3.0-2.

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that minimizes public and worker health and safety risks, avoids or mitigates environmental and public service impacts, and fosters long-term sustainable construction and development opportunities. The organization's members include Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the Los Angeles region.

CREED LA's individual members live, work, recreate, and raise families in Los Angeles County, including communities in the area of the Project site. Accordingly, they will be directly affected by the environmental and health and safety impacts of the Project. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards created by the Project. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts.

CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

CREED LA supports the development of commercial and residential projects where properly analyzed and carefully planned to minimize impacts on public health, climate change, and the environment. These projects should avoid adverse impacts to air quality, public health, climate change, noise, and traffic, and must incorporate all feasible mitigation to ensure that any remaining adverse impacts are reduced to the maximum extent feasible. Only by maintaining the highest standards can commercial development truly be sustainable.

III. LEGAL STANDARD

When a previously approved project for which an EIR has been prepared is modified, the lead agency must determine, on the basis of substantial evidence in light of the whole record, if one or more of the following events have occurred:

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(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant effects or a substantial increase in the severity of previously identified effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(4)

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.[8]

As detailed herein and in the expert consultant reports attached hereto, the Project's environmental impacts are more severe than analyzed in the 2017 State-certified EIR, and arise from new information not previously known and/or substantial changes in the circumstances under which the Project is being undertaken.

[8] CEQA Guidelines §§ 15162(a)(1)-(3).

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The Project results in significant air quality and health risk impacts from Valley Fever that were not adequately analyzed in the FSEIR and were not analyzed in the State-certified EIR. The Project is in the Service Planning Area with the highest rates of Valley Fever in the County.[9] Rates of Valley Fever in the region have more than doubled since the 2017 EIR was certified.[10] Substantial evidence in Dr. Clark's expert comments demonstrates that the impacts of Valley Fever are significant and unmitigated, and are new significant impacts not analyzed in the 2017 State-certified EIR.

The impacts of noise and vibration constitute new significant effects not discussed in the previous EIR, because the State-certified EIR did not analyze the significant noise and vibration impacts for recording uses at the Grace To You Church.[11] A revised and recirculated SEIR is required to analyze the new and more severe impacts of the Project.

IV. AIR QUALITY IMPACTS REMAIN SIGNIFICANT AND UNMITIGATED

A. The Staff Report, Responses, and FSEIR Fail to Adequately Analyze Valley Fever Health Risk

The Responses in the Staff Report provides that "[a]s Valley Fever spores are a constituent of native soils, the AQ Report concludes that because the Modified Project includes less overall grading and no expansion of grading area relative to the 2017 Project, the Project would not result in any significant new or increased risks of Valley Fever."[12] But, as demonstrated in CREED LA's comments and expert comments, the risk of Valley Fever is more severe than previously known in 2017. Research demonstrates that the risk of Valley Fever has increased in recent years, and has been exacerbated by climate change.

As Dr. Clark's prior comments on the FSEIR pointed out, the Project site is located within the Service Planning Area of Los Angeles County with the highest rate of reported Valley Fever cases.[13] Dr. Clark's comments provided substantial evidence that Project construction may result in significant health risks for

[9] Clark Comments, p. 4.
[10] Clark Comments, p. 3.
[11] Meighan Comments, p. 1.
[12] Responses, p. 7.
[13] Clark Comments, p. 4 - 5.

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construction workers and nearby residents from Valley Fever; the nature and extent of these risks were unknown when the 2017 EIR was certified.

Dr. Clark's comments cite to California Department of Public Health data which show that the rates of Valley Fever in the County of Los Angeles have increased from a rate of 3.3 per 100,000 in 2011 to a rate of 17.9 per 100,000 in 2024.[14] This 6-fold increase resulted in more than 1,300 new cases in 2024 (a total of 1,654 cases in 2024) compared to 2011 (a total of 302 cases in 2011).[15] When comparing the rates of Valley Fever in 2017 (9.5 per 100,000) and 2024 (17.9 per 100,000), Dr. Clark demonstrates that the doubling of the Valley Fever rate since the 2017 State-certified EIR was not accounted for in the FSEIR.[16] This is a new significant impact based on "[n]ew information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted" which shows that the project will have one or more significant effects not discussed in the previous EIR or negative declaration; and significant effects previously examined will be substantially more severe than shown in the previous EIR, such that the FSEIR must be revised and recirculated.[17]

Dr. Clark's expert comments demonstrate that, when soil containing Valley Fever spores are disturbed during construction activities, the microscopic fungal spores become airborne, exposing construction workers and other nearby sensitive receptors.[18] Construction associated with the Entrada South portion of the Project includes approximately 6.5 million cubic yards of earthwork (cut/fill) to allow for the proper base and slope for the Project, including the following:[19]

> This earthwork will entail hauling dirt across public rights of ways in and immediately adjacent to the Entrada South site. There may be the need to move dirt across Magic Mountain Parkway between Planning Areas 1-3 and 4-13. Additionally, Planning Area 14 is physically separated from those

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[14] Clark Comments, p. 3.
[15] *Id.*
[16] *Id.*
[17] CEQA Guidelines §§ 15162(a)(1)-(3).
[18] Clark Comments, p. 4.
[19] Staff Report Exhibit C, CONDITIONAL USE PERMIT 00-210 BURDEN OF PROOF FOR ON-SITE GRADING FOR ENTRADA SOUTH, p. 1; pdf p. 35 of 535, available at: https://lacdrp.legistar.com/View.ashx?M=F&ID=14815857&GUID=A498CC95-40A7-473B-8A9A-FB9021491341.

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Planning Areas by a spineflower preserve... Earthwork to be hauled to Planning Area 14 is anticipated to total roughly 40,000 cubic yards."[20]

Given that proposed grading for Entrada South exceeds 100,000 cubic yards, a Conditional Use Permit is required.[21]

Project-related digging, excavation, trenching, grading, and hauling of dirt containing Valley Fever spores may result in significant health risk impacts to construction workers and nearby residents.[22] The Staff Report, FSEIR, and Responses fails to adequately analyze or mitigate this significant air quality and public health impact. These impacts were not analyzed in the 2017 State-certified EIR, and arise from substantially changed circumstances and/or new information not known at the time of that certification. Thus, the County is required under CEQA to revise and recirculate the EIR for public review and comment.

B. The Staff Report, Responses, and FSEIR Fails to Adequately Mitigate Valley Fever Health Risk Impacts

The record before the Board does not adequately mitigate impacts from significant health risk impacts from Valley Fever. At the September 30, 2025 Planning Commission hearing, the Applicant stated that "there was a dust control plan in the mitigation measures and there will be no new impacts."[23] But, this is not correct. The Applicant is conflating the erosion control plans with performance required under SCAQMD Rule 403d dust control.[24] It is clear from Dr. Clark's comments that conventional dust control measures like those in South Coast Air Quality Management District Rule 403 would not adequately reduce Valley Fever impacts.[25]

The Staff Report, Responses to Comments and FSEIR rely on standard dust requirements to purportedly mitigate impacts associated with Valley Fever.[26] The

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[20] *Id.*
[21] Staff Report Exhibit C, p. 1.
[22] Clark Comments, p. 7.
[23] Staff Report, p. 10.
[24] County of Los Angeles, Entrada South and VCC Project, Draft Mitigation Monitoring and Reporting Program, p. 50, available at: https://lacdrp.legistar.com/View.ashx?M=F&ID=14834133&GUID=F646E365-0C1C-4467-A3A1-D9F534C1E5B3 (hereinafter "MMRP").
[25] Clark Comments, p. 6.
[26] Responses, p. 7.

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Staff Report's Responses to Comments states, without the support of substantial evidence, that "[s]uppressing and minimizing dust [as required by Rule 403] also reduces the potential for exposure to Valley Fever spores, which – like dust – could otherwise become airborne during grading and other construction activities."[27] But Dr. Clark's comments demonstrate that microscopic Valley Fever spores are not mitigated through conventional dust control measures. Compliance with SCAQMD Rule 403 would still fail to prevent the exposure of workers on- and off-site to *Coccidiodes immitis* impacted soils.[28]

Dr. Clark's comments explain why conventional dust control measures are not sufficient to prevent the spread of *Coccidiodes immitis* (*cocci*) and are not effective at controlling Valley Fever because they largely focus on visible dust or larger dust particles—the PM_{10} fraction—not the very fine particles where the Valley Fever spores are found.[29] Dr. Clark provides substantial evidence that standard fugitive dust mitigation such as watering of soils would not provide sufficient protection to on-site workers nor would they prevent the spread of *Coccidiodes immitis* from the site to receptors farther away. Therefore, the FSEIR, Staff Report, and Conditions of Approval do not include measures sufficient to reduce significant Valley Fever impacts from Project construction, and therefore fail to adequately address this significant effect not discussed in the State-certified EIR[30]

Dr. Clark proposes several feasible dust control measures to protect workers from exposure to Valley Fever spores and to prevent transport of spores offsite.[31] He proposes additional measures for worker training and education on the risks of Valley Fever, and measures for medical surveillance of workers.[32] None of these measures are included in the FSEIR.

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[27] Responses, p. 7.
[28] Clark Comments, p. 6.
[29] Clark Comments, p. 6.
[30] Staff Report, Exhibit D, pdf p. 341 of 376, available at: https://lacdrp.legistar.com/View.ashx?M=F&ID=14815854&GUID=346F5650-9C06-4771-9B86-8F5869415A65.
[31] Clark Comments, pp. 9-11.
[32] Clark Comments, pp. 9-11.

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In addition, the FSEIR does not demonstrate conformance with the County's *Coccidioidomycosis (Valley Fever) Management Plan: Guidelines for Employers*,[33] which are consistent with the measures proposed by Dr. Clark. These Guidelines provide that "Valley Fever exposure is highest during ground disturbing activities such as grading, trenching, and landscaping.[34] Therefore, the following preventative measures should be implemented during construction and operations of projects to prevent exposure of construction personnel, operations and maintenance staff, and surrounding communities to Valley Fever…:"

1) Provide construction and operations personnel training to understand and manage the risks associated with Valley Fever. Training includes information on how to recognize symptoms of Valley Fever and ways to minimize exposure; proper cleaning procedures to minimize accidental exposure; and demonstrations on how to use personal protective equipment, such respiratory protection, skin and eye protection.
2) The General Contractor distributes the Valley Fever educational materials to construction and operations personnel and are posted next to the Cal OSHA poster.
3) The General Contractor provides respirators to construction and operations personnel upon request during ground disturbing activities.
   a. National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor shall be available upon request for use during worker collocation with surface disturbance activities. Upon request, a worker shall be provided with a higher level of respiratory protection.
   b. For employees who request respirators, the General Contractor shall ensure they are medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Standard (8 CCR 5144).
4) Heavy equipment with factory enclosed cabs should be provided with HEPA rated air filtration and positive pressure air. The General Contractor utilizing applicable heavy equipment provides proof of worker training on

[33] Acute Communicable Disease Control LA County Department of Public Health, Coccidioidomycosis (Valley Fever) Management Plan: Guidelines for Employers (August 2019), available at: http://publichealth.lacounty.gov/acd/docs/valleyfeverplan2019.pdf.
[34] Acute Communicable Disease Control LA County Department of Public Health, Coccidioidomycosis (Valley Fever) Management Plan: Guidelines for Employers (August 2019), available at: http://publichealth.lacounty.gov/acd/docs/valleyfeverplan2019.pdf.

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proper use of applicable heavy equipment cabs. Provide communication methods, such as two-way radios, for use in enclosed cabs.

5) Provide separate, clean eating areas with hand-washing facilities, and a changing of clothing area. Separate bins with proper labels be provided for on-site disposables.
6) Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.
7) Any employee experiencing symptoms of Valley Fever shall promptly reports to their supervisor and consult a medical professional as necessary. Maintain an accessible log of all employees reporting symptoms and disease of Valley Fever.
8) When possible, position workers upwind or crosswind when performing ground disturbing activities.
9) Prohibit smoking at the project site in or outside of designated smoking areas. Designated smoking areas shall be equipped with handwashing facilities.
10) Maintain an Injury and Illness Prevention Program (IIPP) which should include a cold and heat illness prevention section. Make the IIPP available upon request.[35]

These mitigation measures, and the measures proposed by Dr. Clark, are feasible and would reduce the Project's significant impacts from Valley Fever and have been shown to reduce Valley Fever during construction in endemic areas.

None of these measures are included as Project mitigation measures, nor were they added to the Conditions of Approval before the Board. The FSEIR should be revised and recirculated to allow a robust analysis of the Project's Valley Fever risks and adoption of appropriate mitigation measures.

C. The FSEIR Fails to Analyze Impacts Associated with Non-Residential Generators

The Responses to Comments in the Staff Report does not provide substantial evidence rebutting CREED LA's comments that emergency generators are a reasonably foreseeable project component. The County was required to analyze all "reasonably foreseeable indirect physical changes in the environment which may be caused by the project"[36] including backup generators.

[35] Clark Comments, pp. 8-9.
[36] 14 CCR § 15064(d).

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CREED LA's DSEIR comments pointed out that the County failed to analyze impacts from diesel emissions associated with emergency generators use during Project operations. The Responses to Comments state that the specific land uses planned at the Project site are not expected to install emergency generators, and that it is therefore "speculative to assume emergency generators would be installed at non-residential land uses."[37] This Response does not account for the emergency generators required by the commercial operations including the hotel planned on the Project site.

Emergency generators are required for the elevators and fire systems within the hotel proposed onsite. Pursuant to the 2022 California Building Code Section 403.4.8, standby power is required for the following: (1) Ventilation and automatic fire detection equipment for smokeproof enclosures; (2) Elevators; and (3) Where elevators are provided in a high-rise building for accessible means of egress, fire service access or occupant self-evacuation.[38]

The FSEIR does not demonstrate that there is an independent power source such that an emergency power system or on-site generator would not be required. It is reasonably foreseeable that emergency generators are required onsite, but were not accounted for in the County's air quality, health risk, and GHG modeling.

Dr. Clark's comments demonstrate that emergency back-up generators and diesel powered fire pumps onsite will emit criteria air pollutants, greenhouse gases, and toxic air contaminants.[39] Back-up generators and fire pumps may rely on diesel as a fuel source and will therefore could impact public health by releasing diesel particulate matter ("DPM") and other volatile organic compound (VOC) emissions.[40] This equipment can emit significant amounts of oxides of nitrogen (NOx), sulfur dioxides (SO2), particulate matter less than 10 microns (PM10), particulate matter less than 2.5 microns (PM2.5), carbon dioxide (CO2), carbon monoxide (CO), VOCs, and air toxins such as DPM.[41] The FSEIR's omission of an impact analysis for an onsite generator system results in a significant underestimation of the Project's air quality, greenhouse gas, and health risk impacts, according to Dr. Clark.[42]

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[37] FSEIR, p. 2.0-75.
[38] 2022 California Building Code §§ 403.4.8, 403.4.8.3.
[39] Clark Comments, p. 4.
[40] *Id.*
[41] *Id.*
[42] *Id.*

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The measures in the Net-Zero GHG Plan do not provide for a reduction in emissions associated with diesel-fueled backup generators or diesel-fueled fire pumps, and would not adequately mitigate significant emissions associated with these reasonably foreseeable Project components.

The County must revise and recirculate the FSEIR to adequately analyze the reasonably foreseeable emergency generators and fire pumps required onsite and analyze the resultant air quality, health risk, and greenhouse gas emissions impacts before the Project can be approved.

V. NOISE AND VIBRATION IMPACTS REMAIN SIGNIFICANT AND UNMITIGATED

CEQA was enacted to ensure that people are not subjected to excessive or harmful vibrations that could impact their physical health or well-being. CEQA explicitly provides that agencies must analyze whether a project results in the "generation of excessive groundborne vibration or groundborne noise levels" as a mandatory consideration when determining CEQA significance.[43]

A. The Staff Report and Responses to Comments Fails to Resolve the Noise and Vibration Impacts Raised by CREED LA

The Responses do not resolve or remedy the noise and vibration issues raised in CREED LA's DSEIR and FSEIR comments. The Staff Report does not provide any new substantial evidence to rebut CREED LA's expert consultant's conclusion that impacts from the vibratory rollers will be significant and more severe than analyzed in the 2017 EIR.

The Staff Report provides that "[c]onstruction of the Entrada South/VCC Project will be subject to measures to reduce potential impacts, including… minimizing construction noise…"[44] However, the measures in the Mitigation Monitoring and Reporting Program to minimize construction noise would not mitigate and reduce impacts from vibratory rollers on nearby sensitive receptors.[45]

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[43] CEQA Guidelines Appendix G, XIII(b).
[44] Staff Report, Exhibit C, Resolution of the Regional Planning Commission County of Los Angeles, Project No. 00-210 and Project No. 87-150 Development Agreement No. RPPL2025003357, p. 19 of 24, pdf p. 159 of 183.
[45] Meighan Comments, p. 2.

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CREED LA's comments on the FSEIR demonstrated significant vibration and noise impacts more severe than analyzed in the 2017 EIR, which the FSEIR fails to adequately address. The FSEIR provides that the recommended groundborne noise threshold for recording/broadcast studios is 25 dBA.[46] **The Responses confirm that a vibratory roller would generate noise of 37 dBA at the building occupied by Grace to You.[47]**

Noise from Project construction vibratory rollers exceed the FTA groundborne noise threshold for recording studios, and constitutes a significant unmitigated impact under CEQA. Substantial evidence in Mr. Meighan's comments demonstrates that the Project results in significant noise impacts more severe than analyzed in the 2017 EIR, which the FSEIR fails to adequately address.

The Responses asserts that the FSEIR's "analysis concluded that predicted groundborne noise levels at nearby sensitive receptors, such as the Grace to You Ministry, would not result in an additive or cumulative increase in groundborne vibration or noise beyond existing conditions based on a comprehensive, multi-pronged response."[48] Mr. Meighan's comments, however, provide substantial evidence demonstrating that the FSEIR's analysis of vibratory rollers during construction was flawed. Moreover, evidence in the Staff Report demonstrates that vibratory rollers result in significant noise and vibration impacts.

The Responses failed to resolve CREED LA's prior comment that the FSEIR neglected to adequately analyze groundborne noise impacts to nearby receptors at the Grace to You Ministry recording studio, because the FSEIR improperly converts outdoor noise levels to indoor noise levels, using an outdoor vibration to indoor noise conversion factor.[49] The Responses ignores this issue. The inaccurate conversion of outdoor noise levels in the FSEIR results in a significant underestimation of indoor noise to nearby receptors from vibration from Project construction.

The Responses fail to adequately address or mitigate the potentially significant interior groundborne noise from construction vibration impacts raised in CREED LA and Mr. Meighan's comments. Mr. Meighan's DSEIR comments

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[46] FSEIR, p. 2.0-100; Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual (Sept. 2018), Table 6-4, available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
[47] Responses, p. 15.
[48] Responses, p. 15.
[49] Meighan Comments, p. 1; FSEIR, p. 2.0-100.

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proposed feasible mitigation to reduce significant groundborne noise impacts, including coordination between the studio's recording schedules and high-vibration construction activities within a certain buffer zone.[50] These feasible measures should be included in a revised SEIR before the Project can be approved. The FSEIR should be revised and recirculated to adequately analyze and mitigate these impacts for nearby receptors before the Project can proceed.

VI. THE BOARD CANNOT MAKE THE NECESSARY FINDINGS TO SUPPORT APPROVAL OF THE PROJECT

Several of the Project's entitlements require a finding that the Project is consistent with the County's General Plan. As discussed below, the Project is inconsistent with numerous General Plan policies. Therefore, the Board may not make the required findings to approve the Project's Vesting Tentative Tract Map, Zone Change, Conditional Use Permit or Development Agreement, as detailed herein.

A. The Project is Inconsistent with the General Plan Noise Element

The FSEIR fails to adequately mitigate adverse noise impacts from the Project on nearby sensitive receptors at the Grace To You Church, in violation of County General Plan Policy N 1.1.[51] General Plan Policy N 1.1 requires that the County "[u]tilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts."[52]

Moreover, the failure to mitigate adverse construction and vibration impacts to Grace To You Church is a violation of General Plan Policy N 1.3 which provides that the County must "[m]inimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Control technologies."[53] As detailed herein, CREED LA's noise and vibration expert consultant Jack Meighan identified a significant groundborne noise impact to the sensitive receptors within

[50] Meighan Comments, p. 2.
[51] Los Angeles County General Plan, Chapter 11: Noise Element, p. 196, available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/11.0_gp_final-general-plan-ch11.pdf.
[52] DSEIR, p. 5.8-13.
[53] DSEIR, p. 5.8-13.

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the radio studio located 250 feet from potential development at the Project site and 185 feet from potential grading.[54]

B. The Project is Inconsistent with the General Plan Air Quality Element

General Plan Policy AQ 1.3 requires the County to "Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible."[55]

Substantial evidence above and in the expert consultant reports submitted by CREED LA to the County demonstrate that the Project does not reduce particulate matter emissions to the greatest extent feasible, and additional mitigation is required to reduce significant health risk impacts from diesel particulate matter emissions associated with mobile sources, project construction, and project operation.

C. The Project is Inconsistent with the General Plan Economic Development Element

The Board cannot make the necessary findings to approve the Project's entitlements because the Project is not consistent with the General Plan Economic Development Element. The Development Agreement proposed for the Project does not provide workforce benefits to support local employment or support local workforce training through apprenticeship programs to address the challenges of businesses finding a quality and skilled workforce. These are key elements of the City's General Plan Economic Development Element, which the Project fails to implement.

Los Angeles County General Plan Economic Development Policy ED 5.7 provides that it is the Policy of the County to ensure that businesses have enough skilled workers to meet their workforce needs.[56] General Plan Economic Development Element Policy ED 5.10 provides that it is the policy of the County to initiate vocational training programs that provide the skills necessary for participation in the labor force.[57] General Plan Economic Development Policy ED

[54] Meighan Comments, p. 2.
[55] Los Angeles County, General Plan Chapter 8: Air Quality Element, p. 121.
[56] Los Angeles County General Plan, Chapter 14: Economic Development Element, p. 241.
[57] *Id.*

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5.8 provides that it is the policy of the County to "[p]repare, train, and educate job seekers and incumbent workers to find and advance in high-value, high-wage jobs with built-in career ladders."[58] Finally, General Plan Policy ED 5.12 provides that it is the policy of the County to establish employer assistance initiatives to expand skilled trades training and vocational education for high demand occupations."[59]

The Project's failure to include provisions for a local skilled and trained workforce results in the Project's nonconformance with the General Plan Economic Development Policies.

D. The Board Cannot Make the Necessary Findings to Approve the Vesting Tentative Tract Map

The County cannot approve the Vesting Tentative Tract Map absent additional mitigation reducing significant health risk and noise impacts. Pursuant to the Subdivision Map Act Section 66474, a legislative body of a city or county ***shall deny approval of a tentative map***, or a parcel map for which a tentative map was not required, if it makes any of the following findings:

i. That the proposed map is not consistent with applicable general and specific plans as specified in Section 65451.
ii. That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.
iii. That the site is not physically suitable for the type of development.
iv. That the site is not physically suitable for the proposed density of development.
v. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.
vi. That the design of the subdivision or type of improvements is likely to cause serious public health problems.
vii. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the governing

[58] *Id.*
[59] Los Angeles County General Plan, Chapter 14: Economic Development Element, p. 241.

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> body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction and no authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.[60]

Here, given the Project's inconsistency with the General Plan Noise, Air Quality, and Economic Development Elements, the Board cannot make the necessary findings to approve the Vesting Tentative Tract Map No. 53295.[61]

E. The Board Cannot Make the Necessary Findings to Approve the Zone Change

In order to approve the Project's required Zone Change, the County is required to make the following findings:

1. Modified conditions warrant a revision in the Zoning Map as it pertains to the area or district under consideration.
2. A need for the proposed zone classification exists within such area or district.
3. The particular property under consideration is a proper location for said zone classification within such area or district.
4. The zone classification at such location will be in the interest of public health, safety and general welfare.
5. The Zone Change is consistent with the General Plan.
6. If the Zone Change will permit any uses prohibited by the existing zoning, that such Zone Change will not result in a need for a greater water supply for adequate fire protection or that the existing and proposed sources of water will provide an adequate water supply. [62]

Given the Project's inconsistency with General Plan Policies N 1.1 and N 1.3, AQ 1.3, ED 5.7, ED 5.8, ED 5.10, and ED 5.12 the Project is not consistent with the

[60] Cal. Gov. Code § 66474.
[61] Staff Report, p. 2.
[62] County of Los Angeles Code Section 22.198.050.

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General Plan and the County cannot make the necessary findings to approve the Zone Change.

F. The Board Cannot Make the Necessary Findings to Approve the Conditional Use Permit

In order to approve a Conditional Use Permit, the County must make the following findings:

1) The proposed use will be consistent with the adopted General Plan for the area.
2) The requested use at the location proposed will not:
   a. Adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area;
   b. Be materially detrimental to the use, enjoyment, or valuation of property of other persons located in the vicinity of the site; and
   c. Jeopardize, endanger, or otherwise constitute a menace to the public health, safety, or general welfare.
3) The proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and other development features prescribed in this Title 22, or as is otherwise required to integrate said use with the uses in the surrounding area.
4) The proposed site is adequately served:
   a. By highways or streets improved as necessary to shorten trip length and reduce vehicle miles traveled for the kind and quantity of traffic such use would generate; and
   b. By other public or private service facilities as are required.[63]

Here, substantial evidence in CREED LA's comments and those of our expert consultant demonstrate that the Project will "adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area" in violation of Municipal Code Section 22.158.050 subdivision B(2)(a). Moreover, due to the Project's inconsistency with the General Plan Policies AQ 1.3, N 1.1 and 1.3, ED 5.7, ED 5.8, ED 5.10, and ED 5.12, the Board cannot make the necessary findings to approve the Conditional Use Permit.

[63] County of Los Angeles Code Section 22.158.050.

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G. The Board Cannot Make the Necessary Findings to Approve the Development Agreement

In order to approve a Development Agreement, the County is required to make the following findings:

a. The proposed Development Agreement is consistent with the General Plan and any applicable Community, Area, or Specific Plan.
b. The proposed Development Agreement complies with zoning, subdivision, and other applicable ordinances and regulations.
c. The proposed Development Agreement is consistent with the public safety, welfare, and convenience, making it in the public interest to enter into the Development Agreement with the applicant.
d. The proposed Development Agreement will not:
    i. Adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area;
    ii. Be materially detrimental to the use, enjoyment, or valuation of property of other persons located in the vicinity of the site; or
    iii. Jeopardize, endanger, or otherwise constitute a menace to the public health, safety, or general welfare.[64]

The Project results in a material detriment to the use, enjoyment of property of other persons located in the vicinity of the site given the Project's significant air quality, health risk, noise, and vibration impacts. The Board cannot make the finding that the development agreement is consistent with the General Plan because the Project is inconsistent with General Plan Policies AQ 1.3, N 1.1, N 1.3, ED 5.7, ED 5.8, ED 5.10, and ED 5.12. Moreover, the Project may jeopardize the public health, safety and general welfare due to the Project's significant health risk associated with diesel particulate matter emissions from backup generators.

The Board, therefore, cannot make the necessary findings to approve the Project's Development Agreement, absent substantial additional analysis and mitigation in a revised SEIR circulated for public review and scrutiny.

VII. CONCLUSION

For the foregoing reasons, CREED LA respectfully requests the Board remand the Project to Staff to remedy the errors and omissions in the FSEIR before

[64] County of Los Angeles Code Section 22.162.040.

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the Project can be approved. Please include these comments in the record of proceedings for the Project.

Sincerely,

Kelilah D. Federman

Attachments
KDF:acp

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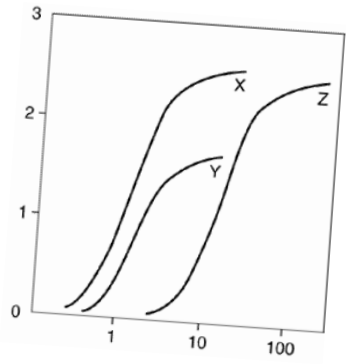
EXHIBIT A



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November 17, 2025

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Ms. Kelilah Federmann

Subject: Comments On Final Supplemental Environmental Impact Report For Entrada South and Valencia Commerce Center (VCC). SCH No. 2000011025.

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed the materials related to the County of Los Angeles (the County) Final SEIR for the above referenced project.

Clark's review does not constitute validation or endorsement of the conclusions or content presented in the Final SEIR. Any lack of comment on specific items should not be interpreted as acceptance or approval of those items.

The project is located in the Northwestern portion of Los Angeles County, west of Interstate 5 (I-5) and the City of Santa Clarita. The modified project site is located within the boundary of the State-approved Newhall Ranch RMDP/SCP.

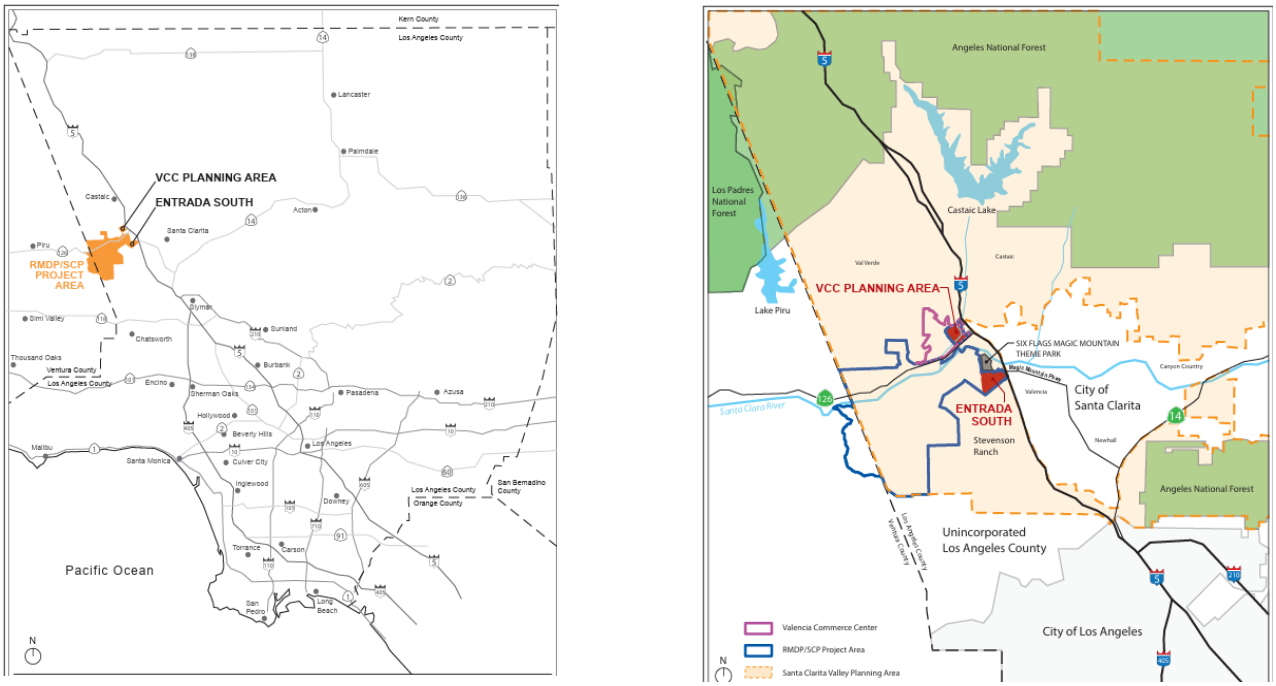

Figure 1: Regional and Local Site Map

The conclusions in the F-SEIR that there are no significant air quality issues are not supported by the information in the F-SEIR and we have demonstrated previously that there are significant unmitigated impacts that will occur if the Project is allowed to proceed without additional mitigation. The lack of current information on the increase in Valley Fever cases in the area following the rise in construction activities, and the failure to require additional mitigation measures for residents that will be impacted by construction emissions are clearly flaws in the analyses of the Project.

According to the Air Quality Analysis presented in the SEIR, "The number of Valley Fever cases in Los Angeles County has significantly increased since 2003, from an average of 100 cases a year, to approximately 300 case in 2011.[86] The number of Valley Fever cases in the San Fernando Valley is 3.9-8.9 cases per 100,000 population in 2011.[87] The Modified Project would not result in any increase in construction or grading relative to the 2017 Approved Project. Therefore, the Modified Project would not increase risks to Valley Fever." First, Santa Clarita is not in the San Fernando Valley so the references to the rate of Valley Fever cases in 2011 for the San Fernando Valley is not relevant. Second, using the Valley Fever rates for Los Angeles County that are 14 to 22 years old are not relevant to the rates of Valley Fever currently being experienced in the County. Third, as will be demonstrated below in comment 1, the rate of Valley Fever in the area in which the Project is located is the highest in the County of Los Angeles and additional construction in this area will entrain Valley

Fever spores further increasing the elevated Valley Fever rate. A revised F-SEIR is clearly warranted for this Project and the County must require the Proponent to complete the EIR to ensure the safety of the residents near the Project.

Specific Comments

1. The FSEIR Fails To Address Concerns Over Exposure To Valley Fever Spores In Soils Present In The Region.

Given the proximity of the Project Site to nearby residential receptors to the east and south of the Site, it is clear that sensitive receptors as well as workers at the project site could be exposed to Valley Fever (*Coccidiodes imimitis)* from fugitive dust generated during construction.

According to the California Department of Public Health,[1] the rates of Valley Fever in the County of Los Angeles have increased from a rate of 3.3 per 100,000 in 2011 to a rate of 17.9 per 100,000 in 2024. This 6-fold increase resulted in more than 1,300 new cases in 2024 (a total of 1,654 cases in 2024) compared to 2011 (a total of 302 cases in 2011). When one compares the rates of Valley Fever in 2017 (9.5 per 100,000) and 2024 (17.9 per 100,000), it is clear that the doubling of the Valley Fever rate since the 2017 State-certified EIR was not accounted for in the F-SEIR.

When you look at the number of Valley Fever cases in the Project area a clear pattern of exposure to Valley Fever spores becomes evident. According to the County of Los Angeles' Department of Public Health, the Project Site is located in Service Planning Area 2 of the County. In 2022, the County reported 483 cases of Valley Fever in SPA 2. This rate is the highest of all the 8 SPAs. The 483 cases in SPA-2 represented 33 percent of the Valley Fever cases reported in the County (483 cases in SPA-2 / 1,461 cases of Valley Fever in Los Angeles County).

[1] CDPH. 2025. Valley Fever Dashboard.
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/ValleyFeverDashboard.aspx

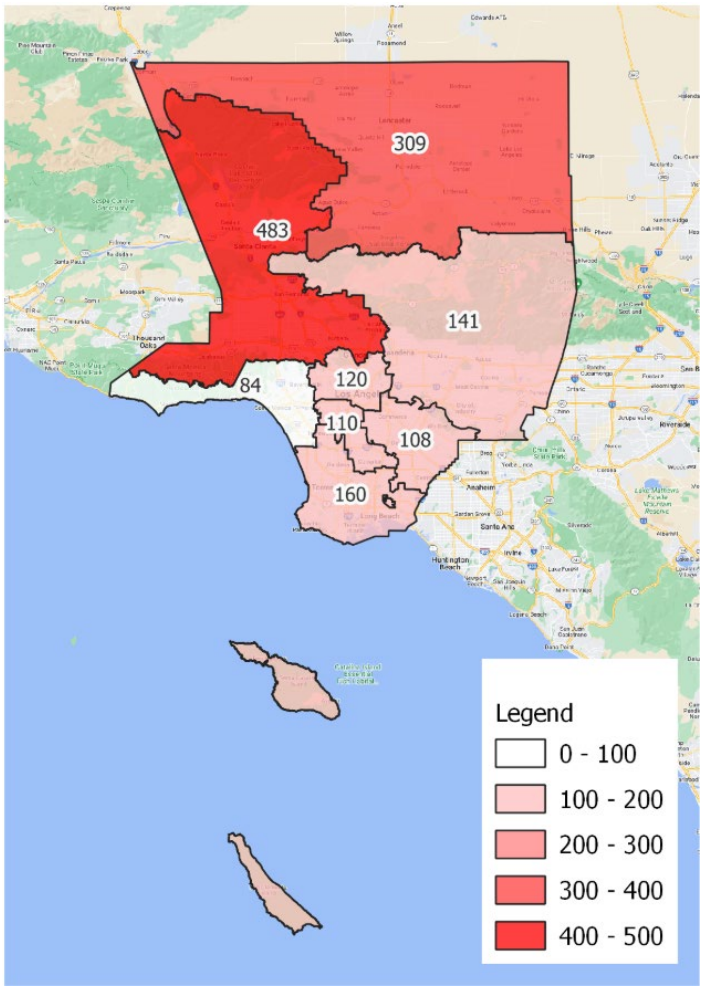

Figure 2: Valley Fever Cases Reported By County For SPAs

Dust exposure is a primary risk factor for contracting Valley Fever (via *Coccidiodes imimitis (cocci)* exposure). When soil containing the *cocci* spores are disturbed by construction activities, the fungal spores become airborne, exposing construction workers and other nearby sensitive receptors.

The fungus lives in the top 2 to 12 inches of soil. When soil containing this fungus is disturbed by activities such as digging, vehicles, construction activities, dust storms, or during earthquakes, the fungal spores become airborne. The most at-risk populations are construction and agricultural workers.[2] Here, construction workers are the population that would be most directly exposed by the Project. A refereed journal article on occupational exposures notes that "[l]abor

[2] Lawrence L. Schmelzer and R. Tabershaw, Exposure Factors in Occupational Coccidioidomycosis, *American Journal of Public Health and the Nation's Health*, v. 58, no. 1, 1968, pp. 107–113, Table 3; available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1228046/?page=1.

groups where occupation involves close contact with the soil are at greater risk, especially if the work involves dusty digging operations."[3]

The potentially exposed population in surrounding areas is much larger than construction workers because the nonselective raising of dust during Project construction will carry the very small spores, 0.002–0.005 millimeters ("mm"), into nonendemic areas, potentially exposing large non-Project-related populations.[4],[5] These very small particles are not controlled by conventional construction dust control mitigation measures.

A study in Antelope Valley identified a clear link between soil disturbance - due to large-scale renewable energy construction projects, agricultural management practices and PM_{10} fugitive dust emissions - and increased incidence of coccidioidomycosis.[6]

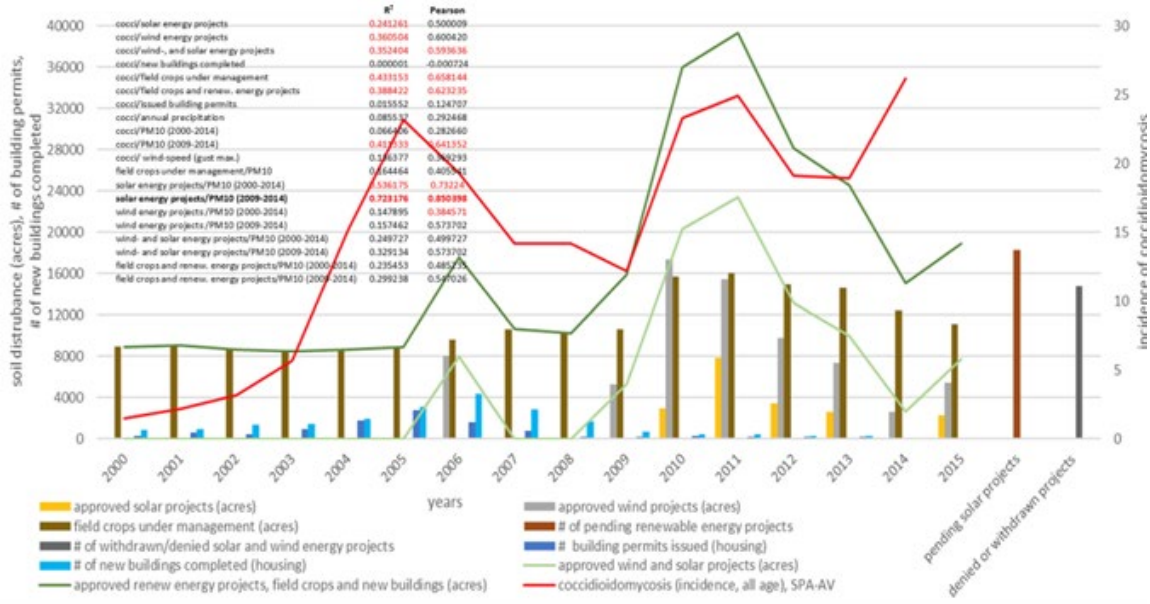

Figure 3: Valley Fever Incidence And Soil Disturbance

[3] *Ibid.*, p. 110.

[4] Schmelzer and Tabershaw, 1968, p. 110; Pappagianis and Einstein, 1978

[5] Pappagianis and Einstein, 1978, p. 527 ("The northern areas were not directly affected by the ground level windstorm that had struck Kern County but the dust was lifted to several thousand feet elevation and, borne on high currents, the soil and arthrospores along with some moisture were gently deposited on sidewalks and automobiles as 'a mud storm' that vexed the residents of much of California." The storm originating in Kern County, for example, had major impacts in the San Francisco Bay Area and Sacramento).

[6] Colson. 2017. Large-Scale Land Development, Fugitive Dust, and Increased Coccidioidomycosis Incidence in the Antelope Valley of California, 1999-2014. https://knowthecause.com/wp-content/uploads/2017/03/Colson2017FugitiveDustCoccidiodes.pdf

It is evident from the figure above that, as the number of acres of soil in the Antelope Valley were disturbed, the incidence rate of Valley Fever also increased. The mass disturbance of soils anticipated by the proposed Project will create the same conditions that were detailed in the study by Colson. [7]

According to research on Valley Fever, outbreaks in populations with intense exposure to aerosolized arthroconidia are at greater risk for infection. These groups include agricultural or construction workers, or persons who participate in outdoor activities such as hunting or digging in the soil. Outbreaks of coccidioidomycosis have been linked to a variety of activities involving disturbance of impacted soils.[8,9,10] Since Valley Fever cases are directly related to the disturbance of soils in the area, the City must directly address the impacts that the project's construction phase will have on the community.

Valley Fever can manifest as a mild respiratory illness, but it can progress to serious chronic forms, especially in immunocompromised individuals, and may even become disseminated, impacting organs including the skin, bones, brain, and spinal cord. Disseminated Valley Fever is associated with severe symptoms like meningitis, painful lesions, and swollen joints.

2. **The County of Los Angeles' Department Of Public Health's Valley Fever Mitigation Plans Fails To Prevent The Exposure Of Sensitive Receptors In The Area.**

All of the mitigation measures outlined in the Los Angeles County Department of Public Health's Valley Fever plan (typically referred to in EIRs for the region) allow for a percentage of the dust that could be generated to be migrate offsite. Under the Requirements Section of Rule 403

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[7] *ibid*

[8] Brown. Et al. 2013. Coccidioidomycosis: epidemiology. *Clinical Epidemiology*. 5:185-197.

[9] Rafael Laniado-Laborin, Expanding Understanding of Epidemiology of Coccidioidomycosis in the Western Hemisphere, Annals of the New York Academy of Sciences, v. 111, 2007, pp. 20–22, available at https://nyaspubs.onlinelibrary.wiley.com/doi/abs/10.1196/annals.1406.004; Frederick S. Fisher, Mark

W. Bultman, Suzanne M. Johnson, Demosthenes Pappagianis, and Erik Zaborsky, Coccidioides Niches and Habitat Parameters in the Southwestern United States, a Matter of Scale, Annals of the New York Academy of Sciences, v. 111, 2007, pp. 47–72 ("All of the examined soil locations are noteworthy as generally 50% of the individuals who were exposed to the dust or were excavating dirt at the sites were infected."), available at https://nyaspubs.onlinelibrary.wiley.com/doi/abs/10.1196/annals.1406.031.

[10] Lawrence L. Schmelzer and R. Tabershaw, Exposure Factors in Occupational Coccidioidomycosis, American Journal of Public Health and the Nation's Health, v. 58, no. 1, 1968, pp. 107–113, Table 3; available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1228046/?page=1.

bullet point 1:

(A) the dust remains visible in the atmosphere beyond the property line of the emission source; or

(B) t**he dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.**

Later in bullet point 3, Rule 403 states that:

(3) No person shall cause or allow PM10 levels to exceed *50 micrograms per cubic meter* when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM_{10} monitoring. If sampling is conducted, samplers shall be:

(A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM_{10}.

(B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

Based on the Mitigation Measures outlined in the CalEEMOD model (typically utilized in the assessment of construction projects under the California Environmental Quality Act) watering exposed areas twice a day would reduce PM_{10} and $PM_{2.5}$ emissions by 61 percent (61%). Increasing the watering frequency to 3 times per day would reduce PM_{10} and $PM_{2.5}$ emissions by 74%. Conventional dust control measures, primarily focus on visible dust or larger dust particles—the PM_{10} fraction—and fail to address the very fine particles that transport Valley Fever spores, which are approximately 5 times smaller than typical PM_{10} particles and remain airborne much longer.[11] These fine particles, when disturbed by soil-disturbing activities, spread widely beyond site, pose a significant risk to both onsite workers and nearby communities.

The only way to control the spread of VF impact soils is to make sure the dust is not generated above the background level for the area. As we commented previously, Rule 403 relies on the smoke-monitoring methods (U.S. EPA Methods 9 and 22) that require active monitoring by certified

[11] See, e.g., Cummings and others, 2010, p. 509; Schneider et al., 1997, p. 908 ("Primary prevention strategies (e.g., dust-control measures) for coccidioidomycosis in endemic areas have limited effectiveness.").

observers, rely on subjective observation, and are affected by variables such as lighting, distance, and weather conditions. Due to these limitations, opacity readings do not provide accurate, continuous data on fine airborne particles. The re-entrainment of the dust with VF from one area to another ensures that not just workers but future residents would be exposed to the re-entrained materials. Additional measures that would reduce the exposure of nearby residents to the spores includes the use of minimum efficiency reporting value (MERV) 16 filters on the homes nearby would reduce exposure to the spores by as much as 95 percent (95%). Given that the Project will be directly responsible for the generation of the spores into the local environment it is necessary that the County provide robust mitigation measures for the surrounding community.

The following preventative measures should be implemented during construction and operations of projects to prevent exposure of construction personnel, operations and maintenance staff, and surrounding communities to Valley Fever:

1) Provide construction and operations personnel training to understand and manage the risks associated with Valley Fever. Training includes information on how to recognize symptoms of Valley Fever and ways to minimize exposure; proper cleaning procedures to minimize accidental exposure; and demonstrations on how to use personal protective equipment, such respiratory protection, skin and eye protection.
2) The General Contractor distributes the Valley Fever educational materials to construction and operations personnel and are posted next to the Cal OSHA poster.
3) The General Contractor provides respirators to construction and operations personnel upon request during ground disturbing activities.
   a. National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor shall be available upon request for use during worker collocation with surface disturbance activities. Upon request, a worker shall be provided with a higher level of respiratory protection.
   b. For employees who request respirators, the General Contractor shall ensure they are medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Standard (8 CCR 5144).
4) Heavy equipment with factory enclosed cabs should be provided with HEPA rated air filtration and positive pressure air. The General Contractor utilizing applicable heavy equipment provides proof of worker training on proper use of applicable heavy equipment cabs. Provide communication methods, such as two-way radios, for use in enclosed cabs.
5) Provide separate, clean eating areas with hand-washing facilities, and a changing of clothing area. Separate bins with proper labels be provided for on-site disposables.
6) Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.

7) Any employee experiencing symptoms of Valley Fever shall promptly reports to their supervisor and consult a medical professional as necessary. Maintain an accessible log of all employees reporting symptoms and disease of Valley Fever.
8) When possible, position workers upwind or crosswind when performing ground disturbing activities.
9) Prohibit smoking at the project site in or outside of designated smoking areas. Designated smoking areas shall be equipped with handwashing facilities.
10) Maintain an Injury and Illness Prevention Program (IIPP) which should include a cold and heat illness prevention section. Make the IIPP available upon request.

These measures and those detailed in prior comments should be included in a revised EIR for the Project.

Conclusion

The facts presented in this comment letter lead me to reasonably conclude that the Project could result in significant impacts. A revised SEIR is necessary to address these substantial concerns fully and transparently.

Sincerely,

EXHIBIT B

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #25-001

November 17th, 2025

Ms. Kelilah D. Federman
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: Entrada South and VCC Project Staff Report
Los Angeles County, California
Response to Comments on Noise Analysis

Dear Ms. Federman,

As requested, we have reviewed Staff Report for the Entrada South and Valencia Commerce Center Project in Los Angeles County specifically the document entitled 'Entrada South and Valencia Commerce Center Project Regional Planning Commission Coalition for Responsible Equitable Economic Development Los Angeles (CREED LA) (September 30, 2025) – Comments and Responses' (Response Document). Response 9 in the Response Document details their comments on Noise and Vibration issues. This letter is based on their responses to our letters dated February 12th, 2025, and September 24th, 2025. None of the items in this or the Final Environmental Impact Report (FEIR) contradict any of the issues we previously raised, and all remain unresolved.

The Response Document states that as "described in the Draft SEIR, the Modified Project would not introduce new land uses or product type that would substantially change the scope of construction activities or the anticipated construction equipment mix as the 2017 Project, meaning that the Modified Project's noise impacts would not be substantially higher than the 2017 Project." Our letter presents several errors within the analysis that detail unreported impacts that require mitigation not included in any Environmental Impact Report associated with the project.

In response to our concerns about recording uses at to Grace To You Ministry, the Response Document states that "roadway noise levels along Commerce Center Drive are measured at 72.1 dBA CNEL, with levels propagating to 70.6 dBA CNEL at the Grace to You studios" and that applying "FTA conversion factors, the estimated groundborne noise from roadway traffic would be 50.6 dBA CNEL at the building currently occupied by Grace to You Ministry."

The response does not accurately categorize groundborne noise and the analysis is unchanged from FEIR, of which we have explained the errors with this analysis in our letter on September 24th. The 'FTA conversion factor' is intended to convert from "ground-borne vibration levels to ground-borne noise levels" (FTA[1], page 145) not from an outdoor noise level to an indoor noise level, as the Response Document erroneously applies. Groundborne noise is the phenomenon of vibration being

[1] https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

transmitted through the ground that then radiates into building structures. This is usually heard as a low rumble, as opposed to the whoosh of traffic. The CNEL is already a noise level; there is no conversion from the exterior noise to the noise caused by vibrations, as the CNEL does not categorize vibration levels. Additionally, traffic produces low source vibration levels, so groundborne noise is rarely a problem, unlike for high vibration sources such as construction equipment or trains. This is for two reasons: vehicle suspensions and tires act as dampers, isolating most vibration before it reaches the ground, and the frequency content is typically higher, which is not transmitted as efficiently through soil. As it stands, the Response Document analysis does not accurately categorize current noise levels heard within the Grace to You recording studios.

For example, the Response Document states that "a vibratory roller would generate groundborne noise of 37 dBA at the building occupied by Grace to You" and "the existing groundborne noise environment already exceeds this threshold by 25.6 dB." Considering the 25 dBA threshold, this implies a sound level of around 50 dBA currently in the studios. Considering 50 dBA is akin to the sound of rainfall or a running refrigerator[2] it is unlikely the current indoor noise level inside a recording studio is at this level. We reiterate our comment that vibration from vibratory rollers propagating as noise into the nearby recording studio has the potential to result in a significant impact and recommend including mitigation measures such as coordination between Grace to You recording schedules and construction activities as well as restricting high-vibration construction activities within a certain buffer zone.

Next, the Response Document states that the "requirement for optimal mufflers on construction equipment is based on Federal Highway Administration guidance, which supports a 10 dBA reduction in noise levels when such mufflers are properly installed and maintained" and that "the RCNM model is likely conservative because advancements in construction equipment technology since that time have led to quieter machinery." If this is true, it could easily be supported with measurements. A simple comparison of measured sound levels between similar equipment taken years or decades apart would prove this point and would not just be qualitative conjecture as it is right now.

Finally, the Response Document states that "mechanical equipment associated with commercial development is required to comply with the County Noise Ordinance, and compliance is verified during the building permit process" and thus a detailed analysis is not required. However, the analysis includes no discussion of levels from combined noise source and how realistic future noise attenuation could be. Mechanical noise may combine with other operational noise levels, such as parking lot noise or loading dock noise, and only analyzing noise at a later date may omit significant impacts resulting from the combination of multiple sources. To confirm a less than significant impact, the Project Applicant should demonstrate that the combined noise levels generated by these sources remain below appropriate significance thresholds.

We believe that several of our comments are not addressed in the FEIR. As such, we believe this report both underestimates significant impacts from the project and does not study all potential ways to mitigate identified impacts. Feel free to contact us with any questions.

[2] https://noiseawareness.org/info-center/common-noise-levels/

Very truly yours,
WILSON IHRIG

Jack Meighan
Associate

11/17/25

Members of the Los Angeles County Board of Supervisors
Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

RE: SUPPORT Entrada South (Project 00-210) and Valencia Commerce Center (Project 87-150)

Dear Los Angeles County Board of Supervisors,

On behalf of the San Fernando Valley Young Democrats (SFVYD), I am writing to offer our full support for the next phase of the Valencia by FivePoint project, Entrada South and Valencia Commerce Center.

SFVYD serves as the premier Democratic organization for young professionals in the San Fernando Valley and adjacent areas. We strive to encourage the fullest possible participation of young Democratic voters and to promote the values of prosperity, equity and justice.

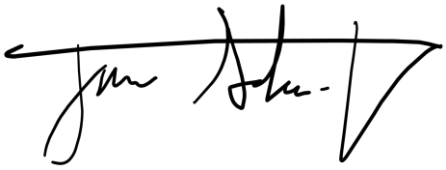
LA County continues to face a severe and long-standing housing shortage – a problem that disproportionately impacts young people, as well as low-income residents and communities of color. The possibility of homeownership feels far out of reach for many of our members – underscored by the recent news that the average age of first-time homebuyers nationwide is now 40 years old. This is a far cry from the days of the traditional “starter home” of years past that might accommodate a young family as they begin their life together.

Projects that prioritize housing production play a key role in relieving this severe shortage and lowering costs for all. It is more important than ever to support well-designed housing investments of all kinds, including Valencia by FivePoint.

Entrada South will create more than 1,500 much-needed housing units at a variety of price points. This comes in addition to the 1,700 homes already sold in Valencia’s Mission Village community, most of them sold for less than the LA County median home price. The community’s impressive sustainability commitments – including robust investments in disadvantaged communities and achieving net zero GHG emissions – further align with the values of our membership.

This is exactly the kind of far-sighted planning that drives progress and prosperity in L.A. County. We urge you to offer this project your full support.

Sincerely,



Juan Solorio Jr

San Fernando Valley Young Democrats

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Mitchell M. Tsai
Law Firm

139 S. Hudson Ave., Suite 200
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VIA E-MAIL

November 17, 2025

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RE: County of Los Angeles' November 18, 2025, Board of Supervisors Meeting – Agenda Item No. 90 (File Nos. 25-189 and 25-190) – Entrada South and Valencia Commerce Center Project (Project Nos. 00-210-(5) and 87-150-(5)) – Final Supplemental Environmental Impact Report (SCH# 2000011025)

Dear Chair Barger, Honorable Supervisors, and Jodie Sackett,

On behalf of the Western States Regional Council of Carpenters ("**Western States Carpenters**" or "**WSRCC**"), our firm is submitting these comments in connection with the County of Los Angeles' ("**County**") November 18, 2025, Board of Supervisors ("**BOS**") hearing (Agenda Item No. 90) concerning the Entrada South Project ("**Entrada South**") and Valencia Commerce Center Project ("**VCC**"; hereinafter, collectively, the "**Project**") and the Final Supplemental Environmental Impact Report ("**Final SEIR**") prepared in connection therewith.

According to the SEIR, the Project as currently proposed involves changes and adjustments to the development of the Entrada South and Valencia Commerce Center Planning Areas that were subject to the State-certified EIR for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan ("RMDP/SCP"), which was certified in June 2017 by CDFW. (SEIR, p. 1.0-1.) The Project Site is located within the planning boundary of the RMDP/SCP, and the current SEIR for the Project purports to focus upon incremental changes at the Project Site

since the 2017 approval of the RMDP/SCP project, changes in circumstances, and any new information that has become available since the prior EIR. (SEIR, pp. 2.0-2 – 3.) The Project, as modified, proposes development of 1,574 residential units and 730,000 square feet of commercial and/or office uses in the Entrada South Planning Area (amounting to a reduction of 151 residential units and an increase of 280,000 square feet of non-residential floor area relative to the project set forth in the State-certified 2017 EIR). (SEIR, pp. 2.0-4 2.0-16.) The Entrada South Planning Area of the Project would also maintain a 27.2-acre Spineflower Preserve, a 5.4-acre public neighborhood park, a potential school site, recreational centers totaling approximately 8,430 square feet, and approximately 140.4 acres of open space. (SEIR, p. 2.0-4.) The plans for the Valencia Commerce Center would remain largely unchanged from the prior EIR, but would add measures to increase environmental protections and reduce impacts to the neighboring Hasley Creek and Castaic Creek. (SEIR, p. 2.0-18)

The Western States Carpenters is a labor union representing over 90,000 union carpenters in 12 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects. Individual members of the Western States Carpenters live, work, and recreate in the County and surrounding communities and would be directly affected by the Project's environmental impacts.

WSRCC expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

WSRCC incorporates by reference all comments related to the Project or its CEQA review, including the SEIR and the prior Environmental Impact Report for the RMDP/SCP. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, WSRCC requests that the County provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code

Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

I. THE COUNTY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The County should require the Project to be built by contractors who participate in a Joint Labor-Management Apprenticeship Program approved by the State of California and make a commitment to hiring a local workforce.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

> [L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at*

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[3]

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The

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https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

[4] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

> city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The County should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE COUNTY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[5]

The Western States Carpenters recommend that the County adopt additional requirements to mitigate public health risks from the Project's construction activities. The Western States Carpenters requests that the County require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

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[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

In particular, based upon the Western States Carpenters' experience with safe construction site work practices, the Western States Carpenters recommends that the County require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.

- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health

> Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The County should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

The Western States Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The County should require the Project to be built using a workforce trained in ICRA protocols.

III. THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA is a California statute designed to inform decision-makers and the public about the potential significant environmental effects of a project. 14 California Code of Regulations ("**CEQA Guidelines**"), § 15002, subd. (a)(1).[8] At its core, its purpose is to

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[6] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

[7] For details concerning the Western States Carpenters' ICRA training program, *see* https://icrahealthcare.com/.

[8] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 et seq., are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. Pub. Res. Code, § 21083. The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 217.

"inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government[.]'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564 (internal citation omitted).

To achieve this purpose, CEQA mandates preparation of an Environmental Impact Report ("**EIR**") for projects so that the foreseeable impacts of pursuing the project can be understood and weighed. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80. The EIR requirement "is the heart of CEQA." CEQA Guidelines, § 15003(a).

CEQA directs public agencies to avoid or reduce environmental damage, when possible, by requiring alternatives or mitigation measures. CEQA Guidelines, § 15002, subds. (a)(2)-(3); see also *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners of the City of Oakland* (2001) 91 Cal.App.4th 1344, 1354; *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 400. The Environmental Impact Report (EIR) serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines, § 15002, subd. (a)(2).

A public agency must prepare an EIR whenever substantial evidence supports a "fair argument" that a proposed project "may have a significant effect on the environment." Pub. Res. Code, §§ 21100, 21151; CEQA Guidelines, §§ 15002, subds. (f)(1)-(2), 15063; *No Oil, supra,* 13 Cal.App.3d at p. 75; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 111-112. If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in Public Resources Code section 21081. See CEQA Guidelines, §§ 15092, subds. (b)(2)(A)-(B).

Essentially, should a lead agency be presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect. CEQA Guidelines, §§ 15064(f)(1)-(2); see *No Oil, supra,* 13 Cal.App.3d at p. 75 (internal citations and quotations omitted). Substantial evidence includes "enough relevant information and reasonable inferences from this information

that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." CEQA Guidelines, § 15384, subd. (a).

The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets")*; *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. *Communities for a Better Environment v. Richmond* (2010) 184 Cal.App.4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449-450). The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. *Id.* For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Id.*

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard under which an EIR must be prepared whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602; *Friends of "B" St. v. City of Hayward* (1980) 106 Cal.3d 988, 1002.

Further, it is the duty of the lead agency, not the public, to conduct the proper environmental studies. "The agency should not be allowed to hide behind its own failure to gather relevant data." *Sundstrom, supra,* 202 Cal.App.3d at p. 311. "Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." *Ibid*; see also *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1382 (lack of study enlarges the scope of the fair argument which may be made based on the limited facts in the record).

Thus, refusal to complete recommended studies lowers the already low threshold to establish a fair argument. The court may not exercise its independent judgment on the

omitted material by determining whether the ultimate decision of the lead agency would have been affected had the law been followed. *Environmental Protection Information Center v. Cal. Dept. of Forestry* (2008) 44 Cal.4th 459, 486 (internal citations and quotations omitted). The remedy for this deficiency would be for the trial court to issue a writ of mandate. *Ibid.*

While the courts review an EIR using an 'abuse of discretion' standard, the reviewing court is not to *uncritically* rely on every study or analysis presented by a project proponent in support of its position. *Berkeley Keep Jets*, *supra*, 91 Cal.App.4th at p. 1355 (quoting *Laurel Heights, supra,* 47 Cal.3d at pp. 391, 409 fn. 12) (internal quotations omitted). A clearly inadequate or unsupported study is entitled to no judicial deference. *Ibid.* Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 102, 131. As the First District Court of Appeal has previously stated, prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process. *Berkeley Keep Jets, supra*, 91 Cal.App.4th at p. 1355 (internal quotations omitted).

Both the review for failure to follow CEQA's procedures and the fair argument test are questions of law, thus, the de novo standard of review applies. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435. Whether the agency's record contains substantial evidence that would support a fair argument that the project may have a significant effect on the environment is treated as a question of law. *Consolidated Irrigation Dist.*, *supra*, 204 Cal.App.4th at p. 207; Kostka and Zischke, Practice Under the Environmental Quality Act (2017, 2d ed.) at § 6.76.

Section 15088.5(a) of the CEQA Guidelines provides that an EIR must be recirculated whenever there is disclosure of significant new information. Significant new information includes: (1) disclosure of a new significant environmental impact resulting from the project or from a new proposed mitigation measure; (2) disclosure of a substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance; and (3) disclosure of a feasible project alternative or mitigation measure considerably different from others previously analyzed which would clearly lessen the significant

environmental impacts of the project which the project proponents decline to adopt. *Id.*

Additionally, an EIR must be recirculated when it is so fundamentally inadequate and conclusory in nature that meaningful public review and comment is precluded. *Id.* [citing *Mountain Lion Coalition v. Fish & Game Com.* (1989) 214 Cal.App.3d 1043].

Here, as discussed below, the SEIR fails to substantiate all of its conclusions to allow meaningful public review and comment, provide adequate mitigation measures, and fully assess all pertinent environmental factors. Accordingly, this comment letter discloses significant new information, necessitating revision and recirculation of the SEIR.

IV. THE SEIR IS INADEQUATE UNDER CEQA AND SHOULD BE REVISED AND RECIRCULATED

A. The SEIR Fails to Include an Adequate Project Description of the Modified Project

The SEIR for the Project must be recirculated because it lacks an adequate Project description with regard to the significant expansion of commercial development in the Entrada South planning area. "[A]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient" environmental document. *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 185, 200. "A curtailed or distorted project description may stultify the objectives of the reporting process" as an accurate, stable and finite project description is necessary to allow "affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance. *Id.* at 192 – 93.

CEQA Guidelines § 15124 requires a project to be described in enough detail to allow for evaluation of its potential environmental impacts: (a) the project's precise location and boundaries; (b) a clearly written statement of objectives sought by the proposed project; (c) a description of the project's technical, economic, and environmental characteristics; and (d) a statement describing a list of agencies, permits, and approval which the project expects to use.

The SEIR notes that the Project as modified from the prior State-certified EIR includes a reduction of 151 residential units and ***an unspecified increase in commercial square footage of 280,000 sq. ft.*** (from 450,000 sq. ft. to 730,000 sq.

ft.) for the Entrada South planning area. See Final SEIR, p. 3.0-3, Table 3.0-1. In this regard, the modified Project would increase the commercial development in the Entrada South planning area by over 50% from the project that was previously studied and approved in the State-certified EIR. Meanwhile, the current Draft SEIR and Final SEIR for the Project contain no description whatsover regarding the nature and type of this anticipated additional commercial development, and only vaguely refers to the anticipated commercial development as "including but not limited to office, retail, hotel, and other allowable non-residential commercial and business park uses..." See Final SEIR, p. 3.0-20.

Simply put, the Project's description with regard to the change in its anticipated commercial floor area development does not satisfy CEQA's project description requirement. Indeed, 280,000 sq. ft. of additional development is equivalent to greater than 6.4 acres in additional commercial floor area to be developed. For the sake of comparison, in the context of other development projects within the state of California, a standalone development of 6+ acres of commercial floor area is routinely subject to its own independent CEQA review. Here, however, the SEIR simply bypasses the specifics of the additional commercial development being contemplated by the modified Project, as well as any associated analysis of the additional impacts resulting from the conversion of the original Project's previously-approved residential floor area into the undefined commercial land uses of the modified Project. The County's later responses to WSRCC's further comments on this issue miss the mark. WSRCC has never claimed that the County must specify the actual tenants that will operate in the new 280,000 square feet of commercial space proposed by the Project. However, the type of the commerical use certainly matters when it comes to the enviromental impacts it will present. For example, if the additional commercial space is to be developed into a hotel with 400+ rooms, it will subject the Project and the surrounding community to different forms of impacts (e.g., transportation, emergency access, public services, utilities, etc.) than if the additional square footage is utilized only for office space. The County's decisionmakers and the public at large is entitled to disclosure of the intended uses of this increased commerical development, as well as the County's analysis of the potential impacts that these new, previously-unstudied commercial uses will present.

Moreover, WSRCC maintains that the SEIR for the Project provides no statement of objectives for the additional commercial floor area to be developed. Final SEIR, p.

3.0-40 – 41. Indeed, the Final SEIR remains silent on with regard to the "additional specific objectives of the for the Modified Project" in the context of the additional commercial development being pursued. *Id.* Thus, the Project description in the SEIR provides no specific information regarding precisely what the Project aims to achieve in the context of the additional commercial development in the Entrada South planning area or whether there is any need for such development and facilities. To that end, the County and its decisionmakers, and the general public, have been left completely in the dark regarding the additional commercial development that would occur under the modified Project, and the SEIR has not been revised to account for this change in the Project, which WSRCC reiterates has rendered large swaths of its study and analysis of environmental impacts deficient with respect to the Entrada South Planning Area. Further, the SEIR provides no description of the Project's technical, economic, and environmental characteristics with respect to the Project's expansion of its commercial development, thereby further failing to satisfy the CEQA Guidelines. *Id.*

Accordingly, WSRCC reiterates that the SEIR must be revised and recirculated to provide a specific description of the additional commercial development being proposed for the Project's Entrada South Planning Area and to provide adequate study and analysis of any changes that will result in the impacts analysis for the Project based upon the significant expansion of commercial development in the modified Project.

B. The SEIR Fails to Support Its Findings with Substantial Evidence

CEQA requires that an EIR identify and discuss the significant effects of a Project, how those significant effects can be mitigated or avoided. CEQA Guidelines § 15126.2; PRC §§ 21100(b)(1), 21002.1(a). If a project has a significant effect on the environment, an agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." CEQA Guidelines § 15092(b)(2) (A–B). Such findings must be supported by substantial evidence. CEQA Guidelines § 15091(b).

When new information is brought to light showing that an impact previously discussed in the EIR but found to be insignificant with or without mitigation in the EIR's analysis has the potential for a significant environmental impact supported by substantial evidence, the EIR must consider and resolve the conflict in the evidence. See *Visalia*

Retail, L.P. v. City of Visalia (2018) 20 Cal.App.5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (the fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

Here, for the reasons discussed in detail below, the SEIR fails to comply with the foregoing requirements.

1. The SEIR Fails to Adequately Analyze and Mitigate Air Quality Impacts

A fundamental purpose of an EIR is to identify ways in which a proposed project's significant environmental impacts can be mitigated or avoided. Pub. Res. Code §§ 21002.1(a), 21061. To implement this statutory purpose, an EIR must describe any feasible mitigation measures that can minimize the project's significant environmental effects. PRC §§ 21002.1(a), 21100(b)(3); CEQA Guidelines §§ 15121(a), 15126.4(a).

If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" PRC §§ 21002; 21002.1, 21081; CEQA Guidelines §§ 15091, 15092(b)(2)(A); and find that 'specific overriding economic, legal, social, technology or other benefits of the project outweigh the significant effects on the environment." PRC §§ 21002; 21002.1, 21081; CEQA Guidelines §§ 15091, 15092(b)(2)(B). "A gloomy forecast of environmental degradation is of little or no value without pragmatic, concrete means to minimize the impacts and restore ecological equilibrium." *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1039.

According to CEQA Guidelines, "[w]hen an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment." CEQA Guidelines Section 15096(g)(2). As previously noted, the SEIR reaffirms the prior conclusion from the State-certified EIR that the Project will have significant and unavoidable construction and operational Air Quality impacts. (SEIR, pp. 2.0-27 – 28.)

However, WSRCC reiterates that an impact can only be labeled as significant-and-unavoidable after all available, feasible mitigation is considered and the SEIR lacks substantial evidence to support a finding that no other feasible mitigation existed to mitigate Project's significant impacts. Here, the SEIR offers no new mitigation measures to ameliorate the significant anticipated air quality impacts, and relies only on the Project's anticipated regulatory compliance and seven assorted Project Design Features ("PDFs") in reaching the conclusion that the Project will result in no substantial increase in the severity of the Air Quality impacts. (SEIR at pp. 5.1-37 – 39.)

Given the current anticipated air quality impacts of the Project are considered substantial and unavoidable, and that the Project appears to be relying upon compliance with current regulations and PDFs for the proposition that its Air Quality impacts are not anticipated to increase beyond those identified in the State-certified EIR, the SEIR should be doing more to ensure that the Project deploys bona fide mitigation against these significant and unavoidable impacts. In its response to comment letters raising concerns regarding air quality issues, the Final SEIR claims

that the Draft SEIR already included a detailed analysis of air quality and is supported by an expert technical report, so recirculation of the Draft SEIR is not required. However, the Final SEIR does not go far enough to mitigate the Project's significant and unavoidable air quality impacts to the maximum extent feasible. At a minimum, the SEIR should be revised and recirculated to adjust its analysis and consider whether any additional Air Quality mitigation measures would be feasible and effective in reducing the Project's anticipated significant impacts.

Moreover, the SEIR currently fails to incorporate any and all feasible mitigation and fails to adopt enforceable mitigation measures. A mitigation measure must be enforceable through conditions of approval, contracts or other means that are legally binding. (PRC § 21081.6; CEQA Guidelines § 15126.4(a)(2).) Mitigation measures should be implemented, not adopted and ignored (*Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261.) The Final SEIR states that the Mitigation Monitoring and Reporting Program (MMRP) is fully enforceable and legally binding on the Modified Project and is subject to the review and enforcement authority of the County of LA. However, this response in the Final SEIR fails to address the fact that the Project's PDFs are not actual mitigation measures and will not be subject to the same level commitment to mitigation that would result from implementation of a bona fide mitigation measure.

As previously raised by WSRCC, given that the Project Site sits in a region that remains in non-attainment for multiple state and national air quality standards, WSRCC agrees with the SEIR that the air quality impacts of the Project will be significant and unavoidable regardless of the mitigation measures ultimately undertaken. However, the Project and its SEIR still have an obligation to reduce those additional air quality impacts to the greatest extent feasible via appropriately crafted mitigation measures. Indeed, the pollutants for which the Project's air quality impacts will be significant are fine particulate matter and ozone, among other pollutants, which the Final SEIR notes have serious impacts on human health. Further, the Clean Air Act requires a demonstration of reasonable progress towards attainment and the incorporation of additional sanctions for failure to attain or meet interim standards, requiring that these pollutants and their impact on air quality be addressed. Just because the emissions are reduced in the Modified Project compared to the 2017 Project does not sufficiently address the concern of the region remaining in non-attainment and the fact that the Project, as presently proposed, will still contribute to

and exacerbate that existing non-attainment status. WSRCC reiterates that the County must revise the SEIR to commit to holding the Project to the essential standard of reducing air quality impacts to the greatest extent feasible using appropriately crafted mitigation measures.

2. The SEIR Fails to Adequately Analyze and Mitigate Wildfire Impacts

In its prior comments, WSRCC raised the issue that the SEIR's analysis of Wildfire Impacts is deficient, in that it references Project Design Features ("PDFs") as the only new measures aimed at offsetting the Project's wildfires impacts/risks (SEIR, pp. ES-42) and it relies entirely on those PDFs and the Project's purported regulatory compliance. Despite the Final SEIR's efforts to summarily dismiss WSRCC's comments on the issue of the Project's wildfire impacts, this deficiency in the SEIR remains particularly prominent given the significant and unavoidable cumulative wildfire impacts identified for the Project by the prior State-certified EIR. In the wake of the recent catastrophic wildfires in Southern California, including but not limited to the Palisades Fire and Eaton Fire, as well as the Hurst Fire, the Castaic Fire, and the Lidia Fire that were located in and around the Santa Clarita Valley, the SEIR's analysis of wildfire risk and implementation of mitigation measures to mitigate that risk falls well short. Indeed, the disastrous level of devastation wrought by Palisades and Eaton fires that occurred earlier this year resulted primarily from several contributing factors that included the placement of significant residential and urban development adjacent to expansive fire-prone wildlands and the existence of high-capacity power lines transecting said fire-prone wildlands (which are characteristics shared by the Project proposed here).

The Draft SEIR 5.14 Wildfire acknowledges on Page 5.14-39 that in 2025, "the Hughes Fire burned approximately 2 to 4 miles north of the VCC Planning Area", highlighting the need for detailed analysis of and a plan to address wildfire risks for the Project. At a minimum, the SEIR must conduct a genuine and thorough analysis of the wildfire risks attendant to the Project Site without the prior incorporation and inclusion of the PDFs in that analysis. Indeed, the Project Site and its surrounding areas are well known to be at extremely high risk for wildfires and have been officially designated as a Very High Fire Hazard Severity Zone ("**VHFHSZ**") by the State subsequent to the certification of the prior State-certified EIR for the Project (a notable change in circumstances). As such, the Final SEIR's analysis of Wildfire

Impacts remains deficient, as it does not adequately present and assess the very real and increased dangers of wildfires on the local landscape and then set forth appropriate ***mitigation measures*** to ameliorate those risks to the greatest extent possible.

The Final SEIR responded to WSRCC's comments on this issue by indicating that the Draft SEIR and the Fire Protection Plan include discussions and analysis of mitigation measures beyond the PDFs. However, these are insufficient to address the significant and unavoidable impact that operation of the Project will have on wildfire risks. The SEIR relies upon PDFs in lieu of mitigation measures for the Project's wildfire impacts, and this is improper particularly given the significant and unavoidable cumulative wildfire impacts that have already been acknowledged under Threshold 5.14-2 in the Section Revised Draft SEIR 2.0 Executive Summary. While the PDFs appear to address on-site fire risks, WSRCC resubmits that they must be coupled with mitigation measures, rather than being the primary method by which the County addresses the wildfire impacts of the Project. There are only two applicable mitigation measures from the state-certified EIR provided in Revised Draft SEIR 5.14 Wildfire on Page 5.14-85. The Final SEIR and the County have thus continued to improperly dismiss WSRCC's arguments regarding the improper use of PDFs in the face of significant and unavoidable wildfire impacts since additional mitigation measures are required.

Moreover, the Final SEIR inaccurately and inconsistently states and concludes that the Entrada South planning area component of the Project is surrounded by developed areas. However, there are thousands of acres of undeveloped wildlands directly west-southwest of the Entrada South planning area, such that any wildfire occurring in that area would have a direct pathway to the Entrada South project area. Further, the Final SEIR's Revised SEIR 5.14 Wildfire section acknowledges on Page 5.14-33 that the southeastern corner of the Entrada South Planning Area is dedicated to a 29.17-acre Spineflower Preserve, which is an area that will be maintained as undeveloped for critical environmental protection. The Wildland Fire Evacuation Plan is insufficient to address the fire hazard to which the site is subject by being surrounded on several sides by undeveloped areas, because there are no measures to address the proximity to undeveloped land and the risk, impacts, and dangers this poses. Indeed, the plan itself continues to state that "the Modified Project is surrounded by exi[s]ting development and infrastructure and located in a relatively

high-density area" (See Revised Draft SEIR Appendix 5.14a – Fire Protection Plan, p. 115), which is a grossly inaccurate characterization of the Project area. Thus, WSRCC resubmits that additional analysis and measures must be undertaken taken to adequately address the Project's wildfire risk.

The Final SEIR revisions commenting on the history of the Hughes Fire and noting that the project is in a VHFHSZ, as designated by the California Department of Forestry and Fire Protection, sits in stark contrast with the SEIR's unsupported conclusion that the project site is surrounded by developed land uses in an effort to downplay the fire hazard to which the Project site is subject. From the map provided on Page 5.14-48 of the Final SEIR's Revised Draft Section 5.14 Wildfire and the discussion above, it is clear there are large swaths of undeveloped vegetation on multiple sides of the Project. This acknowledgment of fire hazards and significant and unavoidable cumulative wildfire impacts for the Project, in addition to the recognition of recent wildfires and their impacts, necessitates additional action be taken by the County in the form of meaningful and mandatory mitigation measures in order to comply with CEQA. WSRCC maintains that the change on the Fire Hazard map designation subsequent to the State-certified EIR is significant new information that gives rise to the County's obligation under CEQA to conduct new, more detailed analysis of the Project's potential wildfire impacts and underscores the need for the implementation of further mitigation measures for the Project.

C. The SEIR Improperly Mischaracterizes Mitigation Measures as "Project Design Features"

In this instance, the SEIR improperly recasts a wide array of mitigation measures as "Project Design Features" or "PDFs." The County has claimed in response to WSRCC's prior comments that its extensive list of PDFs for the Project are voluntary, and that the PDFs are not required to reduce the Project's impacts below levels previously assessed in the prior State-certified EIR for the Project.

However, it is established that "'[a]voidance, minimization and / or mitigation measure' . . . are not 'part of the project.' . . . compressing the analysis of impacts and mitigation measures into a single issue . . . disregards the requirements of CEQA." (*Lotus v. Department of Transportation* (2014) 223 Cal. App. 4th 645, 656.)

When "an agency decides to incorporate mitigation measures into its significance determination, and relies on those mitigation measures to determine that no

significant effects will occur, that agency must treat those measures as though they were adopted following a finding of significance." (*Lotus, supra*, 223 Cal. App. 4th at 652 [citing CEQA Guidelines § 15091(a)(1) and Cal. Public Resources Code § 21081(a)(1).])

By mischaracterizing mitigation measures as PDFs, the County violates CEQA by failing to disclose "the analytic route that the agency took from the evidence to its findings." Cal. Public Resources Code § 21081.5; CEQA Guidelines § 15093; *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal. App. 3d 1022, 1035 [quoting *Topanga Assn for a Scenic Community v. County of Los Angeles* (1974) 11 Cal. 3d 506, 515.]

Specifically, the SEIR delineates the following twenty-two (22) distinct PDFs to be applied to the project, all of which are tantamount to mitigation measures under CEQA:

Regarding Air Quality Impacts:

ES/VCC-PDF-AQ-1 through ES/VCC-PDF-AQ-7.

(SEIR at pp. 5.1-38 – 39.)

Regarding Biological Resources Impacts:

ES-PDF-BIO-1;

VCC-PDF-BIO-1;

VCC-PDF-BIO-2;

RMDP/SCP-AEA-PDF-3-1;

RMDP/SCP-AEA-PDF-3-8;

RMDP/SCP-AEA-PDF-3-11; and

RMDP/SCP-AEA-PDF-3-12.

(SEIR at pp. 5.2-63 – 65.)

Regarding Transportation Impacts:

ES/VCC-PDF-TR-1.

(SEIR at pp. 5.9-25 – 26.)

Regarding Wildfire Impacts:

PDF-WF-1 through PDF-WF-7.

(SEIR at pp. 5.15-49 – 53.)

Notably, the October 7, 2021 Initial Study ("IS") for the Project determined that the Project presented potentially significant environmental impacts for a variety of environmental factors, including but not limited to the following: Air Quality, Biological Resources, Cultural Resources, Hazards/Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Public Services, Transportation, Tribal Cultural Resources, Utilities/Services, Wildfire, and Mandatory Findings of Significance. (Appendix 1a to SEIR, IS at pp. 25, 42, 44-45, 49, 72, 74, 76-80, 82, 86, 91, 98, 100, 102-103, and 104-106.) Fast-forwarding to the publication of the Project's SEIR, the SEIR then determines that the Project would have either no new significant impact or no substantial increase in severity of impact for Air Quality, Biological Resources, Transportation, and Wildfire. According to the SEIR and the County's responses to WSRCC's prior comments, it is entitled to use voluntary PDFs in lieu of mitigation measures to address the significant and unavoidable impacts that the SEIR has identified. WSRCC maintains that such an approach does not comply with CEQA, and the SEIR should be revised and recirculated to convert the PDFs the County has applied to the Project into actual mitigation measures that will be appropriately enforceable pursuant to the Project's MMRP.

By way of example, WSRCC reiterates deploying Tier 4 construction equipment to reduce impacts to air quality (per ES/VCC-PDF-AQ-2) is not a bona fide feature of "project design." (SEIR, p. 5.1-38.) The offering of a conservation easement over preserved streambeds and riparian areas within Unnamed Canyon 2, Castaic Creek, and Hasley Canyon to reduce the Project's biological resources impacts (per ES-PDF-BIO-1 and VCC-PDF-BIO-1) is not a bona fide feature of "project design." The applicant's future preparation and submission of a Construction Traffic Management Plan for the Project (per ES/VCC-PDF-TR-1) is not a bona fide feature of "project design." (SEIR, p. 5.9-25.) And, to be sure, the applicant's future preparation of a Construction Fire Prevention Plan for the Project (per PDF-WF-1) and the required annual completion of vegetation management within the Project's Fuel Modification Zones and common areas (per PDF-WF-3) is not a bona fide feature of "project design." Rather, these are actually bona fide mitigation measures for the Project that the SEIR has unjustifiably recast as PDFs. The Final SEIR and the County's subsequent written responses on this issue summarily dismiss WSRCC's comments,

claiming that the PDFs were never incorporated as a part of the Project's environmental baseline, and that, because the PDFs have been written into the MMRP, they are adequate. In this regard, the Final SEIR improperly disregards the WSRCC's fundamental objection to the use of PDFs in lieu of mitigation measures.

The PDFs cited above are but a handful of examples of the myriad instances of the SEIR's mislabeling of the Project's mitigation measures as PDFs. Indeed, mere cursory review of the SEIR reveals that the bulk of the items on the foregoing non-exclusive list of proposed PDFs for the Project amount to nothing more than an attempt to re-label what are, in fact, mitigation measures for the Project. WSRCC re-submits that the SEIR should be incorporating the Project PDFs as bona fide mitigation measures in the Project's MMRP.

By affirming the recasting of Project's mitigation measures in this manner, the Final SEIR perpetuates the SEIR's improper attempts to skirt its responsibilities to fully analyze and mitigate the Project's various environmental impacts implicated by the PDFs, including those that have been determined to be significant and unavoidable. Such an attempt to evade accountability for addressing the Project's environmental impacts directly violates CEQA, and the SEIR cannot permissibly be certified unless and until this deficiency is rectified.

V. CONCLUSION

Based on the foregoing concerns, the County should require revision and recirculation of the SEIR for the Project pursuant to CEQA. Absent doing so, the SEIR in its current form directly violates CEQA in multiple respects. If the County should have any questions or concerns, please do not hesitate to contact this office.

Sincerely,

Jeremy Herwitt
Attorneys for Western States Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (**Exhibit A**);

Air Quality and GHG Expert Paul Rosenfeld CV (**Exhibit B**);

Air Quality and GHG Expert Matt Hagemann CV (**Exhibit C**)

EXHIBIT A

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March 8, 2021

Mitchell M. Tsai
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Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Mininum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6826**	**1,721.6826**	**0.1294**	**0.0000**	**1,724.9187**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6823**	**1,721.6823**	**0.1294**	**0.0000**	**1,724.9183**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4103	1.4103
2	**12-1-2021**	**2-28-2022**	1.3613	1.3613
3	**3-1-2022**	**5-31-2022**	1.1985	1.1985
4	**6-1-2022**	**8-31-2022**	1.1921	1.1921
5	**9-1-2022**	**11-30-2022**	1.1918	1.1918
6	**12-1-2022**	**2-28-2023**	1.0774	1.0774
7	**3-1-2023**	**5-31-2023**	1.0320	1.0320
8	**6-1-2023**	**8-31-2023**	1.0260	1.0260

9	**9-1-2023**	**11-30-2023**	1.0265	1.0265
10	**12-1-2023**	**2-29-2024**	2.8857	2.8857
11	**3-1-2024**	**5-31-2024**	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6554**	**1,418.6554**	**0.1215**	**0.0000**	**1,421.6925**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6550**	**1,418.6550**	**0.1215**	**0.0000**	**1,421.6921**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4091	1.4091
2	**12-1-2021**	**2-28-2022**	1.3329	1.3329
3	**3-1-2022**	**5-31-2022**	1.1499	1.1499
4	**6-1-2022**	**8-31-2022**	1.1457	1.1457
5	**9-1-2022**	**11-30-2022**	1.1415	1.1415
6	**12-1-2022**	**2-28-2023**	1.0278	1.0278
7	**3-1-2023**	**5-31-2023**	0.9868	0.9868
8	**6-1-2023**	**8-31-2023**	0.9831	0.9831

9	**9-1-2023**	**11-30-2023**	0.9798	0.9798
10	**12-1-2023**	**2-29-2024**	2.8757	2.8757
11	**3-1-2024**	**5-31-2024**	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

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November 17, 2025

VIA EMAIL &
ONLINE PUBLIC COMMENT PORTAL

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RE: Agenda Item 25-6126 – Entrada South/Valencia Commerce Center Project

Dear Supervisors,

This letter responds to seven letters submitted by three law firms on the above-referenced project, as listed below. The letters were filed on behalf of the (i) Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA")[1], (ii) Western States Regional Council of Carpenters ("WSRCC"), and (iii) Supporters Alliance For Environmental Responsibility ("SAFER"),[2] and are collectively referred to herein as the "Lawyer Letters."

[1] CREED LA acknowledges that it is a "non-profit organization," whose members include, without limitation, "Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California." (See CREED-LA September 30, 2025 Letter at 3-4).

[2] SAFER is a Covina-based non-profit organization with well-documented ties to labor unions that has challenged environmental impact reports on large projects in Los Angeles, Santa Ana, Sacramento, and other California cities. SAFER's CEO, Jon Preciado, is a Business Manager for the Southern California District Council of Laborers. Press articles referring to SAFER's prior activities can be found here:

Commenter	Law Firm	Date of Comment Letters
CREED LA	Adams Broadwell Joseph & Cardozo	• February 18, 2025 (Draft SEIR) • September 30, 2025 (RPC Meeting) • November 17, 2025 (BOS Hearing)
WSRCC	Mitchell Tsai Law Firm	• February 18, 2025 (Draft SEIR) • September 30, 2025 (RPC Meeting)
SAFER	Lozeau Drury LLP	• September 29, 2025 (RPC Meeting) • November 16, 2025 (BOS Hearing)

Each of these letters allege that the Supplemental EIR prepared for this Project is deficient under CEQA. Detailed responses to each comment have already been included in the administrative record on this matter, which confirm that the Supplemental EIR does include the information, analysis and mitigation required by CEQA.

The purpose of this letter is to ensure that the administrative record includes facts and evidence demonstrating that these Lawyer Letters constitute a pattern of conduct intended to result in labor agreements with certain unions to employ their members and/or pay "prevailing wages" established by the state of California and applicable only to "public works projects."

"Public works" projects are generally limited to public infrastructure and facilities that are undertaken by public agencies or paid for by certain types of public funding. This Project includes major construction components including streets and sidewalks, storm drains and other subsurface utilities, and public facilities, such as a new park, as required by existing Community Facilities District ("CFD") agreements with the County to pay prevailing wages.[3] Other prevailing wage construction components included in previously-approved Newhall villages include public services and infrastructure such as a fire station, library, as well as additional park, trail, and infrastructure improvements. As required by the CFD, these prevailing wage project components—for the already-completed and planned future prevailing wage work—employ hundreds of construction union members.

The Lawyer Letters make CEQA comments but their core objective is to leverage the applicant into agreeing to limit who can build or buy future homes or businesses at

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https://davisvanguard.org/2025/07/ceqa-reform-housing-crisis-california/; https://www.sandiegouniontribune.com/2023/06/22/oceanside-upholds-approval-of-two-large-development-projects/

[3] Please see section 5(d) of the Community Facilities District Acquisition, Funding and Disclosure Agreement, included as Attachment A.

ES/VCC by the implicit threat of litigation by alleging CEQA noncompliance. The Lawyer Letters seek to achieve this objective by obligating the applicant, which does not build homes or business structures, to enter into an agreement to require future builders and employers to pay prevailing wages and/or employ members of designated unions – even though those future builders and employers do not receive public funding, are not building "public works projects" subject to CFD funding agreements, and are accordingly not required to pay prevailing wages to their future construction workforce.

The fact that this economic objective is the purpose of the Lawyer Letters was made most clear in this administrative record by Luis Flores, the CREED speaker who testified at the Regional Planning Commission hearing: "We are asking that you deny this project until it includes workforce benefits in the development agreement, commensurate with what we believe is essential in this part of LA County." Mr. Flores explained that "CREED LA has the active support of the Mechanical, Electrical, Plumbing, Iron Worker, and Rod Buster Trades.[4] The Lawyer Letters filed by Mr. Tsai and Mr. Drury explain that their clients are the carpenters' union and the laborers' union.

In a website that has compiled copies of these and related Lawyer Letters for more than a decade,[5] the statistics are startling:

- Adams Broadwell has filed 535 CEQA comment letters
- Lozeau Drury LLP has filed 488 CEQA comment letters
- Mitch Tsai has filed 125 CEQA comment letters
- SAFER, WSRCC, and CREED LA have collectively filed another 410 CEQA comment letters

The standard pattern and practice for these law firms is to use CEQA to create an implicit threat of litigation *unless and until* the applicant agrees to prevailing wage or union work demands. However, once an applicant capitulates to their economic demands (unrelated to CEQA), these law firms routinely *go silent, drop all CEQA opposition or even flip to supporting the CEQA analysis*. This pattern and practice is well known by state officials, housing experts, and the building industry (as described below) and makes clear that these law firms bend CEQA for economic purposes and not for environmental protection.

There is nothing in the CEQA statute or Guidelines that authorizes CEQA lawsuits and lawsuit threats to be weaponized as a tactic to delay and block projects to gain economic advantages. As a California Court of Appeal has recently observed:

> "*CEQA was meant to serve noble purposes, but it can be manipulated to be a formidable tool of obstruction, particularly against proposed projects that will increase housing density.*" "*CEQA litigation threatens to become 'a never-ending*

[4] Luis Flores, CREED, public speaker #2 (and "Speaker 12") at the RPC hearing on October 2025; RPC hearing transcript accessed on County website.

[5] See, *Phony Union Tree Huggers, Labor Union Abuse of the California Environmental Quality Act (CEQA)* (accessed Oct. 7, 2025), available at https://phonyuniontreehuggers.com/unions-abusing-ceqa/union-abuse-of-california-environmental-quality-act-ceqa/

battle of attrition with ever-changing targets for project opponents to aim for.' 'Delay can become its own reward for project opponents. ... [T]his is a recipe for paralysis. But CEQA is not meant to cause paralysis.'"[6]

Using CEQA comment letters, with implied or actual CEQA lawsuits, for this economic objective has long been recognized and criticized by California's elected leaders. For example, Governor Jerry Brown said "you can't change CEQA" and went on to explain, "The unions won't let you because they use it as a hammer to get project labor agreements."[7]

Furthering the economic objectives of a party, as sought by the Lawyer Letters, undermines the integrity and purpose of CEQA. This tactic directly attacks important state and County laws and public policies applicable to this Project. This Project is adjacent to the Newhall Ranch Specific Plan project, for which a Specific Plan was originally approved in 1999 and reapproved in 2003 following litigation, which included an extensive Specific Plan EIR (State Clearinghouse No. 95011015). Development of the Specific Plan area and the Project area was again analyzed by a State-certified EIR (State Clearinghouse No. 2000011025), which required the project reduce and offset all greenhouse gas ("GHG") emissions and thus become the nation's first and largest "net zero" GHG community. The Specific Plan EIR and State-certified EIR, and related CEQA documents, have been targeted by more than a dozen CEQA lawsuits, ultimately leading to a landmark settlement with environmental activists in 2017.

One environmental activist group continues to oppose the project and has filed serial lawsuits against numerous entitlement approvals. This Project has already been stalled for years by serial CEQA lawsuit tactics impacting the State-certified EIR. Because this Project and the remainder of the Newhall Ranch project covered by the CFD are already required to pay prevailing wages in accordance with the CFD, CEQA litigation based on the Lawyer Letters actually deprives union members of construction jobs, attainable homeownership options, and permanent jobs.

The Lawyer Letters's objective of requiring high cost labor obligations on vertical building structures in exchange for not filing CEQA lawsuits is particularly egregious given the housing crisis and the fact that California has the highest unemployment rate of any state in the nation.[8] These higher labor costs are included as the overall cost of building, and are passed onto future residents and employers. Housing costs are already unaffordable for most Los Angeles county residents. Had this project been constructed in 1999, the median home price was $191,000.[9] However, by September of 2024, the

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[6] *Tiburon Open Space Comm. v. Cnty. of Marin*, 78 Cal. App. 5th 700, 781-782; citing *Center for Biological Diversity v. Department of Fish & Wildlife*, 62 Cal.4th 204 (J. Chin, dissenting).

[7] "Unions and Environmentalists Oppose Plan to Address California's Rising Housing Cost" (accessed November 11, 2025) available at: https://cei.org/blog/unions-and-environmentalists-oppose-plan-to-address-californias-rising-housing-costs/

[8] "Unemployment Rates for States," (2025) U.S. Bureau of Labor Statistics, accessed November 11, 2025 and available here: https://www.bls.gov/web/laus/laumstrk.htm

[9] "Home Prices Close Out '99 on a High Note," (2000) LA Times, accessed November 11, 2025 and available here: https://www.latimes.com/archives/la-xpm-2000-jan-18-fi-55212-story.html

median home price had risen to $983,320.[10] As calculated by UC Berkeley's Terner Center, per housing unit construction costs for projects required to pay prevailing wages are approximately $94,000 higher than housing units not required to pay prevailing wages.[11]

California's political leaders, California's non-partisan experts, and academic experts have recognized that requiring prevailing wages, with or without project labor agreements with specific unions, results in significant increases in housing costs and lowers housing production:

1. Even in the political consensus reached in the Legislature in 2025 to exempt from CEQA housing located within previously-developed areas, prevailing wages were not required for housing projects less than 85' (about eight stories) high.[12]

2. The role of prevailing wages in California as a significant driver of high housing costs, and lower housing production, has been documented by numerous experts, such as the California Legislative Analyst Office study on the "Causes and Consequences" of California's extraordinarily high housing costs.[13]

3. The UC Berkeley Terner Center's 'Making It Pencil' analysis similarly finds that increased labor costs jeopardize project feasibility, especially for mid-rise and non-high-rise projects.[14]

4. Several RAND studies further validated the UC Berkeley Terner Center findings, including how mandated Project Labor Agreements reduced housing production in the City of Los Angeles and making California housing production costs much higher than comparable housing in Colorado and Texas.[15]

These Lawyer Letters not only omit the anti-housing, anti-construction union jobs, and anti-permanent job consequences of their tactic as shown by these facts and evidence,

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[10] "Median Home Sales Prices Southern California (2024) Los Angeles Almanac, accessed November 11, 2025 and available here: https://www.laalmanac.com/economy/ec37.php

[11] "Low-Income Housing Tax Credit Construction Costs: An Analysis of Prevailing Wages (2024), accessed November 11, 2024 and available here: https://ternercenter.berkeley.edu/research-and-policy/lihtc-construction-costs-prevailing-wages/

[12] "AB 130's Game-Changer for CEQA Streamlining of Housing Development" (2025), accessed November 11, 2025 available at: https://ascent.inc/new-infill-exemption/

[13] California's High Housing Costs, Causes and Consequences, 2015, https://lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf.

[14] UC Berkeley Terner Center for Innovative Housing, Making It Pencil: the Math Behind Housing Development – 2023 Update, David Garcia, https://ternercenter.berkeley.edu/research-and-policy/making-it-pencil-2023/.

[15] RAND, Project Labor Agreements and Affordable Housing Production Costs in Los Angeles, 2024, https://www.rand.org/pubs/research_reports/RRA1362-2.html and RAND, The High Cost of Producing Multifamily Housing in California, 2025, https://www.rand.org/pubs/research_reports/RRA3743-1.html.

they also ignore the fact that the applicant does not build either houses or commercial structures. Instead, the applicant completes grading, and installs the required infrastructure and public services, that allow future unknown third parties to construct homes and commercial uses. The Lawyer Letters have the effect of essentially demanding as a CEQA litigation avoidance tactic that the applicant restrict eligible buyers and employers, and impose both far higher construction costs and labor agreement legal obligations, to those future potential homebuilders and employers willing to be bound by these extraordinary demands which are inconsistent with prevailing practice, applicable legal requirements, and market conditions.

The Lawyer Letters also fail to acknowledge any of the scores public benefits with the Project, such as public recreational parks and affordable housing reserved for lower income households. Even with similar public benefits and the extraordinary "net zero" GHG obligation, the median price of new housing at the previously-approved Mission Village project within the Newhall Ranch Specific Plan was lower than the 2024 County median home price, allowing over a thousand families to buy a home (as was recognized to by numerous commenters at the RPC hearing on October 25, 2025).

The record also demonstrates that the Newhall Ranch Specific Plan project, and this Project, have long been included in both the County's General Plan and Housing Element as critical components of meeting the state-mandated housing goals established by the Regional Housing Needs Assessment laws. Under applicable state housing laws, the County is required to approve this long-planned housing, absent extraordinary conditions that are not present and have not been alleged as problems by any commenter. The jobs created at VCC are also critical to achieving the County's economic goals, and provide a proximate job center to balance the increased workforce including those who can choose to live in the new housing.

The record similarly demonstrates that the Newhall Ranch Specific Plan project, and this Project, have also been included in every version of the regional "Sustainable Communities Strategy," ("SCS") which assigns each region a GHG reduction obligation to be achieved through land use and transportation plans and projects. An SCS must be prepared and approved every four years by the Southern California Association of Governments on behalf of all 197 local governments (counties and cities) in Southern California, and must then be reviewed and accepted by the California Air Resources Board ("CARB"). Even as California's GHG reduction climate goals have become more ambitious, the Project continues to be included in each of these approved SCS documents. CARB prepares even more comprehensive statewide "Scoping Plans" to identify GHG reduction obligations for all economic sectors of California, and the Scoping Plan also favorably highlights the Newhall Ranch Specific Plan project as a "net zero" GHG project that is aligned with meeting the state's climate goals.

Finally, it is also relevant that this Lawyers Letter tactic has not been deployed against Newhall, or earlier phases of development.

Late Hit Sandbag Lawyer Letter Tactics Also Undermine CEQA and Housing

Under CEQA, members of the public are invited to comment on the scope of what should be studied in an EIR before the Draft EIR is prepared, and are then invited to comment on the content of the Draft EIR during a required 30-45 day comment period. The lead agency is required respond in the Final EIR to comments. CEQA also requires the Final EIR to be available for public review for ten days before the EIR is certified as final by the lead agency. As explained in detail in the record, the County has met and exceeded every one of these CEQA public participation requirements.

The Lawyer Letters follow a disruptive pattern that show willful contempt for CEQA's statutory and regulatory public participation requirements. Of the three law firms and sevenLawyer Letters, precisely two letters were submitted during the public comment period on the Draft SEIR, notwithstanding the sophistication and experience of each of the law firms and their clients with the CEQA public comment process.

Instead, three of the untimely Lawyer Letters were submitted as "late hits" on the eve of the Regional Planning Commission meeting ("RPC Meeting") held on October 1, 2025, to consider whether to recommend certification of the EIR and approval of the Project, raising new issues despite the fact that all issues included in the Lawyer Letters were known or could have been known at the time of the Draft SEIR. All of these letters alleged that the SEIR was deficient under CEQA – arguments that can and should have been raised during the comment period on the Draft SEIR. For such sophisticated law firms, the only plausible explanation for waiting to raise such comments was to attempt to disrupt or delay the hearing instead of trying to facilitate thoughtful consideration of environmental concerns.

Even more untimely are the two recent of these "late hit" letters, submitted 45 days after the RPC hearing, on the Sunday immediately preceding the Tuesday Board of Supervisor hearing ("BOS Hearing") to consider SEIR certification and Project approval ("Sunday Late Hit Letter"). The BOS Hearing date was announced at the RPC Hearing, at which representatives from each law firm and/or their clients attended. This Sunday Late Hit Letter includes 99 new pages of additional commentary on the SEIR, alleging still more CEQA deficiencies.[16] This letter largely overlaps with comments submitted months earlier to the County by the same law firm on behalf of the same client for a different and unrelated project in the Santa Clarita area. [17] The CEQA consultant for that unrelated project prepared 142 pages of responses to this immediate predecessor of the Latest Late Hit Letter, all of which are hereby included in the record for this Project as Attachment D to this letter. [18]

Even later that the Sunday Late Letter is the Monday late afternoon late hit letter from Adams Broadwell ("Monday Late Hit Letter") submitted a scant half-day ahead of the Board of Supervisors' hearing. This 35-page letter re-raises some prior arguments and adds more – the proverbial spaghetti against the wall in the hopes something will stick in

[16] Lozeau Drury letter to County on Project (Nov. 16, 2025), included as Attachment B.
[17] Lozeau Drury letter to County on Lyon Canyon project (September 22, 2025), included as Attachment C.
[18] Dudek, Responses to SAFER letter on Lyon Canyon Project, included as Attachment D.

the threatened lawsuit. What is most plainly-stated is the request that the Board indefinitely delay making a decision on the SEIR or the project to provide yet another round of responses to the County's response to the original Adams and Broadwell Late Hit Letter submitted just before the RPC meeting.

These late hit letter tactics all demonstrate the "gotcha" objective of the Lawyer Letters: to wantonly violate CEQA's public comment procedures and then cynically stall comments that were known to, and in fact written by, these same lawyers and their consultants in other CEQA proceedings in an attempt to leverage agency entitlement approval delays based on threatened litigation vulnerabilities. These tactics have been repeatedly decried by appellate courts. In a similar serial CEQA lawsuit challenge to a hotel near Santa Barbara, opponents filed a "late hit" comment just before the project was approved alleging that a second-round CEQA document was deficient because it should have studied an additional alternative first identified in the late hit. The appellate court rejected this tactic, in a quote often repeated in subsequent CEQA appellate court decisions:

> ***We cannot, of course, overemphasize our disapproval of the tactic of withholding objections, which could have been raised earlier in the environmental review process, solely for the purpose of obstruction and delay.***[19]

In that case, the court acknowledged the existence of the late hit comment, but also found that the timing of the letter was relevant to the lead agency's decision to proceed with the scheduled decision on the SEIR and project rather than trigger even more process and delay – and the court's ultimate decision to reject opponents' argument that the SEIR was flawed:

> [T]he timing issue does bear on the reasonableness of the Board's decision to address the alternative sites by means of administrative findings, rather than by commissioning yet another supplemental EIR.

So well known is this late hit abusive CEQA tactic that it ranked as the second of only six CEQA reform recommendations endorsed by the non-partisan Little Hoover Commission's May 2024 report recommending legislative reforms to CEQA. Notwithstanding receipt of hundreds of pages of comment letters from entrenched interests seeking to preserve CEQA's litigation and leverage status quo, the Commission urged the Legislature to:

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[19] This and the following quote are from *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 559.

[Excerpt] 2. Address "Data Dumps" and "Late Hits." [20]

CEQA statute language allows for new information to be inserted into the review process at any time prior to the close of the last public hearing before final project approval (even after the close of the public comment period). Project opponents can take advantage of this feature to introduce significant (and copious) new information at the last minute. As a result, ***an aspect of CEQA intended to encourage public input and engagement with that input on the part of lead agencies can become a tactical tool for creating delays, for setting up grounds for litigation, and for creating leverage vis-à-vis the lead agency to extract a settlement or project changes.*** In order to create a more efficient CEQA process and remove undue burden from lead agencies, California needs to put an end to these practices and substantially limit the submission of input outside the public comment period.

Although the Legislature has not amended CEQA to entirely eliminate late hits, longstanding judicial interpretations including by the court in *Goleta* cited above have held that the timing of late hit comments is a relevant and appropriate factor to be considered in determining how or to what extent to consider claims of CEQA noncompliance based on "late hit" comments.

Here, the Lawyer Letters' cynical and manipulative timing, including the suppression of EIR comments previously submitted by the same lawyers and clients on other projects until in the hopes that a judge will be pick one issue from hundreds, based on one alleged omission or deficiency in 10,000 or more pages of administrative record, is a textbook example of "sandbagging." Building homes and creating jobs, on a site and pursuant to local, regional, and state-approved land use plans, for a Net Zero greenhouse gas project that already reached a comprehensive settlement agreement with and environmental advocacy groups, such as the Center for Biological Diversity, is an unconscionable delay tactic to abuse an environmental statute for economic gain.

CEQA Must be Interpreted and Applied Based on the Plain Language of the Statute and Not Expanded to Advance the Economic Objective of the Lawyer Letters

In 1972, only two years after CEQA was enacted and before there were any regulatory "guidelines" promulgated to interpret CEQA, the California Supreme Court overturned approval of a 184-unit condominium project in the Mammoth Mountain ski resort, holding that CEQA applied to both projects undertaken and approved by public agencies, "so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *(Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal. 3d 247, 259.)

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[20] Little Hoover Commission, *CEQA: Targeted Reforms for California's Core Environmental Law* (May 2024), p. 15, accessed November 17, 2025 and available here: https://lhc.ca.gov/wp-content/uploads/Report279.pdf

In 1993, the Legislature substantially scaled back judicial discretion to expand the scope of CEQA by enacting Section 20183.1, which provides:

> It is the intent of the Legislature that **courts**, consistent with generally accepted rules of statutory construction, **shall not interpret this division [CEQA] or the state [CEQA] guidelines** adopted pursuant to Section 21083 **in a manner which imposes procedural or substantive requirements beyond those explicitly stated in this division or the state guidelines**.

In 2014, an appellate court squarely rejected the legal argument that the expansive holding in the 1972 *Friends of Mammoth* decision overrode the 1993 Legislated limit on CEQA in Section 21083.1:

> To the extent the Picayune Tribe contends its broad interpretation ... is compelled by our Supreme Court's determination in *Friends of Mammoth* that CEQA must "be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language" [], **we believe the explicit approach to the interpretation of CEQA mandated by CEQA section 21083.1 defeats that contention.** Under that approach, to the extent a party like the Picayune Tribe advances an interpretation of CEQA that is beyond the explicit terms of the act and that imposes requirements not otherwise compelled by the face of the act, we are constrained to reject that interpretation, even if accepting it would arguably afford greater protection to the environment....." *Picayune Rancheria of Chukchansi Indians v. Brown*, 229 Cal.App.4th 1416, 1430 (2014),

In 2023, the California Supreme Court affirmed that "CEQA is a statute, and we must enforce its terms as the Legislature has written them," and held that neither social noise nor the impact of university housing on city housing supply were physical environmental impacts covered by CEQA. *Regents of University of California v. City of Berkeley*, 14 Cal. 5th 104.

In 2024, the Little Hoover Commission—an independent, bipartisan state oversight agency comprised of appointed senators, assemblymember and members of the public—held multiple hearings and received thousands of pages of comments, and then issued a comprehensive report analyzing the current state of CEQA and making recommendations for reform. See, *CEQA: Targeted Reforms for California's Core Environmental Law Report #279* (May 2024) (the "Little Hoover Report").[21] The Little Hover Report echoes the concerns above regarding CEQA abuse from project opponents, as well as a plea for consistent adherence to CEQA Section 21083.1 mandates against CEQA expansions:

- p. 5: CEQA "can have damaging, often unintended, consequences. It is an expensive and lengthy process that can add years to project timeframes. It can be used for purposes that have little relationship to environmental protection. Its

[21] Available at https://lhc.ca.gov/wp-content/uploads/Report279.pdf.

strong bias toward the status quo means that it can be used to block projects that would help improve the environment."

- p.10: "[W]hen CEQA litigation does occur, it often targets residential projects, which are valuable as California seeks to lessen its high housing costs while simultaneously addressing climate change."

- p.16: Despite Section 21083.1's clear mandate, there has nonetheless been substantial judicial interpretation of CEQA and the CEQA Guidelines. "[T]he Legislature should [] strongly reaffirm the language in 21083.1 that courts should in the future defer to the procedural and substantive requirements established in statute and Guidelines."

Simply put, the alleged CEQA deficiencies in the Lawyer Letters do not pass muster under Section 21083.1.

To pick just one example, the Tsai letter first asks the County to "require the Project to be built by contractors who participate in a Joint Labor-Management Apprenticeship Program approved by the State of California and make a commitment to hiring a local workforce" and then goes on to rely on an attached 2021 report prepared for an unrelated project, authored by Soil Water Air Protection Enterprise ("SWAPE"), to argue that local hire requirements are capable of reducing the length of worker trips, and consequently, reducing vehicular emissions of greenhouse gas (GHG). SWAPE then presents a general discussion of how California Emissions Estimator Model (CalEEMod) calculates emissions from construction-related vehicle trips and discusses the relationship between trip length and GHG emissions untethered to this project.

The SWAPE report entirely ignores the project-specific fact that regardless of the length of construction trips, this project is already required to be "net zero" for all GHG emissions. The SWAPE letter also fails to disclose a 2014 policy brief prepared for the California Air Resources Board ("CARB") titled "Impact of Jobs-Housing Balance on Passenger Vehicle Use and Greenhouse Gas Emissions," which questions whether local hire requirements actually reduce air quality and GHG emissions. The report found that purely focusing on spatial proximity between worker residence and job location "ignores the influence of traffic congestion on commute time, as spatially separated jobs and houses in uncongested locations (possibly at the urban fringe) could potentially allow faster commutes than shorter job-residence distances in more congested locations (likely closer to the urban core)."[22] The SWAPE letter does not account for trip duration; only number, length and class of worker trips.

There is nothing in CEQA or the CEQA Guidelines that "explicitly" limits the construction workforce to local residents or participants in the apprenticeship program,

[22]"Impact of Jobs-Housing Balance on Passenger Vehicle Use and Greenhouse Gas Emissions," Technical Background Document for CARB (2014), accessed November 10 and available at: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Jobs-Housing_Balance_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Technical_Background_Document_0.pdf

nor does CEQA require VMT reductions to reduce GHG on what is already a net zero GHG project with no adverse GHG impacts.

The SAFER letter likewise asserts as CEQA deficiencies noncompliance with nonexistent procedural requirements, such as asserting that the absence of Findings and a Statement of Overriding Considerations ("SOC") in an early version of the Regional Planning Commission ("RPC") agenda package was a legal error that required the RPC to postpone its hearing on whether to recommend that the Board of Supervisors certify the Supplemental EIR or approve the project. In fact, these documents were included in the agenda package considered by the RPC, and CEQA does not require Findings or the SOC that are ultimately considered by approval of the Board to also be presented to the RPC acting in its advisory role.

Labor plays a very important role in California and the nation, but weaponizing CEQA to increase wages and limit eligible workers is a "lose lose" for members who will remain unemployed if this Project is delayed or derailed by lawsuits enabled by the Lawyer Letters.

Very truly yours,

HOLLAND & KNIGHT LLP

Jennifer L. Hernandez

Attachments A-D

Attachment A

COUNTY OF LOS ANGELES

COUNTY OF LOS ANGELES
COMMUNITY FACILITIES DISTRICT NO. 2021-01
(VALENCIA-FACILITIES)

THE NEWHALL LAND AND FARMING COMPANY
(A CALIFORNIA LIMITED PARTNERSHIP)

ACQUISITION, FUNDING AND DISCLOSURE AGREEMENT

DATED AS OF JUNE 1, 2022

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COUNTY OF LOS ANGELES

COUNTY OF LOS ANGELES
COMMUNITY FACILITIES DISTRICT NO. 2021-01
(VALENCIA-FACILITIES)

THE NEWHALL LAND AND FARMING COMPANY
(A CALIFORNIA LIMITED PARTNERSHIP)

ACQUISITION, FUNDING AND DISCLOSURE AGREEMENT

THIS ACQUISITION, FUNDING AND DISCLOSURE AGREEMENT (the "**Agreement**") is dated as of June 1, 2022, by and among the COUNTY OF LOS ANGELES, a political subdivision of the State of California (the "**County**"), the COUNTY OF LOS ANGELES COMMUNITY FACILITIES DISTRICT NO. 2021-01 (VALENCIA-FACILITIES) (the "**District**"), and THE NEWHALL LAND AND FARMING COMPANY (A CALIFORNIA LIMITED PARTNERSHIP), a California limited partnership (the "**Company**").

R E C I T A L S:

A. In connection with the development of the Valencia project by the Company (herein, the "**Project**"), on March 9, 2021 the Board of Supervisors of the County of Los Angeles (the "**Board of Supervisors**") formed and established the District pursuant to the provisions of the Mello-Roos Community Facilities Act of 1982, as amended, being Chapter 2.5 (commencing with Section 53311) of Part 1 of Division 2 of Title 5 of the California Government Code (the "**Act**"). The parties hereto acknowledge that the District has been established as a legally constituted governmental entity pursuant to the Act. The land included within the District and Improvement Area No. 1 therein ("**Improvement Area No. 1**") and the land included as proposed to be annexed in the future to the District (the "**Future Annexation Area**") are described on the map recorded with the County Recorder on February 4, 2021 in the Book of Maps of Assessment and Community

Facilities Districts in the County Recorder's Office in Book No. 195 Page No. 80-83 as Instrument No. 2021-10197579. The Company and the County will propose to annex land within the Future Annexation Area into the District as one or more future Improvement Areas (each, an "**Improvement Area**" or, collectively, the "**Improvement Areas**") by unanimous written consent of the owners of the land proposed to be annexed and approval of the Board of Supervisors acting as the Legislative Body of the District.

B. The purpose of the District is to provide for financing of "**Facilities**," as shown in Exhibit A, which are defined to mean all or a portion of the costs of the purchase, construction, modification, expansion, improvement or rehabilitation of facilities permitted under the Act and that are required as conditions of development of the property within the District, the Future Annexation Area, and any other property annexed to the District including, but not limited to, certain (i) road improvements (including but not limited to Magic Mountain Parkway, Commerce Center Drive, Westridge Parkway, Long Canyon Road, Valencia Boulevard, Legacy Village Road, Potrero Valley Road, Homestead South Road, Landmark Road, Chiquito Valley Road, The Old Road, Henry Mayo Drive, and Wolcott), (ii) sewer improvements (including but not limited to those included in the rights of way of the streets listed above), (iii) water improvements (including but not limited to those included in the rights of way of the streets listed above), (iv) storm drain improvements (including but not limited to those included in the rights of way of the streets listed above), (v) utility improvements (including but not limited to those included in the rights of way of the streets listed above), (vi) median/parkway landscaping (including but not limited to that associated with the streets listed above), (vii) water quality basins, (viii) bridge improvements, (ix) improvements to SR 126, (x) interchanges, bridges, and pedestrian bridges, (xi) public parks, (xii) libraries, (xiii) fire stations, (xiv) potable and recycled water distribution facilities, (xv) wastewater reclamation plant, including site acquisition, site development and facility improvements, (xvi) utility corridors, and (xvii) trails and landscaping. The Facilities may be financed by the issuance of one or more series of bonds

(referred to herein as "**Bonds**") on behalf of one or more Improvement Areas or directly from special taxes collected on behalf of one or more Improvement Areas. The Facilities authorized to be financed may be located within or outside the boundaries of the District or the Future Annexation Area or any Improvement Area located therein (as originally designated and as designated in the future in conjunction with subsequent annexations of any other property). The Facilities and the estimated cost thereof are described in the community facilities district report for the District and filed with the Board of Supervisors (the "**Report**").

C. The District and the Future Annexation Area include approximately 10,668.13 gross acres of land within the unincorporated area of the County which is being developed by the Company. The land within the District and the Future Annexation Area will be benefited by the construction and/or acquisition of the Facilities.

D. The purpose of this Agreement is to provide for coordination by and among the County, the District and the Company with regard to the use of proceeds from the proposed issuance of one or more series of Bonds of the District on behalf of one or more of the Improvement Areas. The proceeds of Bonds of the District, when and if issued, will be the primary source of funds applied to finance all or a portion of the Facilities listed in Exhibit A.

E. In forming the District, designating Improvement Area No. 1, and identifying the Future Annexation Area, the County and the Company have established a financing program that will require the designation of new Improvement Areas as additional property in the Project is ready for development, and this Agreement sets forth the criteria for annexing parcels in the Future Annexation Area into the District from time to time.

F. Among other Facilities, the District is authorized by the Act to finance Facilities to be owned by the County as described and listed in Part I of Exhibit A (the "**County Facilities**"). Exhibit A may be amended from time to time to reflect additional County Facilities.

G. The District is authorized by the Act and upon execution of a Joint Community Facilities Agreement (the "**Water Agency JCFA**") by and among the County, the Company and the Santa Clarita Valley Water Agency (the "**Water Agency**") to acquire and finance the acquisition and/or construction of the portion of the Facilities consisting of water facilities described in the Water Agency JCFA and listed in Part II of Exhibit A (the "**Water Agency Facilities**"). Exhibit A may be amended from time to time to reflect additional Water Agency Facilities.

H. The District is authorized by the Act and upon execution of a Joint Community Facilities Agreement (the "**Sanitation District JCFA**") by and among the County, the Company and the Newhall Ranch Sanitation District of Los Angeles County (the "**Sanitation District**") to acquire and finance the acquisition and/or construction of the portion of the Facilities consisting of sewer facilities described in the Sanitation District JCFA and listed in Part III of Exhibit A (the "**Sanitation District Facilities**"). Exhibit A may be amended from time to time to reflect additional Sanitation District Facilities.

I. The District is authorized by the Act and upon execution of a Joint Community Facilities Agreement (the "**Flood Control District JCFA**") by and among the County, the Company and the Los Angeles County Flood Control District (the "**LACFCD**") to acquire and finance the acquisition and/or construction of the portion of the Facilities consisting of storm drain improvements or drainage systems described in the Flood Control District JCFA and listed in Part IV of Exhibit A (the "**Flood Control Facilities**"). Exhibit A may be amended from time to time to reflect additional Flood Control Facilities.

J. This Agreement is applicable to the acquisition and/or construction of the Facilities from the **CFD Sources** (as defined herein) generated from the District and each Improvement Area that currently exists or that may be designated in the future from the Future Annexation Area or other property.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth herein, the parties hereto agree as follows:

Section 1. Recitals. Each of the above recitals is incorporated herein and is true and correct.

Section 2. Future Annexation of Improvement Areas. The Company anticipates requesting, or causing to be requested, from time to time, the Board of Supervisors to annex portions of the Future Annexation Area into the District as one or more additional Improvement Areas. In connection with each annexation to the District of a portion of the Future Annexation Area, the Company shall notify the County in writing of its intention and desire to annex, or cause annexation of, such property (the "**Notice to Annex**") and shall deposit with the County moneys sufficient to cover the County and its consultants costs associated with such annexation, including but not limited to costs of County staff time, County Counsel and the County's municipal advisor, special tax consultant, market absorption consultant and bond counsel. Such deposit shall be reimbursable from proceeds of Bonds issued by the District on behalf of such Improvement Area when and if issued. Following receipt of each Notice to Annex from the Company, the County, the District, and the Company shall do the following in connection with the proposed annexation to the District:

(a) Special Tax Consultant. The County shall retain a special tax consultant to draft the rate and method of apportionment of special tax (an "**RMA**") for the proposed Improvement Area. Subject to subsection (b) below, the Company shall provide its desired land use classes and special tax rates for the proposed Improvement Area to the special tax consultant who shall incorporate them into the RMA for the proposed Improvement Area, provided that they are consistent with the terms of this Agreement, the Act and federal tax laws for the issuance of tax exempt bonds. The Company shall establish the special tax rates for all land use classes. The

Company and the County agree that the special tax rates may differ from those set forth in the RMA for Improvement Area No. 1, but are subject to the limitations set forth in subsection (c) below.

(b) Market Absorption Consultant. The County shall engage a market absorption consultant to produce a price point study identifying the projected sales prices of residential units in such proposed Improvement Area.

(c) Effective Tax Rate Limitation. In no event shall the effective tax rate on residential units in such proposed Improvement Area to be annexed to the District exceed 1.85% of the sales prices for residential units in the proposed Improvement Area at the time of annexation as set forth in the price point study. In determining the effective tax rate, only the taxes, special taxes, assessments and charges that are collected on the County secured tax roll shall be included in the calculation; homeowner or property association assessments will not be part of the calculation.

(d) Annexation Map. An annexation map for the proposed Improvement Area shall be prepared by, or on behalf of, the Company (the "**Annexation Map**").

(e) Escalator. The RMA for the proposed Improvement Area shall include an annual 2% escalation of the special tax.

(f) Further Price Point Study. The RMA for the proposed Improvement Area shall provide that no earlier than 180 days prior to the issuance of the first series of Bonds for that Improvement Area, another price point study shall be performed to confirm that the effective tax rate on residential units in such Improvement Area is not in excess of 1.85% of the sales prices for such residential units based on the updated price points. If the price point study determines that effective tax rates for a land use class are in excess of such levels, the RMA shall provide for a reduction of the special taxes for such land use class so that the effective tax rate for residential units within such land use class is 1.85%. The reductions, if required, shall be only for those land use classes that are in excess of the 1.85% level, and there shall be no requirement that all land use classes must be

proportionately reduced. The reduction shall be made administratively without the requirement for legislative action.

(g) Unanimous Consent. Property within the Future Annexation Area shall be annexed to the District by the execution of a unanimous consent by the owners of the property proposed for annexation (the "**Unanimous Consent**"). The property proposed to be annexed may be owned by the Company and/or one or more merchant builders. If the property to be annexed is owned by one or more merchant builders, the Company shall cause such merchant builders to execute and deliver the Unanimous Consents required. Notwithstanding that one or more merchant builders may own the property to be annexed, the District will process the annexation only upon the receipt of the Notice to Annex from the Company as the master developer.

(h) Bonded Indebtedness Limit. The Unanimous Consent shall include the maximum bonded indebtedness amount for the proposed Improvement Area as determined by the Company based on the special tax rates in the proposed RMA based on consultation with the Special Tax Consultant and the County.

(i) PayGo Special Taxes. The RMA shall provide that the District shall levy special taxes on Developed Property (as defined in the RMA) within the proposed Improvement Area at the maximum special tax rates regardless of whether Bonds have been issued until the earlier of (i) the fiscal year following the issuance of the last series of Bonds secured by the Special Tax for such Improvement Area, (ii) the third fiscal year following the fiscal year in which the first series of Bonds for such Improvement Area were issued, and (iii) the fifth fiscal year following the fiscal year in which the Special Tax was first levied for such proposed Improvement Area. Levying special taxes on Developed Property at the maximum special tax rates as described above may produce special taxes not needed for debt service on Bonds issued in such proposed Improvement Area (if any), for administrative expenses, or for replenishment of the reserve fund (if any) for such proposed Improvement Area. These surplus special taxes shall be referred to herein as "**PayGo Special Taxes**"

and such PayGo Special Taxes shall be used to finance Facilities to the extent not required to pay administrative expenses, replenish debt service reserve funds or pay debt service on Bonds. Prior to the issuance of Bonds, the PayGo Special Taxes shall be held in an account maintained by the County, and such amounts may be used to finance Facilities. After the issuance of Bonds, and upon release of such funds from the Special Tax Fund established under any Bond Indenture (as defined herein) for the Bonds of any Improvement Area, such PayGo Special Taxes shall be deposited into a separate account of the Acquisition and Construction Fund or such other fund or account as may be designated in such Bond Indenture. The accounts which hold the PayGo Special Taxes, whether held by the County or the Trustee, shall be referred to herein collectively as the "**PayGo Account**."

(j) Term of Special Tax. The RMA shall provide that the term of the special tax in the proposed Improvement Area shall be for the earlier of (i) forty (40) years from the first fiscal year following the date of annexation (which shall be deemed the date that a Notice of Special Tax Lien is recorded on the property to be annexed), or (ii) the final maturity of the Bonds issued in such proposed Improvement Area.

(k) CFD Sources. The proposed Improvement Area shall be authorized to finance any of the Facilities regardless of geographic location of the Facilities from all of the following sources (herein, the "**CFD Sources**"): (i) proceeds of Bonds; (ii) PayGo Special Taxes; and (iii) any prepayments of special taxes collected for the financing of facilities under the RMA for the proposed Improvement Area.

(l) Submittal and Approval. The Unanimous Consent shall include the RMA, the Annexation Map, and the Assessor's Parcel Numbers and name(s) of owner(s) of the property to be annexed. Once the executed Unanimous Consent is submitted to the District, the Board of Supervisors shall place an annexation resolution on its next available agenda as determined by the County. Neither a public hearing nor an election is required to approve the annexation. The District shall cooperate to approve the Annexation Map and order the recordation of the Annexation Map and

the Notice of Special Tax Lien if the proposed annexation satisfies all of the conditions set forth in this Section 2. The resolution approving the annexation shall direct that the Annexation Map and the Notice of Special Tax Lien be promptly recorded.

(m) Annexation to Services CFD. The parties acknowledge and agree that (i) a condition precedent to the annexation of any property to the District will be that such property is either already located within or annexed to the County of Los Angeles Community Facilities District No. 2021-02 (Valencia-Services) (the "**Services CFD**") simultaneously with its annexation to the District, and (ii) a condition precedent to the annexation of any property to the District will be the annexation of the property to the Services CFD. If property is required to be annexed to the Services CFD as a new tax zone, the County shall establish the special tax rates to be sufficient to finance the services necessary to serve the new tax zone. The Company may request annexation to the District and the Services CFD in a consolidated Unanimous Consent.

Section 3. Sale of District Bonds and Related Agreements of Company.

(a) Sale of District Bonds. From time to time following the receipt of Company's written request and a deposit for non-contingent costs, the District shall commence all necessary proceedings under the Act for the issuance, sale and delivery of one or more series of Bonds. The Board of Supervisors will authorize the sale of each series of Bonds in accordance with the terms and conditions of a resolution of issuance and a fiscal agent agreement, indenture of trust or other agreement providing for, among other matters, the issuance of each series of Bonds and the establishment of the Acquisition and Construction Fund (with subaccounts therein for each of the County Facilities, the Water Agency Facilities, the Sanitation District Facilities and the Flood Control Facilities), as it may be amended or supplemented from time to time (individually a "**Bond Indenture**" or, collectively, the "**Bond Indentures**"), by and between the District and the trustee named therein. The amount and timing of the sale of each series of Bonds shall be in all respects subject to the sole discretion and approval of the District. The Bonds may be tax-exempt or taxable.

Nothing contained herein shall be construed as requiring the District to issue Bonds or to levy any special tax in accordance with the Act (except as expressly provided herein).

(b) Cooperation in Initial and Continuing Disclosure. The Company agrees to provide all information regarding the planned development of the property within the District which is necessary to ensure that the official statement for each series of Bonds complies with the requirements of Rule 15c2-12 of the Securities and Exchange Commission and all other applicable federal and state securities laws. As a condition to the issuance of each series of Bonds, if required by the County or the underwriter for the Bonds, the Company further agrees to enter into a Continuing Disclosure Agreement. The Company also acknowledges that as a condition to the issuance of each series of Bonds, the County or the underwriter for the Bonds may require the Company (if it were to become a homebuilder) and each developer or builder in the District to provide initial disclosure and certain semiannual and event disclosures related to the District -and/or the applicable Improvement Areas to the extent determined necessary by the District to comply with federal and state securities laws.

Section 4. Deposit and Use of CFD Sources.

(a) Application of Bond Proceeds for District Formation Costs, Costs of Issuance and Reserve Account. The proceeds of each series of Bonds will be applied first to pay any costs of forming the District (including the reimbursement of the Company for any costs advanced), proceedings relating to annexing or designating any Improvement Areas therein and issuing such series of Bonds and funding the Reserve Account established under the applicable Bond Indenture.

(b) Application of Bond Proceeds for Facilities. All proceeds of each series of Bonds remaining after the funding of the items described in (a) above shall be deposited in the Acquisition and Construction Fund established in the applicable Bond Indenture and shall be applied, from time to time, to finance the construction and acquisition of the Facilities listed in Exhibit A. All of the Facilities are to be constructed by or at the direction of the Company (or its licensed affiliate)

for acquisition by the County, the Water Agency, the Sanitation District, or the Flood Control District in accordance with the provisions of this Agreement and the applicable JCFA.

Amounts in the County Facilities Account shall be disbursed, from time to time, to acquire and construct the County Facilities. Amounts in the Water Agency Facilities Account shall be disbursed, from time to time, to finance the acquisition and construction of the Water Agency Facilities in accordance with the provisions of this Agreement and the Water Agency JCFA. Amounts in the Sanitation District Facilities Account shall be disbursed, from time to time, to finance the acquisition and construction of the Sanitation District Facilities in accordance with the provisions of this Agreement and the Sanitation District JCFA. Amounts in the Flood Control Facilities Account shall be disbursed from time to time, to finance the acquisition and construction of the Flood Control Facilities in accordance with the provisions of this Agreement and the Flood Control District JCFA.

Upon mutual approval of the District and the Company, amounts may be transferred from one account to another account from time to time. For purposes of the immediately preceding sentence, the County Treasurer and Tax Collector or his/her designee (each an "Authorized Officer") may provide such approval on behalf of the District.

(c) Allocation of Interest Earnings. The District intends to invest amounts on deposit in the Acquisition and Construction Fund in investments permitted by law. Interest earnings realized on amounts in each Account of the Acquisition and Construction Fund will remain in such Account until disbursed in accordance with this Agreement.

(d) Other Applications of Bond Proceeds by the Board of Supervisors. Notwithstanding any other provision of this Agreement, if fifty-four (54) months after the date of issuance of a series of Bonds any unexpended proceeds of such series of Bonds remain in an Account of the Acquisition and Construction Fund an Authorized Officer, in his or her sole discretion upon sixty (60) days prior notice to Company, may either direct such proceeds either (i) to be reallocated

to another Account to reimburse eligible costs previously incurred for the Facilities, or (ii) to the payment of principal due on the applicable series of Bonds or to the redemption or purchase of the applicable series of Bonds in accordance with the applicable Bond Indenture or, upon direction of the Board of Supervisors, for other lawful purposes of the District; provided however, that the Bond proceeds may remain in an Account of the Acquisition and Construction Fund if an opinion of nationally recognized Bond Counsel acceptable to the County is provided to the County that confirms that if such Bond proceeds remain unexpended or are not used to redeem the Bonds there will be an affect on the exclusion of interest on the Bonds from years income for federal tax purposes.

(e) Prepayments. To the extent authorized under the applicable RMA, any prepayments of special tax obligations with respect to an Improvement Area before the issuance of the first series of Bonds for such Improvement Area shall be placed in a special fund to be held by the County (the "**Prepayment Fund**"), separate and apart from the proceeds of the Bonds and PayGo Special Taxes. A separate Prepayment Fund will be created and maintained for each Improvement Area. In addition, after the issuance of the first series of Bonds for an Improvement Area, but only to the extent that a portion of such prepayments are required by the applicable RMA to be allocated to the costs of Facilities, such portion of the prepayments of special tax obligations with respect to an Improvement Area shall be deposited in the Prepayment Fund for the applicable Improvement Area. Moneys in the Prepayment Fund for an Improvement Area shall be a source for the payment of the costs of the acquisition and construction of the Facilities (and the Discrete Components thereof as defined in Section 6.c.) necessary for the development of such Improvement Area and shall be applied in the same manner as the proceeds of Bonds and PayGo Special Taxes.

(f) PayGo Special Taxes. All PayGo Special Taxes on deposit in a PayGo Account that were generated in any Improvement Area shall be a source for the payment of the acquisition and construction costs of any Facilities and the Discrete Components thereof, regardless

of the geographic location of the Facilities and Discrete Components, and shall be applied in the same manner as the proceeds of Bonds and the Prepayment Fund for such Improvement Area.

Section 5. Acquisition and Construction of and Payment for Facilities. Except as provided in the next sentence, the provisions of this Section 5 apply to all of the County Facilities, Water Agency Facilities, Sanitation District Facilities, Flood Control Facilities, and any Facilities to be acquired by a utility. The provisions of subsections (c), (f), (g), and (i) below apply only to the County Facilities and the Flood Control Facilities. The County expects to acquire the Flood Control Facilities from the Company and to request the LACFCD to accept the transfer and conveyance of such Flood Control Facilities for operations and maintenance.

(a) Plans for Facilities. The Company represents that it has obtained or will obtain approval of the Plans (as defined herein) from all appropriate departments of the County and from any other public entity or public utility from which such approval must be obtained. The Company further represents that the Facilities have been or will be constructed in full compliance with such Plans and any change orders thereto, as approved in the same manner. The term "**Plans**" means the plans and specifications, for the Facilities or Discrete Components thereof

(b) Duty of Company to Construct. All Facilities to be acquired hereunder shall be constructed by or at the direction of the Company (or its licensed affiliate). All Facilities shall be constructed in accordance with the applicable legal requirements, the approved Plans, the Conditions of Approval, this Agreement and the applicable JCFA. The term "**Conditions of Approval**" means any and all conditions of approvals and mitigation measures imposed in connection with the granting of the land use entitlements, permits and approvals for the development of the Project, including but not limited to any subdivision improvement agreement (sometimes referred to by the County as a "**Multiple Agreement**"), owner participation agreement, development agreement, or other agreement with the County relating to the development of the Project or the installation of the Facilities. The Company (or its licensed affiliate) shall perform all of its obligations hereunder and

shall conduct all operations with respect to the construction of the Facilities in a good, workmanlike and commercially reasonable manner, with the standard of diligence and care normally employed by duly qualified persons utilizing their commercially reasonable efforts in the performance of comparable work and in accordance with generally accepted practices appropriate to the activities undertaken.

The Company shall be obligated: (i) to construct, or cause to be constructed, and cause conveyance of all Facilities (including Discrete Components thereof) in accordance with the Conditions of Approval and the Company's timing of development of the Project, and (ii) subject to the use of available CFD Sources to pay the Purchase Prices (as defined herein) of Facilities in accordance with this Agreement, to use its own funds to pay all costs associated with such construction and conveyance(s), except as may be otherwise expressly provided in the Conditions of Approval. Notwithstanding the foregoing, nothing in this Agreement shall prevent the Company from applying for or applying public or private funds (e.g., grants, State funds, etc.) in addition to its own funds and any CFD Sources for the construction of Facilities; provided that in no event shall the Company be reimbursed more than once for the Facility or Discrete Component thereof; i.e. no "double dipping."

The Company shall not be relieved of its obligation to construct each Facility (including Discrete Components thereof) and convey each such Facility to the County or other public agency in accordance with the Conditions of Approval, this Agreement and the applicable JCFA even if the total CFD Sources available over time is insufficient to pay the Purchase Price (defined in Section 6) thereof. This Agreement shall not alter any obligation of the Company or any owner of land in the Project relating to the public improvements required in connection with the development of land within the Project, whether such obligation is imposed as a Condition of Approval or arises under any other law, regulation, government approval, or for any other reason.

(c) Bid Procedures for County Facilities and Flood Control Facilities. The following bid procedures shall apply to contracts for the construction of County Facilities and Flood Control Facilities under this Agreement except for the **Exhibit B Facilities** (as defined herein), which are Facilities that were bid prior to the date of this Agreement. These bid procedures do not apply to soft costs such as engineering and architecture costs, or to any materials needed in the construction of the Facilities. For materials that are not included in a bid as described in this section, the Company will request bids from at least three vendors and purchase materials from the lowest cost responsive supplier.

(i) Company shall work with the County to create a list of pre-qualified contractors using a set of objective prequalification factors mutually acceptable to the Company and the County.

(ii) The Company shall request bids (A) from at least three (3) pre-qualified contractors or (B) if due to the nature of the Facility being constructed, the number of pre-qualified contractors is less than three, then the request for bids from less than three contractors is acceptable if determined by the County to be acceptable.

(iii) Company shall distribute notices inviting formal bids. The notices shall be distributed (by mail or email) no more than thirty (30) calendar days and not less than 10 calendar days before the opening date of the bids. The notices shall distinctly describe the project and state the time and place for submission of bids.

(iv) Bids shall be submitted to the Company either via email or deposit into an electronic portal, as the Company may direct from time to time. The bids shall be received and opened by the Company and there shall be no requirement for a public bid opening. At the time that the bids are due, the Company shall open the bids that have been received. The Company may contact one or more of the bidders and request clarification of any bid or adjustments to the bid to comply with the

specifications of the proposed project so that all bids may be evaluated on a comparable basis.

(v) Company shall submit to the County written evidence of compliance with the competitive bidding procedures set forth herein, including evidence of the required noticing, a listing of those to whom bids were requested, a listing of all responsive bids and their amounts (as adjusted pursuant to subsection (iv), if applicable), and the name or names of the contractor or contractors to whom the Company proposed to award the contracts for such construction.

(vi) The bidding documents for the Facilities shall require (A) performance of services in accordance with the approved Plans (as modified or amended from time to time), (B) liability and worker's compensation insurance naming the Company, the County, and their respective designees as additional insureds, (C) retention amounts, and (D) performance and payment bonds.

(vii) The contract for the construction of a Facility shall be awarded to the responsible bidder submitting the lowest responsive bid (as adjusted pursuant to subsection (iv), if applicable) for the construction of such Facility, subject to written concurrence from the County as provided in Section 5(f).

(d) Prevailing Wages. The Company covenants that it will require that all contracts or subcontracts for the construction of the Facilities require compliance with any applicable law or regulation for the payment of prevailing wages for such construction.

(e) Applicability of Public Contracts Code. The parties hereto agree that this Agreement is for the acquisition of certain Facilities to be owned by the County, the Water Agency, the LACFCD, the Sanitation District, and utilities, and the sale of one or more series of Bonds for the payment of the construction and/or acquisition cost of such Facilities and such other amounts as are herein provided, and is not nor is intended to be a public works contract under the California Public

Contracts Code. The County and the Company agree that the provisions of the California Public Contracts Code do not apply to the construction of the Facilities. The County and the Company agree that this Agreement is necessary to assure the timely and satisfactory completion of the Facilities and establishes the terms under which the Facilities shall be constructed as if they were constructed under the direction and supervision, or under the authority of, the County, as required by the Act. In performing this Agreement, the Company is an independent contractor and not the agent of the County or the District. Neither the County nor the District shall have responsibility for payment to any contractor or supplier of the Company. Notwithstanding the foregoing, the Company shall be required to post all payment and performance bonds required in connection with the final conditions of approval for the Project.

(f) Contracts for County Facilities and Flood Control Facilities. The Company (or its licensed affiliate) shall be responsible for entering into all contracts required for the construction of the County Facilities or Flood Control Facilities. All such contracts shall be submitted to the County for review and concurrence prior to commencement of the work identified in the contract. For all construction contracts, as well as soft costs related to the construction work, Company shall provide to County a spreadsheet of the construction bid results, the anticipated cost for soft costs, and a letter requesting the County's concurrence ("**Letter of Concurrence**") of funding eligibility and award of the construction contract to the responsible bidder submitting the lowest responsive bid. The form of Letter of Concurrence is attached hereto as Exhibit C. The County shall make reasonable efforts to review construction contracts and provide a Letter of Concurrence within ten (10) days. If the County fails to review and provide its concurrence with the terms the contract within fifteen (15) business days, the County shall be deemed to concur. If time is of the essence, the Company may proceed at its own risk, and potentially forfeit reimbursement from the District for this work, pending County approval of the contract and provision of the Letter of Concurrence; provided, however, that in no event shall the Company be permitted to submit, or

obtain approval of, a contract more than twenty (20) business days following the execution of a contract with a contractor (the parties acknowledging that the Company may under certain circumstances need to cause the contractor to commence work under such contract in the field prior to the submission to the County).

(g) Change Orders for County Facilities and Flood Control Facilities. The Company (or its licensed affiliate) shall be responsible for entering into all change orders required for the construction of the County Facilities or Flood Control Facilities. The Company shall submit change work order documentation to the County accompanied by a Potential Change of Work ("**PCOW**") form to determine funding eligibility and to obtain County approval prior to implementing changes. The County shall make reasonable efforts to approve the PCOW within five (5) business days. The form of PCOW is attached hereto as Exhibit D. If time is of the essence, the Company may proceed at its own risk, and potentially forfeit reimbursement from the District for this work, pending County approval of the changes; provided, however, that in no event shall the Company be permitted to submit a PCOW more than twenty (20) business days following the issuance of a written change order to the contractor (the parties acknowledging that the Company may under certain circumstances need to cause the contractor to commence such implementing changes in the field prior to the final design or engineering and written change order is written and executed by the Company and applicable contractor). PCOWs shall include the signature of the County (on behalf of itself or on behalf of LACFCD) inspector assigned to the contract.

(h) Independent Contractor. In performing this Agreement, the Company is an independent contractor and not the agent or employee of the County or the District. Neither the County nor the District shall be responsible for making any payments directly to any contractor, subcontractor, agent, employee or supplier of the Company.

(i) Periodic Meetings for County Facilities and Flood Control Facilities. From time to time at the request of the County, representatives of the Company shall meet and confer with

County staff, consultants and contractors regarding matters arising hereunder with respect to the County Facilities or the Flood Control Facilities and the progress in constructing and acquiring the same, and as to any other matter related to the County Facilities, the Flood Control Facilities or this Agreement. The Company shall advise the County in advance of any coordination and scheduling meetings to be held with contractors relating to the County Facilities or the Flood Control Facilities, in the ordinary course of performance of an individual contract. The County shall have the right to be present at such meetings, and to meet and confer with individual contractors if deemed advisable by the County to resolve disputes and/or ensure the proper completion of the Facilities.

(j) Non-County Facilities and Non-Flood Control Facilities. Any Facilities or Discrete Components thereof to be owned by a utility or a local agency other than the County or the LACFCD shall be bid and constructed in accordance with an agreement between the Company and the utility, district, or agency.

(k) Exhibit B Facilities. Notwithstanding anything herein to the contrary, prior to the execution of this Agreement, the Company has solicited bids and may have begun or completed construction for the Facilities listed in Exhibit B attached hereto (the "**Exhibit B Facilities**"). The Company certifies as to the following with respect to the Exhibit B Facilities: Exhibit B Facilities were bid consistently with the following: (i) the contract was competitively bid and the construction contract was awarded to the responsible bidder submitting the lowest responsive bid, (ii) the contractors listed in Exhibit B are reputable, licensed contractors registered with the California Contractors State License Board, (iii) the bid was received in an arms-length transaction with the Company, and (iv) the bidders have no proprietary interest in the overall Project. Upon written request by the County, the Company will supply backup documentation to demonstrate compliance with 5c (i)-(iv) above for the Exhibit B Facilities.

Section 6. Acquisition of Facilities. The District hereby agrees to use the CFD Sources to pay the Company the Actual Cost (as defined below), as approved in accordance with this Section

for each Facility and Discrete Component(the "**Purchase Price**"), subject to the terms and conditions hereof.

(a) Inspection. No payment hereunder shall be made by the District to the Company for a Facility or Discrete Component thereof until the Facility or Discrete Component thereof has been inspected by the County or other applicable public entity or utility and found to be constructed in accordance with the Plans approved by the County or other applicable public entity or utility. For Facilities or Discrete Components thereof to be acquired by the County, the Company shall request inspection using applicable County procedures. For Facilities or Discrete Components thereof to be acquired by other public entities or utilities, the Company shall request inspection using applicable procedures from the other public entities or utilities and shall be responsible for obtaining such copies of inspections and providing written evidence thereof to the County. The Company agrees to pay all inspection, permit and other fees of the County and other public agencies applicable to construction of the Facilities or Discrete Components thereof, which fees may be subject to reimbursement under this Agreement as part of the Actual Cost (as defined below) of the Facilities.

(b) Actual Cost. The term "**Actual Cost**" means, with respect to a Facility or Discrete Component, an amount equal to the costs incurred by the Company (or its licensed affiliate), including (a) the actual cost of constructing such Facility or Discrete Component, including labor, materials, tools, and equipment costs, (b) the costs of any and all necessary professional and technical services rendered which are related to the design and construction of such Facility or Discrete Component, including, but not limited to, accounting, legal, architectural, engineering, inspection, materials testing, consulting services and similar professional services, (c) the actual cost of actions necessary to ensure the design and construction of the Facility or Discrete Component meets the mitigation, monitoring, and reporting plan described in the applicable approved final environmental impact report, except any costs related to litigation, (d) the amount of the fees actually paid to governmental entities or utilities in order to obtain permits, licenses or other necessary

governmental approvals for such Facility or Discrete Component, (e) the actual cost for necessary professional services related to the construction of such Facility or Discrete Component, including engineering, inspection, construction staking, materials testing and similar professional services, (f) a fee for construction management and supervision (which may be to the Company or to an outside firm engaged by the Company), which cost shall not exceed 3% of the cost of constructing such Facility or Discrete Component, as determined pursuant to clause (a) of this definition, (g) the actual cost of any title insurance, workers' compensation insurance, commercial/comprehensive general liability insurance, builder's risk/property insurance, or other insurance required hereby for the construction of such Facility or Discrete Component, (h) the actual cost of any payment and performance bonds required to construct the Facility, (i) any administration and oversight charges paid to the County for the implementation of this Agreement, (j) and the lesser of the actual cost to the Company, or its affiliates, for the purchase of the real property or the appraised value of the real property confirmed by an appraiser mutually acceptable to the Company and the County at the time of conveyance of any real property or interest therein acquired from a party other than the Company or its affiliates, which real property or interest therein is either necessary for the construction of such Facility or Discrete Component (*e.g.*, temporary construction easements, haul roads, etc.) or is required to be conveyed with such Facility or Discrete Component in order to convey title thereto to the County or other public entity, and (k) other costs directly related to the construction and/or acquisition of such Facility as reasonably determined to be directly related to such construction and/or acquisition by the County in its sole discretion. No item of cost relating to a Facility or Discrete Component shall be included in more than one category of cost under this definition.

(c) Acquisition of Discrete Components of County Facilities and Flood Control Facilities. Subject to the provisions of Government Code section 53313.51, the County may approve payment of a Discrete Components of County Facilities or Flood Control Facilities prior to completion of the Facility of which the Discrete Components are a part in the manner described in

Section 6(f) herein. The term "**Discrete Component**" means a segment or component of a Facility that can be separately identified, inspected, completed, and capable of serviceable use as determined by the County.

(d) Request for Payment Applicable to all Facilities. Any request for payment hereunder (a "**Payment Request**") by the Company shall: (i) identify the Actual Costs incurred by the Company (or its licensed affiliate) and the amount required to be disbursed, the purpose for which the disbursement is to be made and the person or entity to which the disbursement is to be paid; (ii) contain reasonable and customary back-up documentation, including evidence of payment for all related paid invoices, substantiating the basis for and amount of the requested payment or disbursement as set forth in Section 6(f) herein; (iii) certify that the disbursement is for a purpose eligible to be funded with such amounts to be so disbursed, and in any event that no portion of the amount then being requested to be disbursed was paid pursuant to any previously filed Payment Request; and (iv) provide Project-related documentation, as requested by the County, to substantiate that any costs that are not subject to competitive bidding requirements are reasonable and customary. The County's review of a Payment Request shall be completed within 15 business days of the County's receipt of the Payment Request and the Company's supporting documentation. When such documentation is satisfactory to the County, the County shall Authorize (as defined below) payment of the Purchase Price of the Facilities that are the subject of the Payment Request.

(A) There shall be a presumption of reasonableness as to the amount of the construction contract (or change order) entered into as a result of a call for bids by the Company in accordance with this Agreement. For Actual Costs that are not subject to competitive bidding requirements, the County is not required to authorize payment to the extent that the costs exceed what is determined by the County to be reasonable and customary. For any Facility or Discrete Component to be acquired by a public entity or utility other than the County, the Company shall, at the County's

request, provide written evidence, to the reasonable satisfaction of the County, of the approval of such Actual Cost substantiation and approval of such Facility or Discrete Component from such entity or utility when requesting payment.

(B) The Purchase Price approved for payment hereunder for any Facility or Discrete Component thereof may be paid in any number of installments as CFD Sources become available.

(C) Within ten (10) business days after approving a Payment Request (in whole or in part), the County shall Authorize (as defined herein) payment to be made to the Company exclusively from one or more of the CFD Sources. If there are insufficient CFD Sources to pay the full amount of a Payment Request, then the County shall Authorize payment of as much of the Payment Request amount as there are CFD Sources available, and the payment of the remaining balance of the Payment Request shall be deferred until there are sufficient CFD Sources available. Promptly following the availability of CFD Sources, the County shall, from time to time and in as many installments as necessary, Authorize payment of the remaining balance of the Payment Request. Payment Requests may be paid (i) in any number of installments as CFD Sources become available and (ii) irrespective of the length of time of such deferral of payment. In no event shall the County be required to Authorize the District to make payments for Facilities or Discrete Components from any funding sources other than the CFD Sources. The term "**Authorize**" means either of the following, as the context requires: (i) where payment of a requisition is to be made from CFD Sources held and maintained by the Trustee under the Bond Indenture, the term means that the County provides whatever documentation and written authorization under the Bond Indenture as necessary for the Trustee to make payment on the requisition from the applicable CFD Sources; and (ii) where payment

of a requisition is to be made from CFD Sources held and maintained by the County, the term means that the County authorizes the District to pay the applicable amount to the Company pursuant to the Payment Request.

(D) In connection with processing any Payment Request under this Agreement, the County will use good faith efforts to request any additional information required to Authorize the request as soon as practicable following receipt of the original materials and Company will use its good faith efforts to provide a thorough, organized, and complete response to each request. Company is authorized to communicate directly with the County, and its designees, agents, and contractors to facilitate any additional information request, to facilitate the prompt resolution of any technical issues, and to minimize the amount of time it takes to resolve outstanding issues. In addition to the foregoing, and except as otherwise provided for herein, the parties agree that if a Payment Request includes more than one Discrete Component or Facility, the County will not withhold payment Authorization on any Discrete Component or Facility that has been approved and for which sufficient CFD Sources are available, and will withhold payment Authorization only on such Discrete Components and Facilities for which payment has not been approved.

(E) If Company incurs costs that (1) apply to more than one Facility or Discrete Component (e.g., soft costs), or (2) apply to both Facilities or Discrete Components and improvements other than the Facilities or Discrete Components (e.g., grading), Company shall allocate, or cause the contractor to reasonably allocate, such costs between the Facilities or Discrete Components (in the case of clause (1)), or between the Facilities or Discrete Components and the improvements other than the Facilities or Discrete Components (in the case of clause (2)) (the "**Company Allocation**"). If the County disagrees with the Company Allocation, then the County

and Company shall promptly allocate such costs, on a reasonable basis, between the Facilities or Discrete Components (in the case of clause (1)) or between the Facilities or Discrete Components and the improvements other than the Facilities or Discrete Components (in the case of clause (2)) (the "**Agreed-Upon Allocation**"). The Company Allocation or the Agreed-Upon Allocation, as applicable, will be included as part of the Actual Costs in the Payment Request for the specified Facility or Discrete Component.

(F) Prior to receiving final payment for a Facility, the Company shall submit for and obtain approval of as-built drawings from the County inspection staff and record a Notice of Completion (or its functional equivalent). A copy of the recorded Notice of Completion shall be included with the Payment Request for the final payment of such Facility.

(e) Conditions for Payment. The District shall not be obligated to pay the Purchase Price of any Facility or Discrete Component until the Facility or Discrete Component is constructed and complies with the terms of this Section 6. The Company acknowledges that the County or LACFCD may not accept certain Discrete Components until the Facility of which a Discrete Component is a part has been determined Complete by the County. The County acknowledges that the Discrete Components (or the Facility of which the Discrete Component is a part) do not have to be accepted by the County as a condition precedent to the payment of the Purchase Price for such Discrete Component, but any such payment shall not be made until the Discrete Component has been constructed in accordance with the Plans therefor, as determined by the County or other agency or utility, and, for County Facilities and Flood Control Facilities, the Company shall provide for the operation and routine maintenance of the Discrete Component, in a manner acceptable to the County, until the Discrete Component is accepted by the County. In any

event, the District shall not be obligated to pay the Purchase Price for any Facility or Discrete Component except from the CFD Sources.

Prior to the District paying the Purchase Price for the County and Flood Control Facilities, the Company shall provide to the County (i) documentation indicating that the approved improvement plans, as built drawings or other similar plans and specifications of such County Facility or Flood Control Facility have been received in a form reasonably acceptable to the County, or in lieu thereof, the County may refer to the official improvement plans on file with the Los Angeles County Department of Public Works, (ii) a certificate of the Company, supplemented by information satisfactory to the County, that the improvements being acquired were constructed under the inspection of County inspectors, or under the authority, of the County, (iii) a certificate of the Company stating that no mechanic's liens or other encumbrances have attached, or to the best of its knowledge will attach, to the improvements being acquired, and (iv) if previously required by the County, evidence that performance and payment bonds, in a form acceptable to the County, are on file with the County.

(f) Payment Requests for County Facilities and Flood Control Facilities. The following provisions apply to the payment of a Payment Request submitted by the Company for County Facilities and Flood Control Facilities (herein, the "**County/Flood Facilities**"), or Discrete Components thereof:

(i) Payment When Substantially Complete. The Company may submit a Payment Request for up to 90% of the Actual Cost of a County/Flood Facility or Discrete Component when the County/Flood Facility or Discrete Component is Substantially Complete (as defined herein). With respect to a County/Flood Facility or Discrete Component, when the County (i) determines that such County/Flood Facility or Discrete Component, while not Complete (as defined herein), is Substantially Complete as determined in writing by the County/Flood Control

District, (ii) confirms that such County/Flood Facility or Discrete Component has been constructed in accordance with the Plans therefor, (iii) confirms receipt of the Bid Spread Sheet, the contract, Letter of Concurrence, any PCOWs, and invoice for payment of costs, and (iv) verifies and approves the Actual Cost of such County/Flood Facility or Discrete Component, the County shall sign the Payment Request and authorize payment.

(ii) Payment When Complete. When the Company completes or causes to be completed all work with respect to such County/Flood Facility or Discrete Component and concludes that such County/Flood Facility or Discrete Component is Complete, the Company shall deliver to the County (i) documentation indicating that the approved improvement plans are on file with the Los Angeles County Department of Public Works, and (ii) a Notice of Completion for the County/Flood Facility or Discrete Component. Upon receipt of such information and documentation and determination in writing by the County/Flood Control District that the Notice of Completion is acceptable, and that the Facility or Discrete Component is completed to the satisfaction of the County/Flood Control District, the County shall sign a copy of the Payment Request therefor, indicating thereon that such County/LACFCD Component is Complete and that the amount of the Purchase Price set forth in the Payment Request for such County/Flood Facility or Discrete Component is eligible for payment; provided, however under no circumstances shall the total of the payments in (i) and (ii) above exceed the Purchase Price of the County/Flood Facility.

(iii) The term **"Complete"** means, with respect to a County/Flood Facility or Discrete Component, that the construction of such County/Flood Facility or Discrete Component per the Plans (including all ancillary, non-essential items

included in such County/Flood Facility or Discrete Component) by the Company is, in the reasonable judgment of the County, in all respects satisfactorily complete.

(iv) The term **"Substantially Complete"** means, with respect to a County/Flood Facility or Discrete Component, that the construction of such County/Flood Facility or Discrete Component by the Company has, reached a stage of completion sufficient to allow for serviceable use of such County/Flood Facility or Discrete Component, as determined by the County, and that only the construction of ancillary, non-essential items remains incomplete as identified on a mutually agreed punch-list and completion timeline; provided, however, that a County/Flood Facility or Discrete Component shall not be deemed to be Substantially Complete if, in the reasonable judgment of the County, the cost to complete the construction of such ancillary, non-essential items would exceed 10% of the estimated total Purchase Price of such County/Flood Facility or Discrete Component.

(g) Payment Requests for Non-County Facilities and Non-Flood Control Facilities. From time to time, the Company may submit a Payment Request for the payment of the Purchase Price of Facilities or Discrete Components thereof to be owned by a utility or a local agency other than the County or the LACFCD. The Payment Request shall be accompanied by written documentation from the utility or local agency that the Facilities or Discrete Components have been constructed and inspected pursuant to the utility or local agency standards (which may be contained in an agreement between the Company and the utility or local agency). The amount payable for the Facility or Discrete Component shall be governed by agreements between the Company and the utility or local agency. Within ten (10) business days after receiving the Payment Request, if deemed acceptable by the County, the County shall authorize the Payment Request and forward to the Trustee for payment.

(h) Delinquencies by the Company. Notwithstanding any of the provisions of this Agreement to the contrary, the District shall have the right to withhold payment of the Purchase Price or any increment thereof of any Facility or Discrete Component if the Company is delinquent in the payment of any special taxes levied by the District on properties then owned by the Company within the District. The County shall provide written notice to the Company of the decision to withhold any such payment and shall specify the reason for such decision. If the payment is withheld as a result of the delinquency in the payment of special taxes, the notice shall identify the delinquent parcels and the amount of such delinquency. Upon receipt by the County of evidence reasonably satisfactory to the County of the payment of the delinquent special taxes, the District shall forthwith make any payment which has been withheld pursuant to the provisions of this paragraph.

(i) Expectations of the Parties. The County and District understand and agree that (i) Company will be constructing Facilities or Discrete Components prior to the availability of CFD Sources that will be used to pay for such Facilities or Discrete Components, (ii) the County or the other public agencies that will own and operate such Facilities or Discrete Components may be inspecting such Facilities or Discrete Components and processing and reviewing Payment Requests for such Facilities or Discrete Components with the knowledge that there may be insufficient CFD Sources available at such time, (iii) the Facilities or Discrete Components may be conveyed to and accepted by the County or other local agency that will own and operate such Facilities or Discrete Components when there are insufficient CFD Sources to pay the Purchase Prices of such Facilities or Discrete Components, and (iv) in any such case, the payment of any approved Payment Requests for the Purchase Prices of such Facilities or Discrete Components will be deferred until there are sufficient CFD Sources available to pay the Purchase Prices of such Facilities or Discrete Components, at which time the County will make such payments in accordance with this Agreement. At all times, Company will be constructing such Facilities or Discrete Components with the expectation that the Purchase Prices for such Facilities or Discrete Components will be paid solely

from the CFD Sources; provided, however, that the Company acknowledges that the expected Actual Costs of the Facilities or Discrete Components may exceed the expected available CFD Sources. The conveyance of Facilities or Discrete Components to the County or a local agency or district that will own and operate such Facilities or Discrete Components prior to receipt of the Purchase Prices for such Facilities or Discrete Components shall not be construed as a dedication or gift, or a waiver of the payment of the Purchase Prices, or any part thereof, for such Facilities or Discrete Components. However, if the CFD Sources are insufficient to pay the Purchase Price for a Facility or Discrete Component, the Company, or its affiliate, is not relieved of any obligations under this Agreement, and the District or the County shall have no responsibility to reimburse the Company for any shortfall.

(j) Ownership and Transfer of County Facilities and Flood Control Facilities. The provision of or conveyance of County Facilities and Flood Control Facilities from the Company to the County shall take place as follows:

(i) Real Property. Prior to the final payment for a County Facility or Flood Control Facility, the Company shall cause to be made, or shall have previously made, an irrevocable offer of dedication to the County of the appropriate right, title and interest in and to the portion of the land owned by the Company related to such County Facility or Flood Control Facility to be acquired hereunder, including any temporary construction or access easements. The Company agrees to execute and deliver to the County those documents required to complete the transfer of Acceptable Title (as defined herein) to such portion of the land. "**Acceptable Title**" means title to the land delivered free and clear of all taxes, liens or other monetary, encumbrances, assessments, easements, leases, whether any such item is recorded or unrecorded, except those nonmonetary encumbrances and easements which do not

unreasonably interfere with the intended use of the land and therefore are not required to be cleared from the title.

The Company shall maintain the land and any improvements thereon in good and safe condition until the County accepts the County Facility into the County system for maintenance or accepts the Flood Control Facility.

The County's final acceptance of the land and improvements shall not be unreasonably withheld or delayed.

(ii) Personal Property. If any of the County Facilities or Flood Control Facilities to be acquired from the Company contain personal property, then transfer to the County of such personal property shall be accomplished by a Bill of Sale if the County desires the personal property. Otherwise, the personal property must first be removed before transfer can proceed.

(k) Maintenance. The Company shall be obligated for a period of twelve (12) months from the date the County accepts a County Facility into the County system or the County accepts a Flood Control Facility to provide maintenance, and to repair or replace any defects or failures resulting from the work of the Company or its affiliates, and their contractors or agents. For purposes of this Agreement, the term "**maintenance**" in the immediately preceding sentence means the repair, replacement, or correction of any defects in the Facility, and shall not mean the day-to-day upkeep or correction of normal wear and tear of the Facility (such as watering or weeding for landscape improvements, painting, graffiti removal, etc.). For any contract where the County is not a third-party beneficiary of such contract, upon the expiration of such twelve (12) month period, the Company shall assign to the County all of its rights in any remaining warranties, guarantees or other evidence of contingent obligations of third persons with respect to such County Facilities.

Section 7. Disclosure of Special Tax. The Company covenants and agrees that from and after the date hereof it will provide all forms of disclosure of the special tax to be levied by the

District as required by existing law and by any future laws. In particular, the Company covenants and agrees from and after the date hereof to provide the special tax disclosure notice required by Section 53341.5 of the Act and to retain in its files copies of all notices signed by purchasers in accordance with Section 53341.5. The County shall have the right to inspect and obtain copies of all of the Company's records regarding special tax disclosure.

Section 8. Indemnification and Hold Harmless. The Company hereby assumes the defense of, and indemnifies and saves harmless the County, the District and each of their respective elected officials, officers, directors, employees and agents (each, an "**Indemnified Party**"), from and against all actions, damages, claims, losses or expenses of every type and description to which they may be subjected or put, by reason of, or resulting from, or arising out of (i) the design, engineering and construction of any of the County Facilities or the Flood Control Facilities, or arising out of (ii) a failure of the Company to provide notice of the special tax to be levied by the District, (iii) or arising out of any alleged misstatements of fact or alleged omission of a material fact made by the Company, its officers, directors, employees or agents to the County, the District, the District's Underwriter and its counsel, Appraiser, Special Tax Consultant, Market Absorption Consultant or Bond and Disclosure Counsel regarding the Company, its proposed developments, its property ownership and its contractual arrangements contained in the Official Statement relating to each series of Bonds; provided that the actions, damages, claims, losses and expenses covered by this Section 8 which relate to the County Facilities or the Flood Control Facilities being acquired shall be those arising out of the personal injury or property damage which occurred during the period up to the acceptance of the County Facilities or the Flood Control Facilities by the County, whether or not an action or claim is filed by the date of acceptance of the County Facilities or the Flood Control Facilities; and provided, further, that nothing in this Section 8 shall limit in any manner the Indemnified Party's rights against any of the Company's architects, engineers, contractors or other consultants. Upon written request of the County, the Company shall furnish to the District a certificate or certificates of

insurance substantiating that it has obtained (or that the contractor selected to construct a County Facility or a Flood Control Facility has obtained) for the entire period of the construction of the County Facilities or the Flood Control Facilities a policy of comprehensive or commercial general liability insurance insuring the work for the applicable County Facility or Flood Control Facility and having a combined single limit of liability in the amount of not less than $1,000,000 per occurrence and $2,000,000 in the aggregate. The certificate of insurance shall include an endorsement naming the Indemnified Parties as additional named insureds.

Except as set forth in this Section 8, no provision of this Agreement shall in any way limit the extent of the responsibility of the Company for payment of damages resulting from the operations of the Company, its agents, employees or contractors. Nothing in this Section 8 shall be understood or construed to mean that the Company agrees to indemnify an Indemnified Party for any negligent or wrongful acts or omissions to act of the Indemnified Party or any of their respective officers, directors, employees or agents.

Section 9. Company's Duty to Perform Under Other Agreements. Nothing contained herein shall be construed as affecting the Company's duty to perform its obligations under other agreements, land use regulations or subdivision requirements relating to the land within the District and the Facilities, which obligations are and shall remain independent of the Company's rights and obligations under this Agreement.

Section 10. Audit. The County shall have the right, during normal business hours and upon the giving of ten (10) days' written notice to the Company, to review all books and records of the Company relating to the Facilities.

Section 11. Conflict with Other Agreements. Nothing contained herein shall be construed as releasing the Company from any Conditions of Approval or requirement imposed by any other agreement with the County, and, in the event of a conflicting provision, the more specific provision,

as determined by the County, shall prevail unless such conflicting provision is specifically waived or modified in writing by the County.

Section 12. General Standard of Reasonableness. Any provision of this Agreement which requires the consent, approval, discretion or acceptance of any party hereto or any of their respective employees, officers or agents shall be deemed to require that such consent, approval or acceptance not be unreasonably withheld or delayed, unless such provision expressly incorporates a different standard. The foregoing provision shall not apply to provisions in the Agreement which provide for decisions to be in the sole discretion of the party making the decision.

Section 13. Notices. Any notice, payment or instrument required or permitted by this Agreement to be given or delivered to any party shall be deemed to have been received when personally delivered, the next business day following deposit with a nationally recognized overnight carrier (e.g., FedEx or UPS), or seventy-two (72) hours following deposit of the same in any United States Post Office in California, registered or certified, postage prepaid, addressed as follows:

Company: The Newhall Land and Farming Company (A California Limited Partnership)
c/o Five Point
2000 Five Point, 4th Floor,
Irvine, California 92618,
Attention: Richard Leigh

With a copy to:

The Newhall Land and Farming Company (A California Limited Partnership)
c/o Five Point
15131 Alton Parkway, 4th Floor,
Irvine, California 92618,
Attention: Legal Notices

County or District: County of Los Angeles
500 West Temple Street, Room 434
Los Angeles, CA 90012
Attention: Treasure and Tax Collector
Public Finance Division

With a copy to: Los Angeles County Public Works
900 South Fremont Avenue, 3rd Floor-LDD
Alhambra, CA 91803-1331
Attention: Assistant Deputy Director

Each party may change its address for delivery of notice by delivering written notice of such change of address to the other party.

Section 14. Severability. If any part of this Agreement is held to be illegal or unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall be given effect to the fullest extent reasonably possible.

Section 15. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto. The Company may not assign its rights or obligations hereunder except (i) an Approved Assignment (as defined below) or (ii) with the prior written approval of the County and the District, which shall not be unreasonably withheld or delayed. Notwithstanding the preceding sentence, the Company may assign its rights and obligations herein as security to lenders for the purpose of obtaining loans to finance development within the District or other portion of the Project, but no such assignment shall release the Company from its obligations pursuant to this Agreement, which the Company shall remain obligated to perform itself. The Company shall provide written notice to the County of any assignment of this Agreement at least 15 days prior to the effective date of any such assignment. The term "**Approved Assignment**" means an assignment and assumption of this Agreement pursuant to an assignment and assumption agreement with (i) an affiliate of the Company or a joint venture in which the Company is a member or (ii) an entity (or an affiliate thereof) that acquires all or substantially all of the (x) Company's interest in the Project or (y) business, equity or assets of the Company, whether by merger, reorganization, acquisition, sale, spin-off, carve out, operation of law, or otherwise. An Approved Assignment shall not, by itself, release the Company from, or otherwise terminate, any provision in the Conditions of Approval, or any payment and performance bonds that the Company has posted

pursuant to the Conditions of Approval; any release of the Company or termination of the payment and performance bonds will be governed by the terms of the separate agreement(s) with the Company and the County and/or the payment and performance bonds themselves, and the Conditions of Approval and applicable law.

Section 16. Governing Law. This Agreement and any dispute arising hereunder shall be governed by and interpreted in accordance with the laws of the State of California.

Section 17. Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by another party, or the failure by a party to exercise its rights upon the default of another party, shall not constitute a waiver of such party's right to insist and demand strict compliance by such other party with the terms of this Agreement thereafter.

Section 18. Singular and Plural; Gender. As used herein, the singular of any word includes the plural, and terms in the masculine gender shall include the feminine.

Section 19. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original.

Section 20. Remedies in General; Damages Limited.

(a) Damages Limited. It is acknowledged by the parties that neither the County nor the District would have entered into this Agreement if it were to be liable in damages under or with respect to this Agreement or the application thereof, other than for the payment to the Company of any Purchase Price owing to the Company hereunder. Any and all obligations arising out of or related to this Agreement are the special and limited obligations of the County and/or the District payable only from the CFD Sources, to the extent such CFD Sources may become available. Neither the County nor the District shall have any pecuniary liability for any act or omission on the part of the County or the District. In no event will an act, or an omission or failure to act, by the County or

the District with respect to the sale or proposed sale of any series of Bonds subject the County or the District to pecuniary liability therefor.

In general, each of the parties hereto may pursue any remedy at law or equity available for the breach of any provision of this Agreement; except that the County and the District shall not be liable in damages to the Company, or to any assignee or transferee of the Company, other than to pay up to an amount equal to the Purchase Price for any Facility from available CFD Sources. In light of the foregoing, the Company covenants not to sue for or claim any damages for any alleged breach of, or dispute which arises out of, this Agreement, except for the payment of an amount equal to the Purchase Price of any Facility to be acquired from the Company hereunder, together with interest on the Purchase Price up to the amount of available CFD Sources.

(b) Resolution of Disputes Regarding Purchase Price. Notwithstanding any provision in this Agreement to the contrary, in the event of a dispute as to the amount of the Purchase Price to be paid for any Facility to be acquired hereunder, the County and the District will pay any undisputed portion of the Purchase Price upon compliance with the provisions of this Agreement and may elect to withhold payment of the amount of the Purchase Price in dispute, in which case the parties agree to meet and confer regarding such matter.

Section 21. Entire Agreement; Amendment. This Agreement and the agreements expressly referred to herein contains all of the agreements of the parties hereto with respect to the matters contained herein and no prior or contemporaneous agreement or understandings, oral or written, pertaining to any such matters shall be effective for any purpose. No provision of this Agreement may be modified, waived, amended or added to except by a writing signed by each party hereto.

Section 22. Construction of Agreement. This Agreement has been reviewed by legal counsel for the County, the District, and the Company and shall be deemed for all purposes to have been jointly drafted by such parties. No presumption or rule that ambiguities shall be construed

against the drafting party shall apply to the interpretation or enforcement of this Agreement. The language in all parts of this Agreement, in all cases, shall be construed as a whole and in accordance with its fair meaning and not strictly for or against any party and consistent with the provisions hereof, in order to achieve the objectives of the parties hereunder. The captions of the sections and subsections of this Agreement are for convenience only and shall not be considered or referred to in resolving questions of construction.

Section 23. Authority of Signatories. Each signatory and party hereto hereby represents and warrants to the other parties that it has legal authority and capacity and direction from its principal to enter into this Agreement, and that all resolutions and/or other actions have been taken so as to enable such party to enter into this Agreement.

Section 24. Electronic Signatures. This Agreement may be executed simultaneously or in any number of counterparts, including both counterparts that are executed manually on paper and counterparts that are in the form of electronic records and are executed electronically, whether digital or encrypted, each of which shall be deemed an original and together shall constitute one and the same instrument.

The parties hereby agree to regard facsimile/electronic representations of original signatures of authorized officers of each party, when appearing in appropriate places on this Agreement and on any addenda or amendments thereto, delivered or sent via facsimile or electronic mail or other electronic means, as legally sufficient evidence that such original signatures have been affixed to this Agreement and any addenda or amendments thereto such that the parties need not follow up facsimile/electronic transmissions of such documents with subsequent (non-facsimile/electronic) transmission of "original" versions of such documents.

Further, the parties: (i) agree that an electronic signature of any party may be used to authenticate this Agreement or any addenda or amendment thereto, and if used, will have the same force and effect as a manual signature; (ii) acknowledge that if an electronic signature is used, the

other party will rely on such signature as binding the party using such signature, and (iii) hereby waive any defenses to the enforcement of the terms of this agreement based on the foregoing forms of signature.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first set forth above.

COUNTY OF LOS ANGELES

By: _____
Chair of the Board of Supervisors of the County of Los Angeles

COUNTY OF LOS ANGELES COMMUNITY FACILITIES DISTRICT NO. 2021-01 (VALENCIA-FACILITIES)

By: _____
Chair of the Board of Supervisors of the County of Los Angeles

ATTEST: CELIA ZAVALA
EXECUTIVE OFFICER
CLERK OF THE BOARD OF SUPERVISORS

By _____, **Deputy**

APPROVED AS TO FORM:

DAWYN R. HARRISON
Acting County Counsel

By: _____
Deputy

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES
145 June 14, 2022

CELIA ZAVALA
EXECUTIVE OFFICER

79265

THE NEWHALL LAND AND FARMING COMPANY (A CALIFORNIA LIMITED PARTNERSHIP),
a California limited partnership

By: NWHL GP LLC,
a Delaware limited liability company,
its General Partner

By: _____

Name: LYNN JOCELINE

Title: Vice President

By: _____

Name: Michael Alvarado
Vice President and Secretary

Title: _____

EXHIBIT A

DESCRIPTION OF FACILITIES AND FINANCING COSTS

This Acquisition, Funding and Disclosure Agreement shall apply to financing of "**Facilities**," which are defined to mean all or a portion of the costs of the purchase, construction, modification, expansion, improvement or rehabilitation of facilities permitted under the Act and that are required as conditions of development of the property within the District, the Future Annexation Area, and any other property annexed to the District including, but not limited to the Facilities described below:

	($ Millions) Estimated Costs[1]
I. COUNTY FACILITIES	
Magic Mountain Parkway - Mission Village:	
Road Improvements	$ 23.8
Median/Parkway Landscaping	$ 3.7
Sewer	$ 4.1
Utilities	$ 11.6
Magic Mountain Parkway - Homestead South Village:	
Road Improvements	$ 8.8
Median/Parkway Landscaping	$ 3.9
Sewer	$ 3.0
Utilities	$ 4.8
Commerce Center Drive - Mission Village:	
Road Improvements	$ 9.8
Median/Parkway Landscaping	$ 2.3
Sewer	$ 0.7
Utilities	$ 5.6
Westridge Parkway - Mission Village:	
Road Improvements	$ 3.6
Median/Parkway Landscaping	$ 0.7
Sewer	$ 0.6
Utilities	$ 3.2
Long Canyon Road - Homestead South Village:	
Road Improvements	$ 5.7
Median/Parkway Landscaping	$ 2.6
Utilities	$ 3.1
Long Canyon Road - Landmark Village:	
Road Improvements	$ 1.9
Median/Parkway Landscaping	$ 0.9
Utilities	$ 1.1
Valencia Blvd - Homestead South Village:	
Road Improvements	$ 5.9
Median/Parkway Landscaping	$ 2.2
Utilities	$ 3.0
Valencia Blvd - Potrero Village:	
Road Improvements	$ 4.6
Median/Parkway Landscaping	$ 2.4

	($ Millions) Estimated Costs[1]
I. COUNTY FACILITIES	
Sewer	$ 0.6
Utilities	$ 3.1
Valencia Blvd - Legacy Village:	
Road Improvements	$ 9.8
Median/Parkway Landscaping	$ 4.5
Sewer	$ 1.3
Utilities	$ 3.9
Legacy Village Road - Legacy Village:	
Road Improvements	$ 1.7
Median/Parkway Landscaping	$ 1.1
Sewer	$ 0.4
Utilities	$ 1.4
Potrero Valley Road - Potrero Village:	
Road Improvements	$ 6.7
Median/Parkway Landscaping	$ 3.0
Sewer	$ 1.5
Utilities	$ 5.3
Homestead South Road - Homestead South Village:	
Road Improvements	$ 10.2
Median/Parkway Landscaping	$ 3.9
Storm Drain	$ 2.8
Sewer	$ 2.2
Utilities	$ 7.8
Landmark Road - Landmark Village:	
Road Improvements	$ 7.4
Median/Parkway Landscaping	$ 4.4
Sewer	$ 1.4
Utilities	$ 3.6
Chiquito Valley Road - Homestead North Village:	
Road Improvements	$ 2.0
Median/Parkway Landscaping	$ 1.6
Utilities	$ 1.5
Water Quantity Basins – Mission Village:	
Water Quality	$ 23.1
Water Quality Basins – Various Village:	
Water Quality	$ 77.9
The Old Road:	
Road / Bridge Improvements	$ 46.7
Median/Parkway Landscaping	$ 0.2
Sewer	$ 0.1
Utilities	$ 2.5
Henry Mayo Drive - Entrada North Village:	
Road / Bridge Improvements	$ 1.0
Median/Parkway Landscaping	$ 0.0
Sewer	$ 0.2

	($ Millions) Estimated Costs[1]
I. COUNTY FACILITIES	
Utilities	$ 0.8
Wolcott:	
Road	$ 2.3
Median/Parkway Landscaping	$ 0.7
Sewer	$ 0.6
Utilities	$ 1.5
SR 126 Intersections:	
Intersections	$ 49.4
Interchanges:	
Rye Canyon Ramp Relocation	$ 6.9
Bridges:	
Commerce Center Drive Bridge	$ 58.2
Long Canyon Road Bridge	$ 44.7
Pedestrian Bridges:	
Mission Village	$ 14.2
Entrada South	$ 8.1
Entrada North	$ 7.1
Public Parks:	
Mission	$ 57.6
Entrada South	$ 10.4
Legacy	$ 53.8
Homestead	$ 80.7
Landmark	$ 25.2
Potrero	$ 22.1
Library:	
Mission Village Library	$ 20.0
Fire Stations:	$ 18.6
Landmark	
Potrero	$ 17.7
Mission	$ 26.8
SR 126 Utility Corridor:	
Grading	$ 9.6
Dry Utilities	$ 7.3
Trails and Landscaping	$ 11.9
Subtotal County Facilities	$ 925.0

	($ Millions) Estimated Costs[1]
II. JCFA SANTA CLARITA VALLEY WATER AGENCY	
Homestead South Zone 1A Potable Water Tank	$ 4.1
Homestead South Recycled Water Tank 1	$ 4.7
Landmark Potable Water Tank	$ 5.5
Legacy North Potable Water Tank	$ 4.4
Legacy South Potable Water Tank	$ 4.1
Legacy Zone IVB Potable Water Tank	$ 4.8

		($ Millions)
		Estimated Costs[1]
II. JCFA SANTA CLARITA VALLEY WATER AGENCY		
Stevenson Ranch Potable Water Tank	$	4.5
Legacy Potable Booster Station	$	1.2
Legacy Village Potable Booster Station	$	-
Petersen Recycled Water Tank	$	4.6
Legacy Zone 3 Recycled Water Tank	$	4.0
Legacy Zone 4 Recycled Water Tank 1	$	4.3
Legacy Zone 4 Recycled Water Tank 2	$	4.0
Commerce Center Drive Potable Booster Station	$	1.2
Commerce Center Drive Recycled Booster Station	$	1.3
Long Canyon Recycled Booster Station	$	1.2
Magic Mountain Potable Water	$	5.6
Petersen Potable Water Tank	$	5.0
Magic Mountain Potable Booster Station	$	1.0
Petersen Potable Booster Station	$	2.4
Round Mountain Recycled Water Tank Conversion	$	6.8
Potrero Zone 1 Potable Water Tank 1	$	4.1
Potrero Zone 1 Potable Water Tank 2	$	4.5
Potrero Zone IIA-N Potable Water Tank	$	4.5
Potrero Zone 2 Recycled Water Tank	$	4.6
Legacy Zone 3-4 Recycled Booster Station	$	1.2
Legacy Zone -5 Recycled Booster Station	$	1.2
Valencia WRP Recycled Booster Station	$	1.2
Newhall Ranch WRP Recycled Booster Station	$	1.2
Trunk Water Line within the California State Route 126 Trunk	$	39.8
Water Facilities within the following Roadways:		
Magic Mountain Parkway - Mission Village	$	18.5
Magic Mountain Parkway - Homestead South Village	$	12.3
Commerce Center Drive - Mission Village	$	4.4
Westridge Parkway - Mission Village	$	3.3
Long Canyon Road - Homestead South Village	$	5.6
Long Canyon Road - Landmark Village	$	2.5
Valencia Blvd - Homestead South Village	$	6.3
Valencia Blvd - Potrero Village	$	1.8
Valencia Blvd - Legacy Village	$	6.8
Legacy Village Road - Legacy Village	$	2.5
Potrero Valley Road - Potrero Village	$	5.8
Homestead South Road - Homestead South Village	$	8.5
Landmark Road - Landmark Village	$	8.0
Chiquito Valley Road - Homestead North Village	$	1.8
The Old Road	$	0.2
Henry Mayo Drive – Entrada North Village	$	0.1
Franklin Pkwy / Wolcott	$	3.5
Subtotal Water Agency Facilities	$	228.8

		($ Millions) Estimated Costs[1]
III.	JCFA – NEWHALL RANCH SANITATION DISTRICT OF LOS ANGELES COUNTY	
Wastewater Reclamation Plant:		
Site Acquisition	$	50.4
Site Development	$	23.0
Facility	$	81.1
Main Trunk Sewer Along SR-126:		
WRP to Landmark Village	$	11.4
Landmark Village to Travel Village	$	12.2
Trunk Sewer within the following Roadways:		
Commerce Center Drive – Mission Village	$	2.4
Long Canyon Road – Homestead South Village	$	1.2
Long Canyon Road – Landmark Village	$	0.3
Valencia Blvd – Homestead South Village	$	1.0
Chiquito Valley Road – Homestead North Village	$	1.8
Subtotal Sanitation District Facilities	$	184.8

		($ Millions) Estimated CostS[1]
IV.	JCFA LOS ANGELES COUNTY FLOOD CONTROL DISTRICT	
Magic Mountain Parkway – Mission Village Storm Drain	$	19.2
Magic Mountain Parkway – Homestead South Village Storm Drain	$	5.6
Commerce Center Drive – Mission Village Storm Drain	$	14.2
Westridge Parkway – Mission Village Storm Drain	$	16.3
Long Canyon Road – Homestead South Village Storm Drain	$	2.4
Long Canyon Road – Landmark Village Storm Drain	$	0.6
Valencia Blvd. – Homestead South Village Storm Drain	$	2.4
Valencia Blvd – Potrero Village Storm Drain	$	2.3
Valencia Blvd – Legacy Village Storm Drain	$	3.5
Legacy Village Road – Legacy Village Storm Drain	$	0.8
Potrero Valley Road – Potrero Village Storm Drain	$	3.6
Homestead South Road – Homestead South Village Storm Drain	$	5.6
Landmark Road – Landmark Village Storm Drain	$	3.0
Chiquito Valley Road – Homestead North Village Storm Drain	$	1.6
The Old Road Storm Drain	$	0.1
Henry Mayo Drive – Entrada North Village Storm Drain	$	0.0
Wolcott Storm Drain	$	3.4
Subtotal Flood Control Facilities	$	84.8

[1] The estimated costs are for planning purposes only. The Actual Cost of a Facility is eligible to be financed under the Agreement.

EXHIBIT B

LIST OF FACILITIES BID PRIOR TO DATE OF ACQUISITION AGREEMENT

	Description	Amount[1]
1	Phase 1 Magic Mountain Parkway & Commerce Center Drive Landscape Improvements	$3m
2	Phase 1 Magic Mountain Parkway, Commerce Center Drive, and Westridge Parkway Storm Drain (excluding PD 2640 & PD 2641)	$13.5m
3	Phase 1 Storm Drain - PD 2640 & PD 2641	$9.9m
4	Phase 1 Magic Mountain Parkway, Commerce Center Drive & Westridge Parkway Sanitary Sewer	$1.7m
5	Phase 1 Magic Mountain Parkway, Commerce Center Drive, and Westridge Parkway Street Improvements	$14.1m
6	Phase 1 CFD Streetlights (excluding DS 542)	$3.2m
7	Phase 1 Magic Mountain Parkway and Westridge Parkway Street Improvements - 06115-01A	$5.5m
8	Phase 1 Magic Mountain Parkway, Commerce Center Drive, and Westridge Parkway Utilities	$7.3m
9	Water Quality Basin A Water Quality Basin Grading	$.11m
10	Water Quality Basin B Water Quality Improvements	$2.8m
11	Water Quality Basin C Water Quality Improvements	$4.2m
12	Water Quality Basin D Water Quality Improvements	$5.3m
13	Commerce Center Drive Bridge[2]	$62.1m
14	Magic Mountain Parkway Storm Drain PD 2675	$.13m
15	Westridge Parkway (South of Magic Mountain Parkway) Landscape Improvements	$.72m
16	Commerce Center Drive (North of Middleton) Landscape Improvements	$.79m
	Total Exhibit B Facilities	**$134.35m**

[1]	Amount includes an estimate of the reimbursable construction costs bid as of 4/06/2022, including a 3% management fee. Amount may change based on reconciliation of commitments during preparation of the Payment Requests. Amount does not include agency fees, design or field soft costs, or utility company payments. SCVWA and Sanitation District costs bid prior to the date of the Acquisition Agreement are not included in this Exhibit B.
[2]	Commerce Center Drive Bridge construction amount includes storm drain, water quality, street improvements, streetlights, and dry utilities from South abutment to approximately 1000' South.

EXHIBIT C

FORM OF LETTER OF CONCURRENCE

_____[INSERT DATE]

County of Los Angeles
Attention: _____
_____
_____

Subject: Concurrence Letter for _____*[Insert description of the construction work]*

Dear _____:

On behalf of Newhall Land and Farming Company (a California Limited Partnership) ("**Company**"), we are submitting the following information related to the construction of _____ *[Insert description of the construction work]:*

- Bid Spread showing the results of each responsive bid. See attached schedule that follows this Concurrence Letter
- _____ *[Insert description of field soft cost proposals applicable for the construction work]*

Company recommends award of the following work:

CFD PORTION

DESCRIPTION OF WORK	VENDOR NAME	CONTRACT NO.	AMOUNT
		Award Total:	

Please indicate your concurrence and eligibility of the improvements to be reimbursed by signing below and returning to me. If you have any questions or require additional information, please do not hesitate to contact me at _____.

Sincerely,

COUNTY OF LOS ANGELES CONCURRENCE

_____

_____ _____
TITLE DATE

EXHIBIT D

FORM OF PCOW

*Potential Change of Work **("PCOW")***

The purpose of this form is to acknowledge a change in work for the intent of reimbursement of CFD costs.

Date: _____

PCOW No. _____

Description of Contract: _____

Vendor Name: _____

Contract Number/Change Order Number: _____

Owner: _____

Owner's Licensed Affiliate: _____

Provide the following information if PCOW is for field services during construction:

Contractor: _____

Contract No.: _____

Potential Change of Work description:

Total Amount of PCOW: _____

Company Review: _____ _____

Company Representative Date

County of Los Angeles Approval:

☐ Approved and is CFD eligible

☐ Not approved and is not CFD eligible

County comments:

_____

_____

_____

Reviewed by: _____ _____

County Representative Date

Attachment B

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November 16, 2025

Via publiccomment.bos.lacounty.gov

Kathryn Barger, Chair
Hilda L. Solis, Chair Pro Tem
Holly J. Mitchell, Supervisor
Lindsey P. Horvath, Supervisor
Janice Hahn, Supervisor
Los Angeles County Board of Supervisors
500 West Temple Street
Los Angeles, CA 90012

Re: SAFER Comment
Entrada South Project (Project No. 00-210)
Valencia Commerce Center Project (Project No. 87-150)
Board of Supervisors Agenda Item 90 (Nov. 18, 2025)

To Chair Barger, Chair Pro Tem Solis, and Honorable Supervisors:

This comment is submitted on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") and its members living or working in and around the County of Los Angeles ("County") regarding the supplemental environmental impact report ("SEIR") (State Clearinghouse No. 2000011025) prepared for the Entrada South Project (Project No. 00-210) and Valencia Commerce Center Project (Project No. 87-150) (collectively, "Project") to be considered as Agenda Item 90 at the Board of Supervisors' November 18, 2025 meeting.

SAFER is concerned that approval of the Project and certification of the SEIR will violate the California Environmental Quality Act ("CEQA") by: (1) failing to adequately disclose the Project's significant and unavoidable impacts; (2) failing to require all feasible mitigation measures for the Project's significant and unavoidable impacts; and (3) failing to adequately disclose and mitigate the Project's significant impacts to biological resources.

SAFER's review of the SEIR was assisted by expert ecologist Dr. Shawn Smallwood, Ph.D. Dr. Smallwood's comment and CV are attached as **Exhibit A**.

Due to the SEIR's shortcomings, SAFER respectfully requests that the Board of Supervisors refrain from approving the Project at this time and instead direct the Planning Department to amend and recirculate the SEIR prior to further consideration of the Project.

PROJECT DESCRIPTION

The Project consists of two components. First, the Entrada South Project proposes 1,574 residential units (consisting of single-family detached condominiums as well as attached town homes and multi-family units) and 730,000 square feet of commercial/office uses within the Entrada South Planning Area, which consists of approximately 382.3 acres located west of I-5 and The Old Road and predominantly south of Six Flags Magic Mountain. Second, the Valencia Commerce Center ("VCC") proposes 3.4 million square feet of non-residential uses (industrial/business/office park) within the VCC Planning Area, which consists of approximately 328.5 acres of an undeveloped portion of the partially completed VCC non-residential center (industrial/business/office park) located west of I-5 and north of State Route 126.

The Entrada South Planning Area and VCC Planning Area are within the planning boundary of the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan ("RMDP/SCP"). CDFW approved the RMDP/SCS and certified its EIR in 2010. The 2010 EIR evaluated the impacts of the Newhall Ranch Specific Plan (2,550 acres of residential uses, 5.5 million sf of commercial), Entrada South (1,725 residential units, 450,000 sf of commercial), and the VCC (3.4 million sf of industrial/commercial).

Subsequently, the 2010 EIR was challenged in court, culminating in a Supreme Court decision holding that the 2010 EIR was deficient due to: (1) failure to support greenhouse gas findings with substantial evidence and (2) the EIR's mitigation measure for the unarmored threespine stickleback, by capturing and relocating it, was itself a prohibited taking of the species under the Fish and Game Code. (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 213, 231-32, 237.) In response to the Supreme Court's decision, CDFW was certified an Additional Environmental Analysis ("AEA") addressing greenhouse gases and unarmored threespine stickleback in 2017. Collectively, the 2010 EIR and 2017 AEA are referred to as the "2017 EIR" or "State-certified EIR."

The currently proposed Entrada South Project differs from the project analyzed in the 2017 EIR by reducing the amount of residential units (from 1,725 units to 1,574 units or from approximately 3,235,100 square feet to 2,951,913 square feet) and increasing the commercial/office uses (from 450,000 square feet to 730,000 square feet). The currently proposed Entrada South Project and VCC Project also include additional modifications, including drainage and wetland restoration.

To analyze the modifications to the project as analyzed in the 2017 EIR, the County prepared a Supplemental Environmental Impact Report ("SEIR"), consisting of a Draft SEIR, Revised Draft SEIR, and Final SEIR. The SEIR included the mitigation measures from the 2017 EIR as well as new or modified mitigation measures. The SEIR's stated purpose is to analyze whether the proposed Project would result in any new or substantially more severe significant impacts compared to the 2017 EIR.

LEGAL STANDARD

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109.)

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 CCR § 15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 (*Berkeley Jets*); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. (14 CCR § 15002(a)(2) and (3); see also *Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley,* 52 Cal.3d at 564.) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." (14 CCR § 15002(a)(2).) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." (Pub. Res. Code, § 21081; 14 CCR § 15092(b)(2)(A) and (B).)

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Jets*, 91 Cal.App.4th at 1355 [quoting, *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391, 409, n. 12.) "A prejudicial abuse of discretion occurs 'if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.'" (*Berkeley Jets*, *supra*, 91 Cal.App.4th at 1355.)

An EIR must "include[] sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises."

(*Sierra Club v. Cty. of Fresno* (2018) 6 Cal.5th 502, 510.) "Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document." (*Id*. at 516.) "The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency's factual conclusions." (*Id*.) As the Court emphasized:

> [W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

(*Id.* at 514.)

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (14 CCR § 15370.) Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. (14 CCR § 15126.4(a)(1)(B).) A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved.

Once an EIR has been prepared for a project, CEQA provides that no subsequent or supplemental environmental impact report shall be required by the lead agency or any responsible agency" unless: (1) substantial changes to the approved project will require major revisions to the certified EIR; (2) substantial changes occur with respect to the circumstances under which the approved project is being undertaken will require major revisions to the certified EIR; or (3) new information that was not known and could not have been known at the time the EIR for the approved project was certified becomes available. (Pub. Res. Code § 21166; 14 CCR § 15162.) A supplemental EIR may be prepared if a subsequent EIR is required but "[o]nly minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation." (14 CCR § 15163(a).)

DISCUSSION

I. The SEIR Fails to Adequately Disclose the Project's Significant and Unavoidable Impacts.

An EIR must describe any significant environmental effects that cannot be avoided if the project is implemented. (Pub. Res. Code § 21100(b)(2)(A).) Significant effects that cannot be mitigated must be described as well as effects that can be mitigated but not reduced to a level of insignificance. (14 CCR §15126.2(c).) If unavoidable impacts cannot be reduced or avoided

without changing the design of the project, the EIR must describe the reasons the project is being proposed despite the unavoidable impacts. (14 CCR §15126.2(c).)

Notably, the discussion of unavoidable impacts must be included in a separate section of the EIR. (Pub. Res. Code § 21100(b)(2)(A).) Here, the SEIR included its discussion of significant and unavoidable impacts in Section 7.0: Other Environmental Considerations. (DSEIR, p. 7.0-1.) In that section, the SEIR does not disclose *any* significant and unavoidable impacts. Instead, the SEIR merely states:

> Impacts associated with the Modified Project are evaluated in Section 5.0, Environmental Impact Analysis, of this SEIR. Based on that analysis, it was determined that the Modified Project would not result in new or substantially more severe significant impacts than previously identified for the 2017 Project in the State-certified EIR.

(*Id*.) The SEIR's discussion above is inadequate because it does not disclose which impacts remain significant and unavoidable *even if* they are not new or substantially more severe. (See *Communities for a Better Envt. v. California Resources Agency* (2002) 103 Cal.App.4th 98, 124-25 [Even though a prior EIR's *analysis* of environmental effects may be subject to being incorporated in a later EIR for a later, more specific project, the responsible public officials must still go on the record and explain specifically why they are approving the later project despite *its* significant unavoidable impacts."].) Although the SEIR contains a statement explaining why the Project is being considered despite significant and unavoidable impacts (DSEIR, pp. 7.0-1 to -2), the SEIR utterly fails to disclose what those impacts actually are.

Other sections of the SEIR do nothing to alleviate the confusion over which impacts remain significant and unavoidable. For example, Table 2.0-2 purports to show a "Summary of Environmental Impacts, Mitigation Measures, and Resulting Levels of Significance." (RDSEIR, pp. 2.0-29 to -192.) However, for each impact found significant and unavoidable in the 2017 EIR, Table 2.0-2 states the same conclusion for this Project's impacts: "No Substantial Increase in Severity of Impact." Again, this information does not tell the reader which impacts actually remain significant and unavoidable.

The SEIR's detailed sections on each impact are similarly confusing. For air quality, the SEIR does disclose that the 2017 EIR found construction-related, operational, and cumulative air quality impacts to be significant and unavoidable. However, even though the SEIR concedes that "emissions within the VCC Planning Area would be the same as reported in the State-certified EIR," there is ***no*** indication of whether impacts remain significant and unavoidable. Instead, the air quality section merely concludes that "the Modified Project would not result in new or substantially more severe significant impacts related to air quality as compared to the 2017 Project in the State-certified EIR." (DSEIR, p. 5.1-65.) Similarly for noise impacts, the SEIR fails to disclose whether cumulative operational traffic noise impacts remain significant and unavoidable despite the SEIR's conclusion that the Project would not cause a substantial increase

compared to the 2017 EIR. (RDSEIR, pp. 5.8-47, -53.)

The SEIR must be revised to clearly disclose which impacts are significant and unavoidable. As written, no reader of the SEIR could reasonably understand which impacts from the 2017 EIR remain significant and unavoidable. SAFER respectfully requests that the Board of Supervisors continue any consideration of the Project until the SEIR is revised to clearly disclose the Project's significant and unavoidable impacts.

II. The SEIR Fails to Adopt All Feasible Mitigation Measures for the Project's Significant and Unavoidable Impacts.

CEQA prohibits a lead agency from approving a project with significant environmental effects if there are feasible mitigation measures or alternatives that can substantially lessen or avoid those effects. (Pub. Res. Code § 21002; *Mountain Lion Found. v. Fish & Game Comm'n* (1997) 16 Cal.4th 105, 134; *Laurel Heights*, 47 Cal.3d at 403 ["The chief goal of CEQA is mitigation or avoidance of environmental harm"].) CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors." (PRC §21061.1; 14 CCR § 15364.) "The core of an EIR is the mitigation and alternatives sections." (*Citizens of Goleta Valley*, 52 Cal.3d at 564.) When an EIR concludes that a project will have significant impacts, the lead agency has two duties: to meaningfully consider feasible mitigation measures and alternatives, and to identify mitigation measures and alternatives rejected as infeasible. (See *Preservation Action Council v. City of San Jose* (2006) 141 Cal.App.4th 1336, 1353.)

The lead agency may not approve a project with significant impacts unless it makes one or more of three findings:

(1) that changes or alternations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment;

(2) that the agency making the findings lacks jurisdiction to make the change, but that another agency does have such authority, and either has made or can and should make, the change; and/or

(3) that specific economic, legal, social, technological, or other considerations … make infeasible the mitigation measures or project alternatives identified in the EIR.

(Pub. Res. Code §21081(a); 14 CCR §15091(a.).)

When a comment suggests "better ways to avoid or mitigate the significant environmental impacts" (14 CCR §§15088(c), 15204(a)), the lead agency must respond to the comment by either explaining why further consideration of the alternative or mitigation was rejected or by providing an evaluation of the alternative. (*Marin Mun. Water Dist. v. KG Land*

Cal. Corp. (1991) 235 Cal.App.3d 1652, 1666; *Cal. Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 992 (*CNPS*).) "'[A]n adequate EIR must respond to specific suggestions for mitigating a significant environmental impact unless the suggested mitigation is facially infeasible.' [citation omitted] 'While the response need not be exhaustive, it should evince good faith and a reasoned analysis.'" (*CNPS*, 177 Cal.App.4th at 992 [citing *L.A. Unified School Dist. v. City of L.A*. (1997) 58 Cal.App.4th 1019, 1029; see also, *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 442, fn. 8.)

As discussed above, the SEIR does not clearly disclose which impacts of the Project are significant and unavoidable. However, the Board is being asked to adopt a Statement of Overriding Considerations ("Statement"), which lists the following impacts as significant and unavoidable: aesthetics, agriculture, air quality, noise, solid waste, and wildfire. (Statement [BOS Staff Report, Attachment 2], pp. 57-67.) As a preliminary matter, it must be noted that the Statement of Overriding Considerations, like the SEIR itself, obscures the impacts of this Project. For each impact, the Statement states, "As described in the SEIR, the Modified Project does not result in a new or substantially more severe significant effect." (See, e.g., *id*. at pp. 58, 59, 60.) Moreover, the SEIR and Statement fail to comply with CEQA because the County has failed to apply all feasible mitigation measures to reduce the significant and unavoidable impacts to the extent possible prior to proceeding with the Project. (Pub. Res. Code §21081(a); 14 CCR §15091(a.).)

The 2017 EIR found that air quality impacts from construction and operation would remain significant and unavoidable due to emissions of VOC, NOx, CO, PM10, and/or PM2.5. (Statement, p. 59.) Although the SEIR adopts/modified mitigation measures from the 2017 EIR, there are additional feasible measures that must be applied prior to proceeding with this Project.

For construction emissions, the Project must adhere to ES/VCC-PDF-AQ-2, which provides:

> All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 4 emission standards, where available. At a minimum, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 3 emission standards for non-road diesel engines promulgated by the U.S. Environmental Protection Agency.

(MMRP, p. 6.) However, that measure does not take into account that two types of Tier 4 equipment are currently available: Tier 4 Final and Tier 4 Interim (See 40 C.F.R. § 86.1811-27.) By only requiring the use of Tier 4 without specifying "Final" or "Interim, " ES/VCC-PDF-AQ-2 fails to ensure that the impacts have been reduced to the extent feasible. The County must amend ES/VCC-PDF-AQ-2 to require "Tier 4 Final" equipment to ensure the maximum feasible mitigation for the Project's construction-related air quality impacts. Only then can the County make the findings required for approving the Project despite its significant and unavoidable impacts.

For operational emissions, the SEIR claims that the Project equipment/truck idling will be limited to 5 minutes in accordance with state law. (DSEIR, pp. 5.1-24, 5.1-62.) The California Attorney General has issued a guidance document titled "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act" ("DOJ's Best Practices"). A copy of the DOJ's Best Practices is attached hereto as **Exhibit B**. The DOJ's Best Practices explicitly state that operational impacts can be mitigated, in part, by "[f]orbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use." (DOJ's Best Practices, p. 9.) Clearly, it is feasible to reduce idling time below 5 minutes—and the County must do so prior to concluding that GHG impacts are significant and unavoidable.

The DOJ's Best Practices also recommends "[d]esigning all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible." (DOJ's Best Practices, p. 9.) Here, the Project will only provide the bare minimum required by state code. (See, e.g., Initial Study, p. 53.) There is no discussion or analysis in the SEIR of whether solar panels are being required to the maximum extent feasible. The SEIR must be revised to require the maximum feasible amount of solar power or otherwise explain why such mitigation is infeasible. prior to concluding that GHG impacts are significant and unavoidable.

The DOJ's Best Practices list numerous additional mitigation measures for air quality impacts that the EIR has failed to consider including:

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Running conduit to designated locations for future electric truck charging stations.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.

(DOJ's Best Practices, pp. 9-10.)

The County cannot approve the Project and its EIR until all feasible air quality mitigation measures have been applied to this Project, even if the impacts remain significant and unavoidable. SAFER respectfully requests that the Board of Supervisors continue further consideration of the Project until the EIR is revised to include all the mitigation measures

discussed above or otherwise to justify why such additional mitigation measures are infeasible.

III. The SEIR Fails to Disclose and Mitigate the Project's Significant Impacts to Biological Resources.

Expert wildlife ecologist Dr. Shawn Smallwood, Ph.D., found several deficiencies in the SEIR's analysis of the Project's impacts on wildlife. Dr. Smallwood's comment and CV are attached as **Exhibit A**. As discussed below, Dr. Smallwood concluded: (1) the SEIR underestimates the diversity of species at the Project site; (2) the SEIR fails to adequately analyze and mitigate the Project's impacts to habitat loss and fragmentation, wildlife movement, traffic collisions with wildlife, and domestic cat predation; and (3) the SEIR's mitigation measures are inadequate to reduce the Project's impacts to biological resources to less-than-significant levels.

A. The SEIR lacks substantial evidence of the Project's impacts to biological resources due to an underestimation of the diversity of species at the Project site.

Dr. Smallwood's associate conducted wildlife surveys in late September 2025 of the VCC site (two evening surveys and one nocturnal survey) and Entrada South site (one evening survey) by walking the sites' perimeters where accessible and scanning for wildlife with binoculars and an acoustic bat detector. (Ex. A, pp. 2-23) These surveys detected "52 species of vertebrate wildlife at or adjacent to the VCC Planning Area, and 36 species of vertebrate wildlife at or adjacent to the Entrada South Planning Area, for a total of 62 species detected collectively, including 14 species with special status." (*Id*., p. 4.) The special-status species observed include: (1) Western mastiff bat (California Species of Special Concern, Western Bat Working Group High Priority), (2) Southern California rufous-crowned sparrow (CDFW Taxa To Watch List, Los Angeles County Bird Watchlist), (3) Oak titmouse (US Fish & Wildlife Bird of Conservation Concern, Los Angeles County Bird Watchlist, and (4) Turkey vulture (Los Angeles County Sensitive Bird Species). (*Id*. A, pp. 17-19.)

Dr. Smallwood calculated that more thorough site visits would reveal an even greater diversity of wildlife. (Ex. A, pp. 20-23.) Given more time to survey the site, Dr. Smallwood's predicts that 149 species of vertebrate wildlife, including 28 special-status species, would be detected on site. (*Id*., p. 22.) Based on his review of the DEIR and the site visits, Dr. Smallwood concluded, "[T]he large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort." (*Id*., p. 23.)

Although the SEIR's Biological Report detected approximately 130 species on the Project site, including 36 special-status species, the SEIR fails "to contextualize the survey findings by comparing them to survey effort and to survey findings elsewhere." (Ex. A, p. 26.) As a result, the SEIR fails to inform the reader that the Entrada South and VCC sites are

ecologically-abundant areas with a diversity of wildlife, including special-status species, that is well-beyond that found in a typical project. (*Id*., pp. 26-27.)

Furthermore, the Biological Report's review of available wildlife databases to identify which species are known to have occurred at or near the Project site was inadequate. (Ex. A, pp. 27-36.) The Biological Report relied on the California Natural Diversity Data Base ("CNDDB") to determine which species have potential to occur in the Project area. (*Id.*, p. 28.) However, as Dr. Smallwood explains:

> By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, [the Biological Report] screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community.
> . . .
> Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence.

(*Id*.)

Based on available databases (including CNDDB, iNaturalist, and eBird) and site visits, Dr. Smallwood found that "146 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential." (Ex. A, p. 28.) The SEIR's Biological Report only analyzed the occurrence potential for 22 special-status species, which amounts to only 15% of the special-status species identified by Dr. Smallwood. (*Id*., p. 29.) Therefore, the SEIR screened out 124 of the special-status species known to occur at or near the Project site from further review. (*Id*.) Of those 124 special-status species, "34 have been documented on the project site, 25 have been within 1.5 miles, and 44 have been documented between 1.5 and 4 miles of the site." (*Id*.) Further analysis is needed in the SEIR to address possible impacts to those species before determining that the Project will not result in a more severe impacts than the 2017 State-certified EIR.

Every EIR must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. *Communities for a Better Envt. v. So. Coast Air Qual. Mgmt. Dist*. (2010) 48 Cal. 4th 310, 321; see 14 CCR § 15125(a). Due to the inadequate analysis on the Biological Report, the SEIR underestimates the biological baseline at the Project site and, as a result, cannot provide substantial evidence about the severity of the Project's impacts on biological resources. As a result, the SEIR should be revised to properly disclose the biological baseline and the impacts of this Project.

B. The SEIR fails to analyze, disclose, and mitigate the Project's impacts on wildlife due to habitat loss and fragmentation, wildlife movement, bird-window collisions, house cat predation, and traffic-wildlife collisions.

Dr. Smallwood found that the SEIR failed to adequately discuss numerous significant impacts that the Project may have on biological resources due to habitat loss and fragmentation, wildlife movement, bird-window collisions, house cat predation, and traffic-wildlife collisions. (Ex. A, pp. 39-50.) By failing to disclose and mitigate these impacts, the SEIR is inadequate. The SEIR must be revised to disclose and mitigate the impacts discussed below.

1. Habitat loss and fragmentation

Dr. Smallwood found that the SEIR downplays the impacts of habitat loss resulting from the Project by dividing impacts as either temporary or permanent. (Ex. A, p. 39.) However, as Dr. Smallwood explains, "[t]he site is proven to serve as habitat to at least 140 species of vertebrate wildlife." (*Id*.) Dr. Smallwood calculates that the Project site contains over 8,600 bird nests. (*Id*., p. 40.)

As a result of habitat loss and fragmentation from the Project, Dr. Smallwood predicts that the Project would result in a loss of 7,838 nest sites bird nests, which corresponds to an overall loss of ***31,562 fledglings per year***, most of which are protected by the federal Migratory Bird Treaty Act and California's Migratory Bird Protection Act . (Ex. A, p. 40.) which "would be both substantial and highly significant." (*Id*., p. 32.) Dr. Smallwood concludes that "[t]he loss of 35,481 birds would easily qualify as an unmitigated significant impact." The SEIR should be revised to analyze, disclose, and mitigate this impact to the extent possible.

2. Wildlife Movement

Dr. Smallwood found that the EIR applied an improper standard to analyze the Project's impacts to wildlife movement. (Ex. A, pp. 40-41.) The SEIR concluded that there would not be an impact to wildlife movement because the project site itself does not serve as a wildlife movement "corridor." (*Id*., p. 40.) However, as Dr. Smallwood explains,

> The CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. The primary phrase of the CEQA standard

> goes to wildlife movement regardless of whether the movement is channeled by a corridor. Wildlife are obviously using the site, which means wildlife are able to travel to and from the site. Most of the birds recorded at the site are migratory birds, and the site is one of the last remaining patches of open space available to birds that need to move through Santa Clarita. The project site is important to wildlife movement in the region.

(*Id*., p. 41.)

The SEIR fails to provide any evidence regarding how wildlife use actually uses the Project site for movement in the region and that the resulting impacts of the Project on such movement will be. As a result, the SEIR analysis of the Project's impacts on wildlife movement is "speculation." (Ex. A, p. 42.) The SEIR must be revised to accurately describe wildlife movement through the Project site prior to concluding that such impacts will not be significant.

3. Bird-Window collisions.

The SEIR fails to account for the impact to bird species from collisions with the Project's glass windows and facades. The impacts from window collisions are important because such collisions "are often characterized as either the second or third largest source or human-caused bird mortality." (Ex. A, p. 42.) Dr. Smallwood calculated that the Project would result in ***8,173 bird deaths per year*** due to collisions with the Project's windows and glass facades. (*Id*., p. 44.) The SEIR must be revised to disclose, discuss, or mitigate this impact to the extent feasible.

4. House Cat Predation

The SEIR fails to account for the impact to wildlife from the introduction of domestic cats resulting from Entrada South's massive residential development. As Dr. Smallwood explains:

> In 2012 there were 0.44 house cats per human in the USA, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. The SEIR reports there would be 1,574 residential units in the project, and it predicts there would be 4,958 new residents. ***The above rates of cat ownership applied to this number of new residents would predict 2,182 new cats, which based on the findings of Loss et al. (2013) would kill 266,204 vertebrate wildlife per year***.

(Ex. A, p. 45.)

Furthermore, cats introduce *Toxoplasma gondii*, which is "a parasite that can infect virtually all warm-blooded animals." (*Id*.) *Toxoplasma gondii* can cause toxoplasmosis, which in severe cases can damage the brain, eyes, or other organs. (Center For Disease Control, About

Toxoplasmosis, https://www.cdc.gov/toxoplasmosis/about/index.html.) Additionally, "[i]nfants infected [by *Toxoplasma gondii*] while still in the womb often have no symptoms at birth but can develop symptoms later in life." (*Id*.)

Dr. Smallwood concludes that "[i]mpacts to wildlife from the introduction of house cats into the environment would be highly significant, and yet these impacts are not considered in the SEIR. (Ex. A, p. 45.) The SEIR must be revised to disclose and analyze this impact. The revised SEIR should also consider whether mitigating this impact is feasible through requirements on future residents of Entrada South constraining house cat ownership by, for example, requiring cats to remain indoors. (See *id*.)

5. Traffic-Wildlife Collisions

The SEIR fails to address the impacts to wildlife from collisions with traffic generated by the Project. This omission is important because, as Dr. Smallwood explains,

> Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

(Ex. A, pp. 45-46.) According to the SEIR, the Project would result in 272,854 daily vehicle miles traveled ("VMT"), which amounts 99,592,805 annual VMT. (*Id*, p. 48.) Based on the Project's annual VMT, Dr. Smallwood estimates that traffic from the Project will kill at least 42,362 vertebrates annually. (*Id*.) Especially due to the special-status species occurring and likely to occur at or near the Project, these collisions represent a significant impact to wildlife that must addressed, discussed, and mitigated in a revised SEIR.

C. The SEIR's mitigation measures for biological resources are inadequate.

Dr. Smallwood critiqued the SEIR's proposed mitigation measures as being inadequate to reduce the Project's impacts to biological resources. (Ex. A, pp. 50-54.) For example, many of the mitigation measures are requirements to preform wildlife surveys. (*Id*, pp. 51, 53.) However, as Dr. Smallwood explains, these surveys should have been conducted *prior to* preparing the SEIR in order to inform the SEIR's analysis. (*Id*., p. 38.)

Dr. Smallwood provides a list of feasible mitigation measures that should be incorporated into the Project to reduce impacts to biological resources. (Ex. A, pp. 54-55.) These measures include: (1) adhering to Bird-Safe Design Guidelines to reduce bird-window collisions; (2)

compensatory mitigation for wildlife killed/injured by vehicles and window collisions; and (3) a requirement for native landscaping. (*Id*.) The SEIR should be revised to adopt these feasible mitigation measures prior to approval of the Project.

CONCLUSION

Approval of the Project and the SEIR would violate CEQA by: (1) failing to adequately disclose the Project's significant and unavoidable impacts; (2) failing to require all feasible mitigation measures for the Project's significant and unavoidable impacts; and (3) failing to adequately disclose and mitigate the Project's significant impacts to biological resources. For those reasons, SAFER requests that the Board of Supervisors refrain from approving the Project at this time and, instead, direct the Planning Department to revise and recirculate the SEIR to ensure compliance with CEQA.

Sincerely,

Brian B. Flynn
Lozeau Drury LLP

cc: Edward Yen, Executive Officer, executiveoffice@bos.lacounty.gov
Jodie Sackett, Senior Planner, jsackett@planning.lacounty.gov

EXHIBIT A

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012-3208

10 November 2025

RE: Entrada South and Valencia Commerce Center

To Whom It May Concern,

I write to comment on potential impacts to biological resources that would result from development of the proposed Entrada South and Valencia Commerce Center, which herein I refer to together as the project site. I understand the project would add 1,574 single-family dwelling units and 4,130,000 sf of industrial, business, office and commercial buildings on 70.8 acres in Santa Clarita, California. My comments that follow address my concerns that the Supplemental Environmental Impact Report (SEIR), supported by Dudek's biological resources report (Dudek 2024). I am concerned that Dudek (2024) and the SEIR mischaracterize the existing environmental setting, and that its impacts analysis is flawed and its mitigation measures are inadequate.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

THE WILDLIFE COMMUNITY AS A BIOLOGICAL RESOURCE

Most environmental reviews pursuant to the California Environmental Quality Act (CEQA) focus on special-status species because CEQA's Checklist Evaluation of Environmental Impacts specifies that such evaluation includes potential impacts to special-status species. However, an important policy of CEQA is "to prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." Pub. Res. Code § 21001(c). This policy is not restricted to special-status species, but it also applies to wildlife populations and plant

and animal communities. In fact, the CEQA Guidelines Section 21155.1 defines wildlife habitat as "the ecological communities upon which wild animals, birds, plants, fish, amphibians, and invertebrates depend for their conservation and protection." This definition is consistent with the scientific definition of habitat, which is that portion of the environment that is used by members of a species for survival and reproduction (Hall et al. 1997). An essential portion of the environment used by any special-status species is composed of the collection of other species of plants and wildlife, because these species are forage, provisioners of refugia and nest substrates, and ecological mutualists; no special-status species can exist in a vacuum of other wildlife. The CEQA Checklist Evaluation assigns priority to special-status species to balance information and cost, but it does not exclude the need to evaluate environmental impacts to other species, which, after all, are members of the very communities within which special-status species inter-depend for survival and reproduction.

All wildlife species should be of concern in a CEQA review, but the CEQA prioritizes special-status species. The species I consider to be special-status species are those listed in California's Special Animals List inclusive of threatened and endangered species under the California and federal Endangered Species Acts, candidates for listing under CESA and FESA, California's Fully Protected Species, California species of special concern, and California's Taxa to Watch List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406), continental and region-specific US Fish and Wildlife Service Birds of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf), and naturally rare species such as raptors protected by California's Birds of Prey laws, Fish and Game Code Sections 3503, 3503.5, 3505 and 3513 (see https://wildlife.ca.gov/Conservation/ Birds/Raptors).

What follows is a summary of a site visit to detect as many of the species of wildlife as possible within the short time available. The survey was also intended to detect as many of the special-status species as possible, but with the understanding that most special-status species are less readily detectable due to rarity and crypticity. Nonetheless, the species detected can indicate the ecological integrity of the site and thus the likelihood of occurrence of special-status species not yet detected.

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master of Science Degree from California State University Los Angeles, visited the Valencia Commerce Center (VCC) Planning Area to conduct evening surveys for 3.6 hours from 16:28 to 20:04 hours on 26 September 2025 and for 3.92 hours from 16:46 to 18:02 hours, and she conducted a nocturnal survey from 18:21 to 21:00 hours on 14 October 2025. Noriko also visited the Entrada South Planning Area for 3.18 hours from 06:41 to 09:52 hours on 27 September 2025. Noriko walked the site's perimeter where accessible, stopping to scan for wildlife with use of binoculars. On the night of 14 October 2025, shee strapped a Pettersson M500 acoustic bat detector atop a 7.6-m pole, and cabled the detector to her computer, which ran Sonobat Live. Sonobat Live identifies bats to species based on the bats' sonograms that are detected by the M500. Noriko recorded all species of vertebrate wildlife she detected, including those whose members flew over the site or were seen

just off the site. Animals of uncertain species identity were either recorded to the Genus or higher taxonomic level.

Conditions were cloudy to partly cloudy with 7 MPH southwest wind and temperatures of 77-69° F on 26 September 2025, and cloudy with 3 MPH south wind and temperatures of 64-67° F on 27 September 2025. On 14 October 2025, conditions were cloudy with 6 MPH south wind and temperatures of 58-66° F during the diurnal survey and cloudy with 5 MPH south wind and temperatures of 55-52° F during the nocturnal survey. The VCC Planning Area overlaps Castaic Creek and is primarily riparian and scrub (Photos 1-2). The Entrada South Planning Area is primarily annual grassland, oak grassland, and scrub (Photos 20, 21, and 22).

Photos 1 and 2. *Views of the VCC Planning Area, 26 September 2025 and 14 October 2025. Photos by Noriko Smallwood.*

At the VCC Planning Area, Noriko saw great blue heron and great egret (Photos 3 and 4), red-shouldered hawk and Nuttall's woodpecker (Photos 5 and 6), Costa's hummingbird and Anna's hummingbird (Photos 7 and 8), common raven (Photo 9), black phoebe and mourning dove (Photos 10 and 11), red-winged blackbird and California scrub-jay (Photos 12 and 13), house finch and lesser goldfinch (Photo 14), Wilson's warbler and California towhee (Photos 15 and 16), song sparrow and common yellowthroat (Photos 17 and 18), Canada goose (Photo 19), among other species listed in Table 1. At the Entrada South Planning Area, Noriko saw Cooper's hawk and red-tailed hawk (Photos 23 and 24), turkey vulture and great egret (Photos 25 and 26), California quail (Photo 27), Anna's hummingbird and Brewer's blackbird (Photos 28 and 29), common raven and California scrub-jay (Photos 30 and 31), mourning dove (Photo 32),

bushtit and house finch (Photos 33 and 34), California thrasher and lark sparrow (Photos 35 and 36), white-crowned sparrow and lesser goldfinch (Photos 37 and 38), Bewick's wren and Southern California rufous-crowned sparrow (Photos 39 and 40), California towhee and spotted towhee (Photos 41 and 42), California ground squirrel (Photo 43), Mexican free-tailed bat and western mastiff bat (Photos 44 and 45), among other species listed in Table 1. Noriko detected 52 species of vertebrate wildlife at or adjacent to the VCC Planning Area, and 36 species of vertebrate wildlife at or adjacent to the Entrada South Planning Area, for a total of 62 species detected collectively, including 14 species with special status (Table 1).

Photos 3 and 4. *Great blue heron (top left), great egret (top right), red-shouldered hawk (bottom left), and Nuttall's woodpecker (bottom right) on the VCC Planning Area, 26 September and 14 October 2025. Photos by Noriko Smallwood.*

Photos 7 and 8. *Costa's hummingbird (left), and Anna's hummingbird (right) on the VCC Planning Area, 26 September 2025. Photos by Noriko Smallwood.*

Photo 9. *Common raven on the VCC Planning Area, 26 September 2025. Photo by Noriko Smallwood.*

Photos 10 and 11. *Black phoebe (left), and mourning dove (right) on the VCC Planning Area, 14 October and 26 September 2025. Photos by Noriko Smallwood.*

Photos 12 and 13. *Red-winged blackbird (left), and California scrub-jay (right) on the VCC Planning Area, 26 September 2025. Photos by Noriko Smallwood.*

Photo 14. *House finch and lesser goldfinch on the VCC Planning Area, 26 September 2025. Photo by Noriko Smallwood.*

Photos 15 and 16. *Wilson's warbler (left), and California towhee (right) on the VCC Planning Area, 26 September 2025. Photos by Noriko Smallwood.*

Photos 17 and 18. *Song sparrow (left), and common yellowthroat (right) on the VCC Planning Area, 14 October 2025. Photos by Noriko Smallwood.*

Photo 19. *Flock of Canada geese on the VCC Planning Area, 14 October 2025. Photo by Noriko Smallwood.*

Photos 20, 21, and 22. *Views of the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 23 and 24. *Cooper's hawk (left), and red-tailed hawk (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 25 and 26. *Turkey vulture (left), and great egret (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photo 27. *California quail on the Entrada South Planning Area, 27 September 2025. Photo by Noriko Smallwood.*

Photos 28 and 29. *Anna's hummingbird (left), and Brewer's blackbird (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 30 and 31. *Common raven with a food item (left), and California scrub-jay with an acorn (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photo 32. *Mourning doves on the Entrada South Planning Area, 27 September 2025. Photo by Noriko Smallwood.*

Photos 33 and 34. *Bushtit (left), and house finch (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

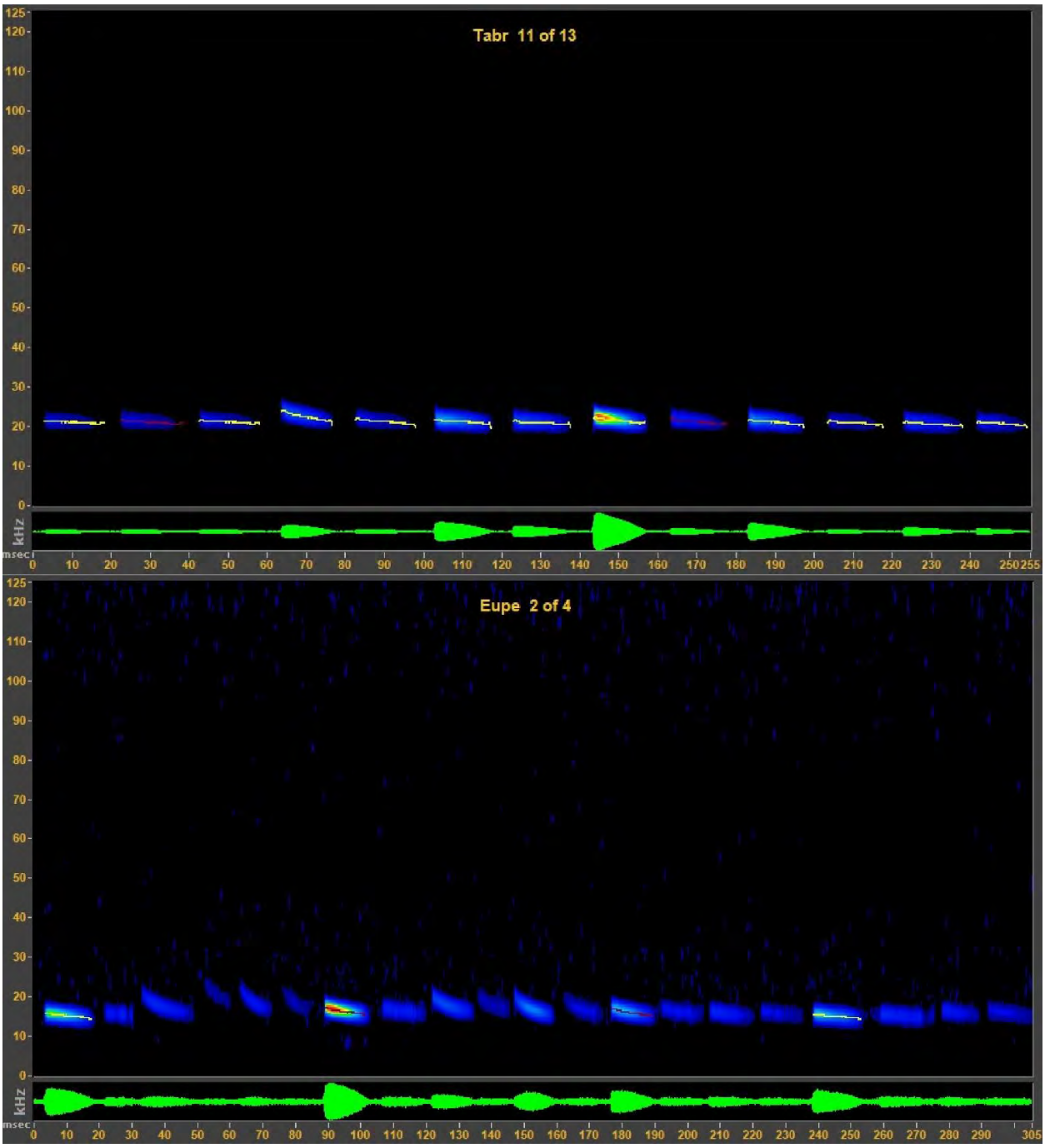
Photos 35 and 36. *California thrasher just off of the Entrada South Planning Area (left), and lark sparrow on the Entrada South Planning Area (right), 27 September 2025. Photos by Noriko Smallwood.*

Photos 37 and 38. *White-crowned sparrow (left), and lesser goldfinch (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 39 and 40. *Bewick's wren (left), and Southern California rufous-crowned sparrow (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photos 41 and 42. *California towhee (left), and spotted towhee (right) on the Entrada South Planning Area, 27 September 2025. Photos by Noriko Smallwood.*

Photo 43. *California ground squirrel on the Entrada South Planning Area, 27 September 2025. Photo by Noriko Smallwood.*



Photos 44 and 45. *Sonogram of Mexican free-tailed bat (top) western mastiff bat (bottom) detected on site using Sonobat Live and a Pettersson M500, 14 October 2025.*

Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood

Table 1. *Species of wildlife Noriko observed during 3.6 hours of survey on 26 September 2025, during 3.18 hours of survey on 27 September 2025, during 1.27 hours of diurnal survey and during 2.65 hours of nocturnal survey on 14 October 2025.*

Common name	***Species name***	**Status[1]**	**VCC**	**Entrada South**	**Notes**
Great Basin fence lizard	*Sceloporus occidentalis longipes*		X		
Canada goose	*Branta canadensis*		X		Flock flew over
Mallard	*Anas platyrhynchos*			X	Flew over
California quail	*Callipepla californica*			X	Many
Rock pigeon	*Columba livia*	Non-native	X	X	
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	X		Just off site
Mourning dove	*Zenaida macroura*		X	X	
Swift sp.	*Apodidae*		X		Flew over
Anna's hummingbird	*Calypte anna*		X	X	
Costa's hummingbird	*Calypte costae*		X	X	
Allen's hummingbird	*Selasphorus sasin*	BCC	X	X	
Killdeer	*Charadrius vociferus*		X		
Great blue heron	*Ardea herodias*		X		Foraged in Castaic Creek
Great egret	*Ardea alba*		X	X	
Black-crowned night-heron	*Nycticorax nycticorax*		X		
Turkey vulture	*Cathartes aura*	BOP, LACSBS	X	X	
Cooper's hawk	*Accipiter cooperii*	WL, BOP		X	Flew over
Red-shouldered hawk	*Buteo lineatus*	BOP	X		Perched and flew over
Red-tailed hawk	*Buteo jamaicensis*	BOP	X	X	Perched and flew over
American barn owl	*Tyto furcata*	BOP	X		Called in evening

Common name	***Species name***	**Status[1]**	**VCC**	**Entrada South**	**Notes**
Great horned owl	*Bubo virginianus*	BOP	X		Called in evening
Acorn woodpecker	*Melanerpes formicivorus*			X	
Nuttall's woodpecker	*Picoides nuttallii*	BCC	X		
Hairy woodpecker	*Dryobates villosus*		X		
Cassin's kingbird	*Tyrannus vociferans*		X	X	
Black phoebe	*Sayornis nigricans*		X	X	Foraged
Say's phoebe	*Sayornis saya*		X	X	
California scrub-jay	*Aphelocoma californica*		X	X	Many
American crow	*Corvus brachyrhynchos*		X	X	
Common raven	*Corvus corax*		X	X	
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW	X		
Bushtit	*Psaltriparus minimus*		X	X	Many
Wrentit	*Chamaea fasciata*	BCC	X	X	Just off site
Ruby-crowned kinglet	*Regulus calendula*		X		
Blue-gray gnatcatcher	*Polioptila caerulea*		X		
Bewick's wren	*Thryomanes bewickii*		X	X	
California thrasher	*Toxostoma redivivum*	BCC		X	Just off site
Northern mockingbird	*Mimus polyglottos*		X		
European starling	*Sturnus vulgaris*	Non-native	X		
Western bluebird	*Sialia mexicana*		X		
House finch	*Haemorphous mexicanus*		X	X	Many
Lesser goldfinch	*Spinus psaltria*		X	X	
Lark sparrow	*Chondestes grammacus*			X	
White-crowned sparrow	*Zonotrichia leucophrys*		X	X	Just off site
Song sparrow	*Melospiza melodia*		X	X	
California towhee	*Melozone crissalis*		X	X	Foraged
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW		X	Foraged
Spotted towhee	*Pipilo maculatus*			X	Foraged
Red-winged blackbird	*Agelaius phoeniceus*		X	X	
Brewer's blackbird	*Euphagus cyanocephalus*			X	

Common name	*Species name*	Status[1]	VCC	Entrada South	Notes
Orange-crowned warbler	*Oreothlypis celata*		X		
Common yellowthroat	*Geothlypis trichas*		X		
Yellow-rumped warbler	*Setophaga coronata*		X	X	
Wilson's warbler	*Cardellina pusilla*		X		Foraged
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L	X		
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	X		
California ground squirrel	*Otospermophilus beecheyi*			X	
Raccoon	*Procyon lotor*		X		Deceased just off site, likely hit by car
Coyote	*Canis latrans*		X	X	Called in evening
Skunk sp.	*Mephitidae*		X		
California vole	*Microtus californicus*		X	X	Burrows
Botta's pocket gopher	*Thomomys bottae*		X		Burrows

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID =109406) as BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); SSC_i = California Species of Special Concern with *i* = priorities 1, 2 and 3; WL = CDFW's Taxa to Watch List; BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), and LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

All the species in Table 1 would lose habitat as the result of the project. Even the species associated with riparian environments would be adversely affected, because they would lose access to forage sourced from surrounding uplands, and because they would be vulnerable to the intrusive effects of artificial light and noise from neighboring industrial and office buildings and homes, and from house cats, dogs and people.

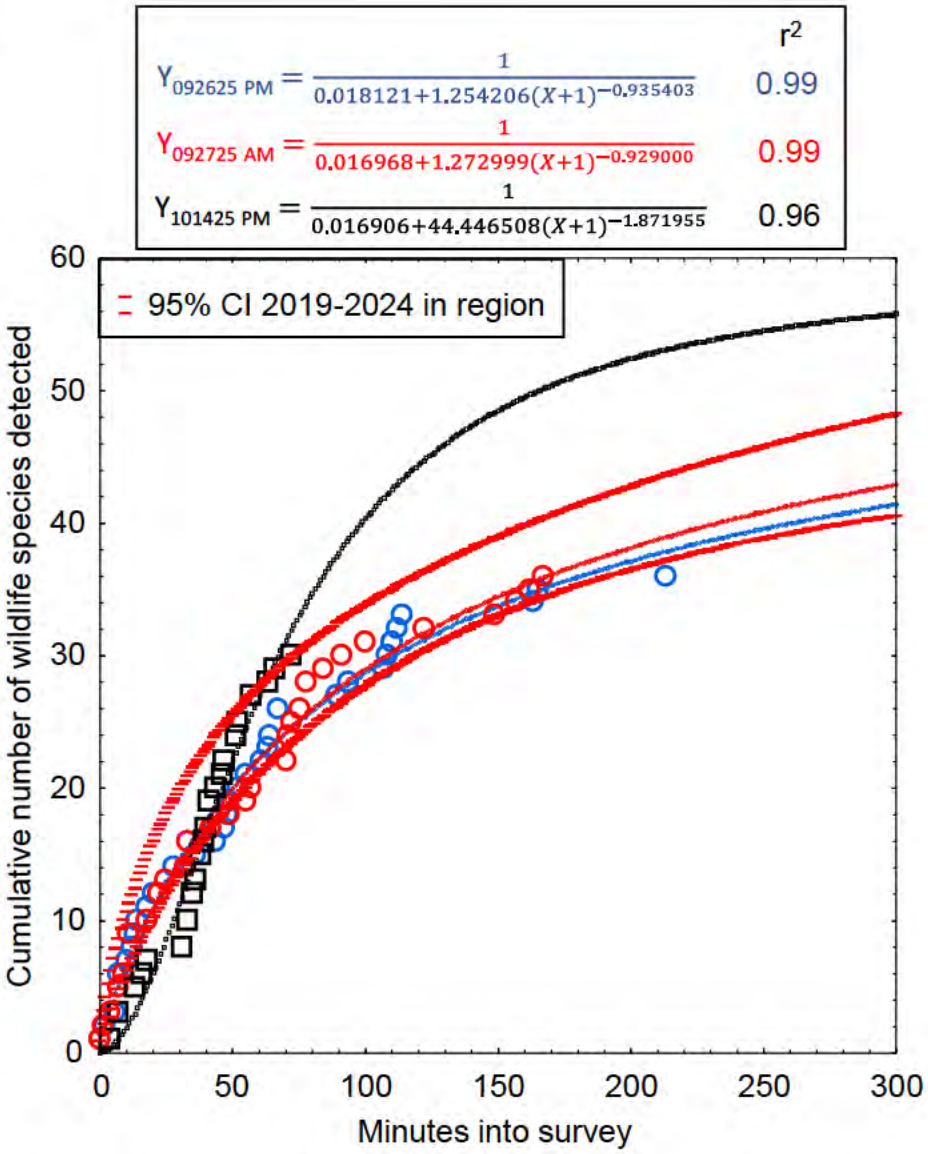
ANALYSIS OF RECONNAISSANCE SURVEY DATA

Noriko detected 62 species of vertebrate willdife, which was a large number for the brevity of her survey effort. However, the species of wildlife Noriko detected at the project site were not the only species that were present during her surveys, as there are always species that are not detected. To demonstrate this, I fit nonlinear regression models to Noriko's cumulative numbers of vertebrate species detected with time into her daytime surveys to predict the number of species that she would have detected with longer surveys or perhaps with additional biologists available to assist her. The type of model is a logistic growth model, which reaches an asymptote that corresponds with the theoretical maximum number of vertebrate wildlife species that could have been detected during the survey. The models fit to Noriko's survey data from the evenings of 26 September and 14 October predict 55 and 59 species of vertebrate wildlife were available to be detected, respectively, and the model fit to Noriko's survey data from the morning of 27 September also predicts 59 species of vertebrate wildlife (Figure 1). These predictions numbered 19 to 29 more species than she detected per survey. Her morning survey results were within the 95% confidence interval estimated from morning surveys Noriko has completed throughout the region.

Unknown are the identities of the species Noriko missed, but the species that Noriko did and did not detect composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence, some require more survey effort because they are highly cryptic, and the members of other species would visit the site only periodically while patrolling large home ranges. Surveys on only two or three days cannot possibly detect all of the species of the local wildlife community.

At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's two surveys. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. This analytical bridge draws inference from the pattern of species detections more than it does from the research site, and I note that the pattern, i.e., rate, of species detections is consistent from site to site.

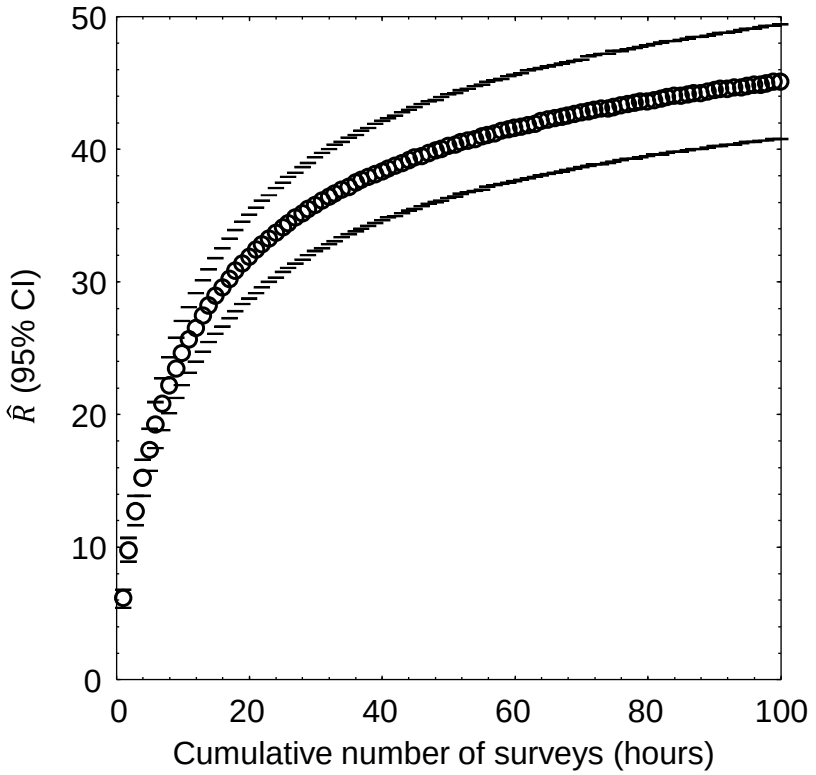
Figure 1. *Actual and predicted relationships between the numbers of vertebrate wildlife species detected and the elapsed survey time based on Noriko's visual-scan surveys on 26 and 27 September, and on 14 October 2025.*



As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 22.2 species over my first 8 hours of diurnal surveys at my research site in the Altamont Pass (8 hours to match the 8 hours Noriko surveyed during daylight hours at the project site), which composed 38.9% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 58 diurnally active species Noriko detected after her 8 hours of daylight survey at the project site likely represented 38.9% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, Noriko would likely detect $^{58}/_{0.389} = 149$ species of diurnally active vertebrate wildlife at the site. Assuming Noriko's ratio of special-status to non-special-status species was to hold through the detections of all 149 predicted species, then continued surveys would eventually detect 28 special-status species of diurnally active vertebrate wildlife.

Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.*



Because my prediction of 149 species of vertebrate wildlife, including 28 special-status species, is derived from daytime visual-scan surveys, and would detect few nocturnal mammals such as bats, the true number of species composing the wildlife community of the site must be larger. Noriko's reconnaissance surveys should serve only as a starting point toward characterization of the site's wildlife community, but they certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than

her three surveys to produce an inventory the project site's wildlife community. Nevertheless, the large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort.

EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the wildlife community and any key ecological relationships and known and ongoing threats to special-status species. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of the CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these steps were taken, though not with sufficient rigor and not interpreted in furtherance of an accurate characterization of the wildlife community.

Environmental Setting informed by Field Surveys

To the CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources. In the case of this project, however, not only are more surveys needed, but the methods and results of past surveys and any future surveys need to be fully reported and much more carefully interpreted.

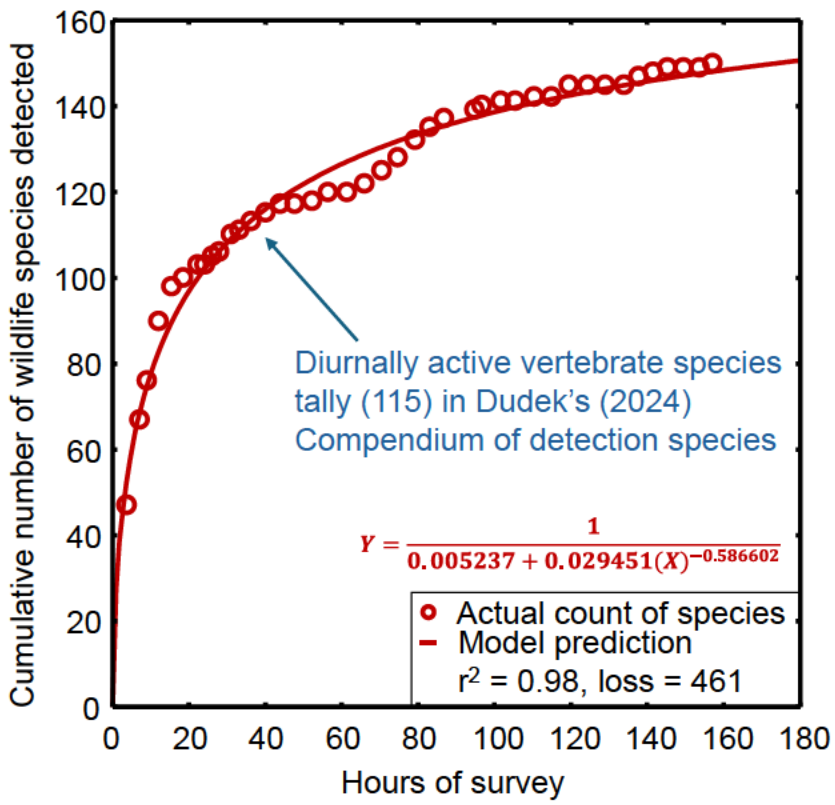
Without full reporting of methods and results of all past surveys, both Dudek (2024) and the SEIR can report on patterns of findings that cannot be checked for veracity by the reader. It would have helped to attach the reports of surveys to the SEIR. The SEIR (p. 5.2-33) reports, "common wildlife species observed within the Entrada South Planning Area since 2010 remain similar to those observed prior to that time, as reflected in the results of the surveys summarized in Table 1 of the Entrada South Bio Report included in Appendix 5.2a." In fact, Table 1 of the Bio Report reflects no such thing, as survey results are not reported nor compared in Table 1 of Appendix 5.2a. Table 1 of App. 5.2a merely summarizes the methods of past survey efforts. Again, without producing the reports of past surveys, and because Table 1 of App. 5.2a does not report what the SEIR claims it reports, the reader has no way of checking whether it is true that "common wildlife species" remain similar to whatever it was they were supposed to be in past surveys. I say "whatever it was they were supposed to be" because the SEIR is ambiguous about what is similar: Species composition? Species richness? Species diversity? Animal abundance? Without specifying the metric under comparison, the SEIR's statement makes little sense.

Dudek (2024) and the SEIR include many additional unfounded conclusions, such as the following. Dudek (2024:16) states, "…more intensive wildlife surveys have been conducted since 2010. As a result, it would not be appropriate to draw the conclusion that the status of biological resources on the Entrada South Project Site has changed, compared to conditions described in the State-Certified EIR, based solely on a comparison of the number and diversity of the wildlife species on the Entrada South Project Site reported in the State-Certified EIR and those observed since then. However, the survey data do provide useful information for evaluating whether wildlife species previously documented to occur, or assumed to occur, within the Entrada South Project Site continue to be present or have a high likelihood of occurring. In some cases, more recent surveys confirm the occurrence of a species that was previously assumed to occur." Regarding the claim that more intensive surveys followed 2010, the reader can only take Dudek's word on this because Dudek (2024) fails to present the survey methods and results of any and all surveys in any manner that would enable the reader to compare the surveys. The survey efforts are insufficiently described, and the survey results are not provided in any form other than an overall compendium of species detected on the project site.

That additional surveys resulted in additional species detections is not surprising, but it is indicative of the past surveys having not been sufficient for characterizing the wildlife community. There should be no doubt, however, that a respectable survey effort has been completed, because otherwise Dudek's compendium would not have numbered 130 vertebrate species of wildlife having been detected. But these 132 species nevertheless represent only a portion of the species composition of the wildlife community (Figure 3). The 115 diurnally active species of vertebrate wildlife detected at the Entrada South project site would have taken about 35 hours of my time had I been doing the surveys (Figure 3), but it would take another 123.5 hours to detect the more cryptic or rare of the diurnally active species I detected at the study site I use for comparison in Figure 3. But again, Dudek (2024) and the SEIR fail to report how much survey time has been committed to the project site.

That additional surveys result in additional species detections is also evident in the focused surveys completed on the project site. Dudek (2024) reports that focused surveys were conducted for Crotch's bumble bee, Coastal California gnatcatcher, grasshopper sparrow, and western spadefoot. Crotch's bumble bee and Coastal California gnatcatcher were detected; these species likely would not have been detected without the focused surveys. On the other hand, grasshopper sparrow and western spadefoot were not detected, but the western spadefoot surveys were reportedly conducted under less-than-ideal conditions, and the surveys were never repeated in later years under more suitable conditions. To detect special-status species that are rare or highly cryptic, detection survey protocols need to be followed, or many additional reconnaissance surveys need to be completed. There is no shortcut to learning of the species composition of the wildlife community.

Figure 3. *Compared to my 41 reconnaissance-level surveys over three years in Rancho Cordova, California, the survey effort at Entrada South ended before it could achieve a wildlife species inventory of diurnally active vertebrae wildlife species, and coming up 23% short of the number of species I tallied after 158.5 hours of survey at another site.*



Dudek (2024) explains that no focused surveys were conducted for wildlife species that were not found during previous surveys or that were considered to have low likelihoods of occurrence, or for high-mobility species such as puma or "cryptic species that are unlikely to be detected even if present, as such surveys were not likely to produce meaningful data. The analysis regarding such species in the State-certified EIR remains valid…" None of this explanation makes sense. Focused surveys are absolutely in need for those special-status species that have yet to be detected, such as for western spadefoot. And, of course, it is for the cryptic species that detection survey protocols have been prepared, and for which focused surveys are in greatest need. Regarding meaningful data, to not survey for a species is the surest way to generate meaningless data, as null data are meaningless data. Dudek's explanation is inconsistent with the scientific method, as well as with the primary objectives of the CEQA.

Dudek (2024) states that surveys for rare plants were conducted through 2019, and it claims that it is very unlikely that additional surveys would generate different results. However, I see no evidence in Dudek (2024) or the SEIR that the plant surveys completed to date achieved the minimum standards of the CDFW (2018) survey guidelines for rare plants, which are not even cited in Dudek (2024).

Regarding rare plants, the SEIR (p. 5.2-27) claims that "for special-status plant species that have not been the subject of recent focused surveys, Project mitigation measures require either that the number of plants impacted be assessed and mitigated at the time of Project construction … or that impacts be assessed and mitigated based on loss of suitable habitat, rather than the number of plants affected." However, this approach is

inconsistent with the first tenant of CDFW (2018), which states “These protocols are meant to help people meet California Environmental Quality Act (CEQA) requirements for adequate disclosure of potential impacts to plants and sensitive natural communities.” The detecting and enumerating of rare plant species put at risk of harm by a proposed project needs to be disclosed to the public by completing appropriate surveys to the minimum standards of CDFW (2018).

Neither Dudek (2024) nor the SEIR attempt to contextualize the survey findings by comparing them to survey effort and to survey findings elsewhere. Dudek’s (2024) Appendix B lists 130 species of vertebrate wildlife having been detected, including 36 special-status species of vertebrate wildlife and another 2 species of invertebrates (omitted from Appendix B were two more special-status species – northern California legless lizard and two-striped gartersnake). Nothing is made of these numbers, which are not compared to numbers of species detected elsewhere. Are these numbers typical? In my experience, these numbers are exceptional. Of consultant survey outcomes at 198 project sites I have reviewed as an expert, the 132 vertebrate species at the Entrada South site is the second most I have seen (Figure 4), and the 38 special-status species of vertebrate wildlife is the most I have seen (Figure 5). Comparisons of the survey findings to the survey findings at other project sites clearly identify the Entrada South site as exceptional.

Figure 4. *Histogram of consultants’ tallies of vertebrate wildlife species resulting from surveys among project sites in California. The red line denotes the normal curve fit to the data. Entrada South falls within the right-skewed portion of the normal curve with 132 species detected.*

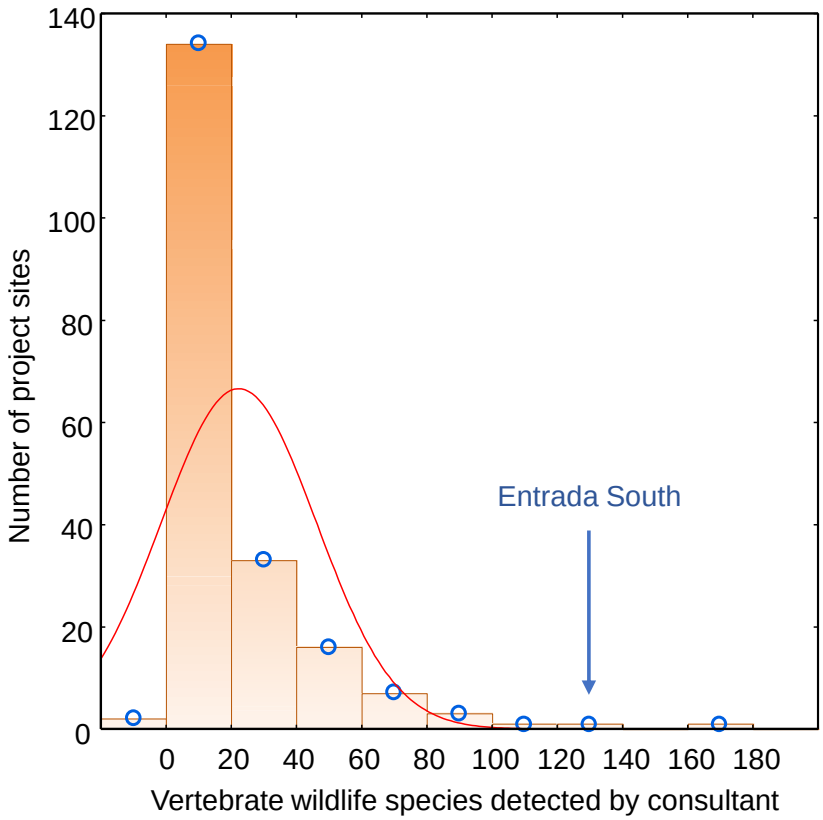
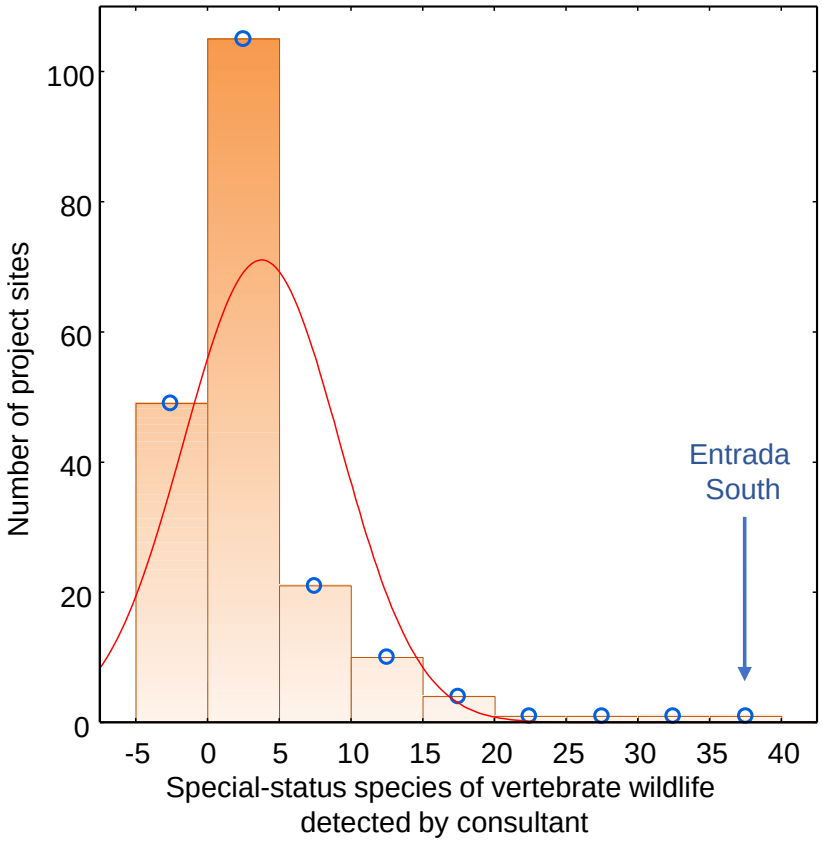


Figure 5. *Histogram of consultants' tallies of special-status species of vertebrate wildlife species resulting from surveys among project sites in California. The red line denotes the normal curve fit to the data. Entrada South falls far to the right of the right-skewed portion of the normal curve with 38 special-status species of vertebrate wildlife detected.*



I will point out that Noriko detected an additional 8 species of vertebrate wildlife that the consultants had not detected, including the western mastiff bat, which is another special-status species that brings to total 140 species of vertebrate wildlife and 39 special-status species of vertebrate wildlife documented on the project site. Noriko's additional species serve as additional evidence that the inventory of species composing the wildlife community on the project site remains incomplete. Additional surveys would result in additional species detections.

Environmental Setting informed by Desktop Review

The purpose of literature and database reviews and of consulting with local experts is to inform the field survey, and to augment interpretation of its outcome. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and migration flight paths. In the case of this project, the desktop review was incomplete, and the review that was completed was distorted to minimalize the likelihoods of occurrence of special-status species.

According to the SEIR (p. 5.2-24), "the State-certified EIR contained the best available information about the Project Site, including vegetation mapping and results of special-status plant and wildlife surveys." However, the 2017 EIR is eight years old, and its supporting surveys preceded the CDFW (2018) rare plant survey guidelines. Furthermore, the environmental review leading to the 2017 EIR made no use of eBird or

iNaturalist as part of its first step to establish the pool of special-status species for habitat assessment in its desktop review. Moreover, 25 species of wildlife in Table 2 have been designated with special status or a higher level of special status since the 2017 EIR, including monarch, Crotch's bumble bee, willet, tricolored blackbird, western gull, northern harrier, burrowing owl, California thrasher, wrentit, Bullock's oriole, and others. If the 2017 EIR is the best available information about the project site, then insufficient survey effort and an inadequate desktop review has since followed from the 2017 EIR. In fact, Dudek (2024:25) acknowledges that "many recent occurrences have been added to CNDDB since 2019." Along with this acknowledgement, Dudek and the SEIR should have also acknowledged that the 2017 EIR no longer provides the best information about the wildlife community on the project site.

To establish the pool of special-status species for assessment of occurrence likelihoods, Dudek (2024) queried the CNDDB for occurrence records within the nine nearest USGS Quadrangles inclusive of the project site. By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, Dudek (2024) screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." Dudek (2024) and hence the SEIR misuse the CNDDB.

The CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence. And again, the screening out of a species due to lack of occurrence records in the CNDDB is the same as an absence determination, and this step is being taken without adequate support of field surveys.

In my assessment based on a database review and site visits, 146 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 2). Not all these species should be expected to occur at the project site,

but each of them should be given a closer look to determine occurrence likelihoods and whether additional surveys are needed, or implementation of detection surveys, or whether it would be reasonable to assume presence. Of these 146 species, 39 (27%) were recorded on the project site, and another 29 (20%) species have been documented within 1.5 miles of the site (Very close), another 13 (9%) within 1.5 and 4 miles (Nearby), and another 55 (38%) within 4 to 30 miles (In region). More than half (55%) of the species in Table 2 have been reportedly documented within 4 miles of the project site. The site therefore supports at least 39 special-status species of wildlife, and it carries the potential for supporting many more special-status species of wildlife based on the proximities of recorded occurrences. Evidence certainly suggests that habitat assessments are needed for many more special-status species than have been performed in the SEIR.

Dudek (2024) considers the occurrence likelihoods of 22 (15%) of the special-status species listed in Table 2, which means that 124 (85%) of the special-status species in Table 2 were screened out of the analysis in the first step of the desktop review. Of the 22 special-status species it assesses, Dudek (2024) determines nine of the special-status species to be present, having not recognized the special status of an additional 27 species that had been detected by past surveys. Dudek (2024) assumes five more are present, and Dudek determines the other eight to have potential to occur. Due to its misuse of the CNDDB to screen species for inclusion in the habitat assessments, Dudek (2024) omits most of the special-status species that could occur on the project site.

Of the 124 special-status species in Table 2 omitted from habitat assessment, 34 have been documented on the project site, 25 have been within 1.5 miles, and 44 have been documented between 1.5 and 4 miles of the site. In summary, Dudek's determinations of occurrence likelihoods comport only poorly with survey results and with available occurrence records in the region.

All the special-status species in Table 2 that have been documented on site, most of those documented within four miles of the site, and some documented within the region would be adversely affected by the project. All these special-status species concentrate on and around the project site can only mean that the project site has maintained a high degree of ecological integrity. Many of these species undoubtedly benefit from the juxtaposition of riparian vegetation and upland environments. Lee and Rotenberry (2015) found that whereas the occurrences of some bird species in riparian forests correlated with local variables defined by percent tree cover versus percent shrub cover, the occurrences of twice as many riparian bird species correlated with landscape variables such as adjacency and extent of upland land uses such as agriculture, shrubland or forest. Much of the functionality of the riparian environment as a concentrator of wildlife is lost when this environment is isolated from natural upland environments. The project would indeed isolate and degrade the riparian environments within the project's footprint.

Table 2. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species detected by Noriko Smallwood during her site visit. Species highlighted in light orange have been assigned special status since the 2017 EIR.*

Common name	***Species name***	**Status[1]**	**SEIR occurrence**	**Databases, Surveys**	
				VCC	**Entrada South**
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT		In region	In region
Riverside fairy shrimp	*Streptocephalus woottoni*	FE		In range	In range
Arroyo chub	*Gila orcuttii*	SSC	Potential VCC	In region	In region
Santa Ana sucker	*Catostomus santaanae*	FT, SSC	Potential VCC	In region	In region
Unarmored threespine sickleback	*Gasterosteus aculeatus williamsoni*	FE, CE, CFP	Potential VCC	In region	In region
Monarch	*Danaus plexippus*	FC		Nearby	On site
Crotch's bumble bee	*Bombus crotchii*	CCE	Present ES, VCC	Very close	On site
Coast Range newt	*Taricha torosa*	SSC		In region	In region
Western spadefoot	*Spea hammondii*	FC, SSC	Assumed present ES, VCC	In region	In region
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Potential present VCC	In region	In region
California red-legged frog	*Rana draytonii*	FT, SSC		In region	In region
Southwestern pond turtle	*Actinemys pallida*	FC, SSC	Potential VCC	Very close	Nearby
Coast horned lizard	*Phrynosoma blainvillii*	SSC		In region	In region
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC		Very close	Nearby
Northern California legless lizard	*Anniella pulchra*	SSC	Present ES, assumed present VCC	In region	On site
San Diegan legless lizard	*Anniella stebbinsi*	SSC		Nearby	Very close
California glossy snake	*Arizona elegans occidentalis*	SSC	Assumed present ES, VCC	In region	In region
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region	In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC	Present ES	In region	On site
South coast gartersnake	*Thamnophis sirtalis pop. 1*	SSC		In region	In region

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Brant	*Branta bernicla*	SSC2		In region	In region
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL		Very close	Very close
Redhead	*Aythya americana*	SSC2		Nearby	Nearby
Western grebe	*Aechmophorus occidentalis*	BCC		Nearby	Nearby
Clark's grebe	*Aechmophorus clarkii*	BCC		Nearby	In region
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	Potential VCC	Nearby	Nearby
Black swift	*Cypseloides niger*	SSC3, BCC		Very close	Very close
Vaux's swift	*Chaetura vauxi*	SSC2		On site	On site
Calliope hummingbird	*Selasphorus calliope*	BCC		In region	In region
Rufous hummingbird	*Selasphorus rufus*	BCC		Very close	Very close
Allen's hummingbird	*Selasphorus sasin*	BCC		On site/**On site**	On site/**On site**
Light-footed Ridgway's rail	*Rallus obsoletus levipes*	FE, CE, CFP		In range	In range
Mountain plover	*Charadrius montanus*	SSC2, BCC		In region	In region
Snowy plover	*Charadrius nivosus*	BCC		In region	In region
Western snowy plover	*Charadrius n. nivosus*	FT, SSC		In region	In region
Long-billed curlew	*Numenius americanus*	WL, LACSBS		Very close	Very close
Marbled godwit	*Limosa fedoa*	BCC		Nearby	In region
Red knot (Pacific)	*Calidris canutus*	BCC		In region	In region
Pectoral sandpiper	*Calidris melanotos*	BCC		In region	In region
Short-billed dowitcher	*Limnodromus griseus*	BCC		In region	In region
Lesser yellowlegs	*Tringa flavipes*	BCC		In region	In region
Willet	*Tringa semipalmata*	BCC		Very close	Very close
Laughing gull	*Leucophaeus atricilla*	WL		In region	In region
Franklin's gull	*Leucophaeus pipixcan*	BCC		In region	In region
Heermann's gull	*Larus heermanni*	BCC		In region	In region
Western gull	*Larus occidentalis*	BCC		On site	Very close
California gull	*Larus californicus*	BCC, WL		On site	Very close
California least tern	*Sternula antillarum browni*	FE, CE, CFP		In region	In region

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Black tern	*Chlidonias niger*	BCC, SSC2		In region	In region
Elegant tern	*Thalasseus elegans*	BCC, WL, LACSBS		In region	In region
Black skimmer	*Rynchops niger*	BCC, SSC3		In region	In region
Common loon	*Gavia immer*	SSC		Nearby	In region
Double-crested cormorant	*Phalacrocorax auritus*	WL		On site	Very close
American white pelican	*Pelacanus erythrorhynchos*	BCC, SSC1		Very close	Very close
Least bittern	*Ixobrychus exilis*	SSC2		Nearby	In region
Reddish egret	*Egretta rufescens*	BCC		In region	In region
White-faced ibis	*Plegadis chihi*	WL, LACSBS		Very close	Very close
California condor	*Gymnogyps californianus*	FE, CE, CFP	Potential opportunistic forager ES, VCC	Nearby	Nearby
Turkey vulture	*Cathartes aura*	BOP, LACSBS		On site/**On site**	On site/**On site**
Osprey	*Pandion haliaetus*	WL, BOP		Very close	Very close
White-tailed kite	*Elanus luecurus*	CFP, BOP		On site	On site
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL		Very close	Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP, LACBW		Very close	Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		On site	Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP		On site	On site/**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP		Very close	Very close
Red-shouldered hawk	*Buteo lineatus*	BOP		On site/**On site**	On site
Swainson's hawk	*Buteo swainsoni*	CT, BOP		On site	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP		On site	On site/**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP, LACSBS		Very close	Very close
Zone-tailed hawk	*Buteo albonotatus*	BOP		In region	In region
Harris' hawk	*Parabuteo unicinctus*	WL, BOP		In region	In region

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Rough-legged hawk	*Buteo lagopus*	BOP		Very close	Nearby
American barn owl	*Tyto furcata*	BOP		On site	Very close/**On site**
Western screech-owl	*Megascops kennicotti*	BCC, BOP		Very close	Very close
Great horned owl	*Bubo virginianus*	BOP		On site/**On site**	On site
Burrowing owl	*Athene cunicularia*	BCC, CCE, SSC2, BOP	Potential ES, VCC	Very close	Very close
Long-eared owl	*Asio otus*	BCC, SSC3, BOP, LACSBS		In region	In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP, LACSBS		In region	In region
Northern saw-whet owl	*Aegolius acadicus*	BOP		In region	In region
Northern pygmy-owl	*Glaucidium gnoma*	BOP, LACBW		In region	In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		Very close	Very close
Nuttall's woodpecker	*Picoides nuttallii*	BCC		On site/**On site**	On site
White-headed woodpecker	*Dryobates albolarvatus*	BCC		Nearby	In region
American kestrel	*Falco sparverius*	BOP		On site	Very close
Merlin	*Falco columbarius*	WL, BOP		On site	On site
Peregrine falcon	*Falco peregrinus*	BOP		On site	On site
Prairie falcon	*Falco mexicanus*	WL, BOP, LACSBS		Very close	Very close
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		On site	Very close
Willow flycatcher	*Empidonax trailii*	CE		On site	Very close
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE	Assumed present VCC	In region	In region
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Very close	Very close
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	Present VCC	On site	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2, LACSBS		Very close	Very close

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW		On site/**On site**	On site
California horned lark	*Eremophila alpestris actia*	WL, LACSBS		On site	On site
Bank swallow	*Riparia riparia*	CT		Very close	Very close
Purple martin	*Progne subis*	SSC2		Very close	Very close
Wrentit	*Chamaea fasciata*	BCC		On site	On site/**Just off site**
California gnatcatcher	*Polioptila c. californica*	FT, SSC2	Assumed present ES, VCC	In region	In region
California thrasher	*Toxostoma redivivum*	BCC		In region	In region/ **Just off site**
Cassin's finch	*Haemorhous cassinii*	BCC		Very close	Very close
Lawrence's goldfinch	*Spinus lawrencei*	BCC		On site	On site
Grasshopper sparrow	*Ammodramus savannarum*	SSC2		Very close	Very close
Black-chinned sparrow	*Spizella atrogularis*	BCC, LACBW		Very close	On site
Gray-headed junco	*Junco hyemalis caniceps*	WL		Nearby	In region
Bell's sparrow	*Amphispiza b. belli*	WL, LACBW		Nearby	Nearby
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, LACSBS		In range	In range
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW		On site	On site/**On site**
Yellow-breasted chat	*Icteria virens*	SSC3		On site	On site
Yellow-headed blackbird	*X. xanthocephalus*	SSC3		On site	Very close
Bullock's oriole	*Icterus bullockii*	BCC		On site	On site
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Assumed present ES, VCC	Very close	Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3		In region	In region
Virginia's warbler	*Leiothlypis virginiae*	BCC, WL		In region	In region
Prothonotary warbler	*Protonotaria citrea*	BCC		In region	In region
Prairie warbler	*Setophaga discolor*	BCC		In region	In region
Yellow warbler	*Setophaga petechia*	SSC2		On site	On site
Summer tanager	*Piranga rubra*	SSC1		Very close	Very close

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
Little brown bat	*Myotis lucifugus*	WBWG:M		In region	In region
Yuma myotis	*Myotis yumanensis*	WBWG:LM	Present ES	In region	In region
Long-eared myotis	*Myotis evotis*	WBWG:M		In region	In region
Fringed myotis	*Myotis thysanodes*	WBWG:H		In range	In range
Long-legged myotis	*Myotis volans*	WBWG:H		In range	In range
California myotis	*Myotis californicus*	WBWG:L		In region	In region
Small-footed myotis	*Myotis ciliolabrum*	WBWG:M		In region	In region
Canyon bat	*Parastrellus hesperus*	WBWG:M		Nearby	Nearby
Big brown bat	*Episticus fuscus*	WBWG:L		In region	Nearby
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M		In region	In region
Hoary bat	*Lasiurus cinereus*	WBWG:M		In region	In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H	Present ES	In region	In region
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H		In range	In range
Spotted bat	*Euderma maculatum*	SSC, WBWG:H		In range	In range
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H		In range	In range
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H		In region	In region
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L		In region	In region/**On site**
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG:M	Present ES	In region	In region
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG:MH		In region	In region
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	Present ES	In region	In region/**On site**
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC		In range	In range
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC		In region	In region
San Diego Bryant's woodrat	*Neotoma bryanti (formerly lepida intermedia)*	SSC		In region	In region
Ringtail	*Bassariscus astutus*	CFP		In region	In region
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC		In range	In range

Common name	*Species name*	Status[1]	SEIR occurrence	Databases, Surveys	
				VCC	Entrada South
American badger	*Taxidea taxus*	SSC		Nearby	Very close
Mountain lion	*Puma concolor*	CCT	Present ES, assumed present VCC	Very close	Very close

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC_i = California Species of Special Concern with *i* = priorities 1, 2 and 3; WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), and LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

BIOLOGICAL IMPACTS ASSESSMENT

The impacts analysis in CEQA review involves prediction. Predictions are necessary because measuring a project's impacts directly could not happen until after the impacts occur, and the timing of this type of measurement would come too late for the formulations of avoidance and minimization mitigation strategies that are prioritized by the CEQA. Impact predictions are necessary as part of the environmental review. The accuracy of the predictions of impacts and their significance ultimately relies on the degree of accuracy in the characterization of the existing environmental setting (Figure 6).

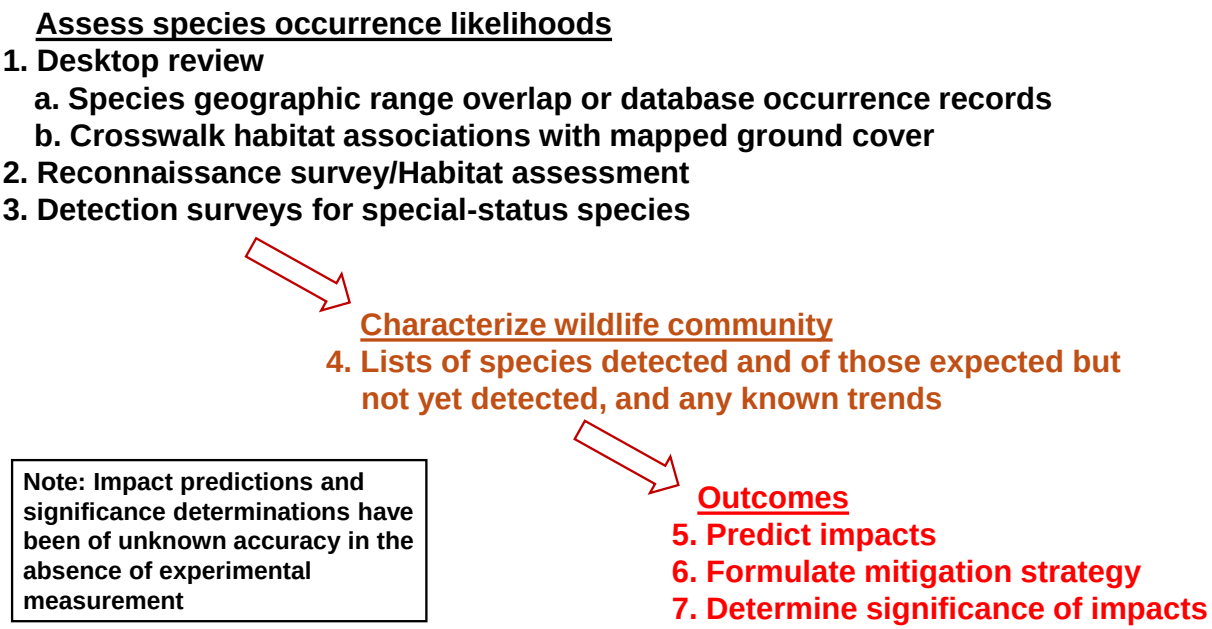


Figure 6. *General flow of information from the gathering stage through the characterization of the existing environment to predictions of impacts and their significance.*

Impact predictions can derive from speculation or from experience (Figure 7). Speculation is repeatedly discouraged in the CEQA Guidelines, because speculation is an inconclusive guess or ponderance on a phenomenon without the benefit of data. Prediction accuracy improves with experience, though the experience that can be brought to bear on impact predictions ranges from anecdotes to careful use of scientific inference. Inference is a conclusion derived logically from data that are available about a phenomenon. Any type of experience is usually better than relying on speculation, but careful scientific inference, especially inference drawn from experiments, has proven most effective. An analogy would be predicting the boiling temperature of water at a certain place with a known atmospheric pressure after having measured it hundreds of times at other places under various atmospheric pressures. The experience of measuring the boiling temperature at all these other places would certainly result in a more accurate prediction of the boiling point as compared to a speculative prediction. We know that use of inference in this example is *certainly* more predictive, and not

potentially more predictive, because we have a long successful history with the application of this type of experimentation to draw predictive inference.

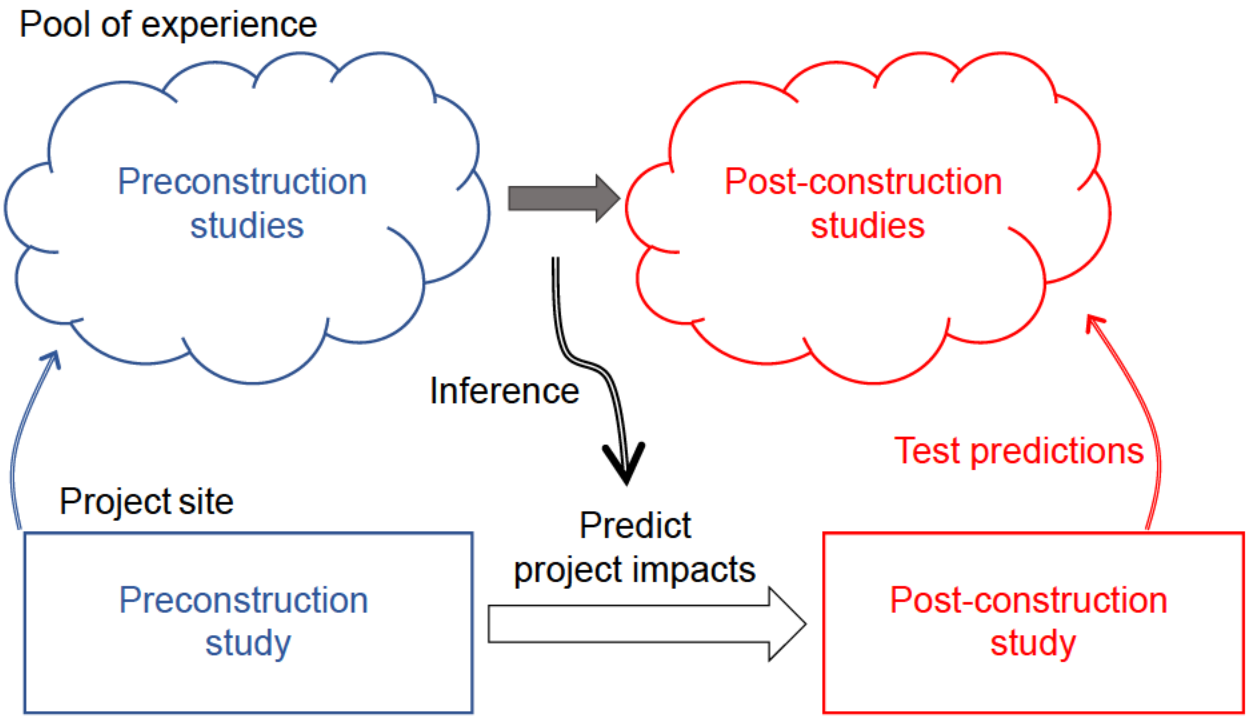


Figure 7. *A framework for arriving at predicted project impacts based on experience with other project sites. Ideally, there is a pool of similar projects in similar circumstances where predicted impacts were compared to realized impacts, and into which the proposed project can also contribute to experience.*

The many projects that have undergone CEQA review provide a comparative basis for drawing inferences needed to predict the impacts of the next proposed project (Figure 7). Reconnaissance survey results that are not compared to survey results from other project sites miss the opportunity to interpret the results for the purpose of predicting impacts. The same is true of CDNNB occurrence records. For example, it would be helpful to know how often a species lacking CNDDB occurrence records on a site is nevertheless detected onsite by reconnaissance survey(s). It would be helpful to know how often the impact predictions of other projects are proven accurate, and how often the required mitigation measures are proven effective. The comparative method enables the use of scientific inference over speculation and the blind confidence of simply repeating impact conclusions of unknown accuracy and mitigation strategies of unknown efficacy.

In the following, I analyze several types of impacts likely to result from the project, none of which are analyzed adequately or at all in the SEIR.

REDUCED PRODUCTIVE CAPACITY FROM HABITAT LOSS

The SEIR divides impacts between permanent and temporary, which might give the impression that, compared to 2017 DEIR, project impacts on habitat loss would be smaller because some would only be temporary. According to the SEIR (p. 5.2-130), temporary impact areas would be "restored with similar vegetation following construction." However, only vague success criteria and monitoring is proposed, and determinations of restoration success would be made subjectively by a single individual outside the public's view. This restoration lacks objective criteria, and it is therefore unenforceable as a means to qualify impacts as truly temporary. I therefore regard all habitat impacts as permanent.

Habitat loss results in a reduced productive capacity of affected wildlife species. The site is proven to serve as habitat to at least 140 species of vertebrate wildlife which were detected on site by the consultants and Noriko Smallwood. Most of these species confirmed on site were bird species, but the number of avian nest sites remains unknown. Because none of the surveys were suitable for detecting and counting all bird nests on the site, estimating total nest density of birds was not possible. The alternative method would be to infer productive capacity from estimates of total nest density elsewhere. A few estimates of total nest density have been published, and Noriko and I have been studying total avian nest density at various locations in California. Table 3 summarizes vegetation cover types mapped on the project site, and associates each with representative total nest density estimates needed to estimate the avian breeding capacity of the project site. Parallel analyses can be performed for other types of wildlife, but I address only birds here, as an example.

Table 3. *Mapped areas of vegetation cover and representative estimates of nest density used to estimate the annual average number of nest sites on the project site (Source: SEIR Tables 5.2-10 and 5.2-11).*

Vegetation cover	Entrada South	VCC	Total	Nests/ac	Estimated number of nest sites
Annual grassland	35.5	48.8	84.3	4.17 [a]	351.5
Coastal scrub, chapparal	148.6	46.2	194.8	1.82 [b]	354.5
Oak woodland	1.7	1.8	3.5	13.56 [c]	47.5
Riparian, wetland	19.1	28.1	47.2	25.20 [d]	1,189.4
Ornamental, developed	122.7	100.6	223.3	29.95 [e]	6,687.8
Total	327.6	225.5	553.1		8,630.7

[a] Noriko estimated 5.56 nests/acre on a 3.6-acre site of ruderal grassland bordering a woodland strip in Murrieta, and 1.86 nests/acre on another 4.83-acre grassland site bordering a strip of woodland in Murietta. I estimated 5.08 nests/acre on 2.95 acres of perennial grassland east of Davis California in 2024. The average of these three estimates is 4.17 nests/acre.

[b] Noriko estimated 1.63 nests/acre on 1.23 acres of coastal sage scrub in Murietta, and 2 nests/acre on 2 acres of chapparal in the Cleveland National Forest, both estimates in 2023, averaging 1.82 nests/acre.

[c] I estimated 14.38 nests/acre on 9.42 acres of an abandoned walnut orchard in Rancho Cordova in 2023, and Noriko estimated 12.73 nests/acre in 0.55 acres of oak woodland in Murietta in 2024, averaging 13.56 nests/acre.
[d] I estimated 28.79 nests/acres on 1.32 acres of riparian forest in Rancho Cordova in 2023; Noriko estimated 12.7 nests/acre on 0.63 acres in Temecula in 2023, and 15.9 nests/acre on 0.44 acres in Murietta in 2024; Young (1948), Yahner (1982)
[e] I estimated 21.25 nests/acre on 2 acres of ornamental tree and shrub vegetation in Rancho Cordova in 2023; Young (1948), Yahner (1982).

I estimate there are on average 8,630.7 nest sites on the project site, including 7,441.3 outside the riparian zone (Table 3). Assuming 1.39 broods per nest site based on a review of 322 North American bird species, which averaged 1.39 broods per year, then I estimate 11,997 nest attempts per year on the project site, including 10,343 outside the riparian zone. Assuming Young's (1948) study site typifies bird productivity of 2.9 fledged birds per nest attempt, then I predict 34,791 fledglings/year at the project site, including 29,948 outside the riparian zone. Assuming two-thirds of the nest sites would be lost from the riparian zone due to the project, as nesting birds in this zone would lose their forage in the upland areas, then the project would result in the losses of 7,838 nest sites, 10,894 nest attempts, and 31,562 fledglings.

The annual losses of 7,838 nest sites, 10,894 nest attempts would qualify as significant impacts that have not been analyzed by the SEIR. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The project would prevent the production of 31,562 fledglings per year. Assuming an average bird generation time of 4 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 35,481 birds per year denied to California.

The loss of 35,481 birds per year would be a loss of significant habitat value that is currently provided by the project site. Most if not all these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which are intended to most strongly protect breeding migratory birds. The loss of 35,481 birds would easily qualify as an unmitigated significant impact.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Unfortunately, the SEIR resorts to wild speculation in favor of the notion that the project site no longer functions as a wildlife movement corridor. According to the SEIR (p. 5.2-51), because of the Mission Village Project, "the Magic Mountain Canyon likely no longer serves as a corridor for high- and moderate-mobility species that were presumed to use this location." It goes on to argue that the corridor is further limited by surrounding development and I-5. It summarizes, "Overall, there are no habitat linkages or wildlife corridors within or in the vicinity of the Entrada South Planning Area under current conditions." At p. 5.2-52, the SEIR characterizes reptiles, small mammals and birds as

less mobile than mule deer, as if this distinction bears on the functionality of a corridor (it does not). And it claims that a camera trap study provides evidence that the corridor has become limited due to development; the evidence was lack of mountain lion in the photos. However, all this speculation is flawed.

One of the few widely-recognized corridors in natural settings is the riparian corridor (Andy 2020). The existence of riparian corridors serves as a stabilizing force on wildlife movement and persistence on larger landscapes (Andy 2020), regardless of the alleged mobility of the species that move along riparian corridors. The SEIR's mobility distinction is contrived, as it has no scientific foundation in the corridor concept (Smallwood 2015). All species of vertebrate wildlife rely on movement for foraging, finding mates or breeding sites, home range patrol, dispersal, and migration, and to meet these needs, any perceived differences in mortality between deer and salamanders are irrelevant to the functionality of a riparian corridor.

Another flaw in the speculation goes to the camera trap study, which is not attached to the SEIR. The SEIR fails to explain how lack of mountain lion detections has anything to do with the functionality of the riparian corridor. I predict that most of the species that occur on the project site were similarly not captured in photos taken by camera traps. Camera traps are not known for detecting more than a fraction of the wildlife species that compose the wildlife community; and if it was otherwise, then the use of camera traps would be pervasive. In my use of camera traps over 18 months at a research site, my co-investigators and I obtained photos of a number species of birds and mammals, but in no way did we expect that we photographed all the species that occur on the site. Specifically, we did not get any mountain lion photos, despite knowing that mountain lions were at least occasionally present. The EIR's reliance on the outcome of a camera trap study to claim that the project site lacks functionality as a movement corridor is unfounded and not credible.

Moreover, whether the site includes a wildlife movement corridor is not the only consideration when it comes to the standard CEQA Checklist question of whether the project would interfere with wildlife movement in the region. The primary phrase of the CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. Wildlife are obviously using the site, which means wildlife are able to travel to and from the site. Most of the birds recorded at the site are migratory birds, and the site is one of the last remaining patches of open space available to birds that need to move through Santa Clarita. The project site is important to wildlife movement in the region.

What is needed but has not been provided is a program of observation to characterize how wildlife use the site for movement in the region. Biologists should have already observed how wildlife utilize the project site to achieve their needs to move in the region. For example, patterns of bird flights could have been quantified from visual-scan surveys, and patterns of mammalian travel could have been revealed by use of a thermal-imaging camera at night, or a search for tracks during daytime. Biologists know how to detect patterns of wildlife movement; they were just not assigned the task in the case of this environmental review. A consequence is that Dudek and the SEIR lack an

empirical basis for predicting project impacts to wildlife movement in the region, nor for measuring impacts. Hence, the SEIR relies on speculation.

BIRD-WINDOW COLLISION MORTALITY

The project would introduce glass windows into an essential portion of avian habitat – that portion of the gaseous atmosphere that is referred to as the aerosphere (Davy et al. 2017, Diehl et al. 2017). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate. Birds are some of the many types of animals that evolved wings as a morphological adaptation to thrive by moving through the medium of the aerosphere. The aerosphere is habitat, to which an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008).

Many special-status species of birds have been recorded at or near the aerosphere of the project site. My database review and Noriko's site visit indicate there are 101 special-status species of birds with potential to use the site's aerosphere (Table 2). All the birds represented in Table 2 can quickly fly from wherever they have been documented to the project site, so they would all be within brief flights to the proposed project's windows. The consultants and Noriko have confirmed 74 vertebrate wildlife species on the project site, some of them flying across the site.

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but they are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and by not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found in searches, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also,

the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only two of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species

for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The SEIR does not report the extent of exterior glass in the project, but it does report 2,951,913 sf of floor space among 1,574 dwelling units, and 4,130,000 sf of floor space among industrial, business, office and commercial buildings. Based on my database of the rates of exterior glass to sf of floor space, the mean of five projects was 0.015192956 m^2/sf, which applied to the total sf of residential floor space predicts 44,848 m^2 of exterior glass windows. The SEIR does not report the allocation of 4,130,000 sf of non-residential floor space to industrial, business, office, and commercial uses, so I assumed an even split of sf and relied on my database to predict window extents. The predictions are 2,083 m^2 of windows among industrial buildings, 48,128 m^2 of windows among business and office buildings, and 16,740 m^2 of windows among commercial buildings. My prediction of total exterior glass windows in the project is 111,799 m^2. This extent of windows multiplied by the above-reported average of bird collision deaths per m^2 of glass per year applied predicts 8,173 (95% CI: 4,852–11,493) bird collision fatalities per year.

The vast majority of predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds and other sensitive species. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the project's airspace into a lethal collision trap to birds.

WILDLIFE DEPREDATION BY HOUSE CATS

Considering national trends, it is safe to assume that house cats would be introduced to the project area by residents of the proposed residential units. This is significant because house cats serve as one of the largest sources of avian mortality in North America (Dauphiné and Cooper 2009, Blancher 2013, Loss et al. 2013, Loyd et al. 2017). Loss et al. (2013) estimated 139 million cats in the USA in 2013 (range 114 to 164 million), which killed an estimated 16.95 billion vertebrate wildlife annually (range 7.6 to 26.3 billion). In 2012 there were 0.44 house cats per human in the USA, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. The SEIR reports there would be 1,574 residential units in the project, and it predicts there would be 4,958 new residents. The above rates of cat ownership applied to this number of new residents would predict 2,182 new cats, which based on the findings of Loss et al. (2013) would kill 266,204 vertebrate wildlife per year.

House cats also contribute to downstream loading of *Toxoplasma gondii*. According to a UC Davis wildlife health research program, "*Toxoplasma gondii is a parasite that can infect virtually all warm-blooded animals, but the only known definitive hosts are cats – domesticated and feral house cats included. Cats catch the parasite through hunting rodents and birds and they offload it into the environment through their feces… and …rain that falls on cement creates more runoff than rain that falls on natural earth, which contributes to increased runoff that can carry fecal pathogens to the sea*" (The original link is no longer active, but the quote came from the program described at: https://whc.vetmed.ucdavis.edu/programs-projects/ca-conservation/sea-otter).

Impacts to wildlife from the introduction of house cats into the environment would be highly significant, and yet these impacts are not considered in the SEIR. An obvious mitigation measure would be to constrain house cat ownership such as requiring cats to remain indoors.

TRAFFIC IMPACTS ON WILDLIFE

The SEIR neglects to address one of the project's most obvious, substantial impacts to wildlife, and that is wildlife mortality and injuries caused by project-generated traffic. Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic (Photos 46—49), including along roads far from the

project footprint but which would nevertheless by traversed by automobiles head to or from the project's building. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

Photo 46. *A white-tailed antelope squirrel runs across the road just in the Coachella Valley, 26 May 2022. Such road crossings are usually successful, but too often prove fatal to the animal.*

Photo 47. *A coyote uses the crosswalk to cross a road on 2 February 2023. Not all drivers stop, nor do all animals use the crosswalk. Too often, animals are injured or killed when they attempt to cross roads.*

Photos 48 and 49. *Raccoon killed on Road 31 just east of Highway 505 in Solano County (left; photo taken on 10 November 2018), and mourning dove killed by vehicle on a Bakersfield road (right; photo by Noriko Smallwood, 21 June 2020.)*

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 9,462 animals killed by traffic on the road. This fatality number projected over 1.25 years and 2.5 miles of road translates to 3,028 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 188,191 animals killed per 100 km of road per year, or 22 times that of Loss et al.'s (2014) upper bound estimate and 53 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,028 animals killed per mile along a county road in Contra Costa County. The estimated numbers of fatalities were 1.75% birds, 26.4% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 67.4% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs,

western toads, arboreal salamanders, slender salamanders and others), and 4.4% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts on wildlife

The SEIR predicts 272,854 mitigated daily VMT, which translates to 99,592,805 annual VMT would be generated by the project. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road in Contra Costa County daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 9,462 wildlife fatalities, or 2,351 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 42,362 vertebrate wildlife fatalities per year due to project-generated traffic. This would be an excessive take of wildlife caused by project-generated traffic.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The SEIR does not address this potential impact, let alone propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, and that, as the SEIR is currently written, these impacts would be unmitigated.

CUMULATIVE IMPACTS

The SEIR's cumulative impacts analysis is flawed. The SEIR fails to list past, ongoing and future projects in the area that would provide context for the analysis. Its analysis is entirely speculative, and its standards are contrived. The analysis falls far short for a project that would take 553.1 of a complex mosaic of wildlife habitat of high ecological integrity and inclusive of a major riparian corridor, and in which 140 species of vertebrate wildlife have been documented, including 39 special-status species, 25 of which have been designated special status or a greater level of special status since the 2017 EIR. The analysis falls far short in the face of predictable impacts such as the loss of 35,481 birds per year due to habitat destruction, 8,173 (95% CI: 4,852–11,493) bird collision fatalities per year caused by the installations of glass windows, 42,362 vertebrate animal fatalities per year caused by project-generated traffic, and 266,204 wildlife fatalities per year caused by free-ranging house cat predation. These predictable impacts and others warrant a serious cumulative impacts analysis.

The SEIR states (p. 5.2-136) that "compared to the 2017 project, the modified project would result in incremental reductions in the development footprint … including reduction of permanent impacts…" However, the areas of temporary impacts are small,

and as I commented earlier, the temporary nature of the impacts is not credible because the SEIR requires only vague success criteria for the habitat restoration needed to qualify impacts as temporary. Also, the determinations of restoration success would be made subjectively by a single individual outside the public's view, and they would lack the objective criteria needed to make it enforceable as means to qualify impacts as truly temporary. There is no reduction of the development footprint since 2017.

The SEIR argues that because there are no incremental increases in impacts from the 2017 EIR, the proposed modified project would not contribute significantly to cumulative impacts. However, as I commented earlier, there are now 25 species with new special status since 2017 and which occur on the project site. With all these changes in status, there are certainly incremental increases in impacts since 2017. The SEIR recognizes that there have been changes to species' status, resulting in special status that had not been analyzed in the 2017 EIR, but its argument for dismissing potential impacts as less than significant is flawed. The SEIR claims that because species such as California glossy snake shares habitat with other species that were analyze in the 2017 EIR, its contribution to cumulative impacts is no different from the species that were already analyzed in 2017. However, no two species share the same habitat, as habitat is defined by use of that portion of the environment that is needed for survival and reproduction by members of a species (Hall et al. 1997), and every habitat is unique to a species. The notion that two or more species share the same habitat is contrary to the habitat concept. This same flaw in the SEIR's argument also applies to Crotch's bumble bee and to any other special-status species that was not analyzed in the 2017 EIR but which the SEIR claims shares habitat with other species.

The SEIR then claims that mitigation for direct impacts to a species would prevent cumulative impacts. If this was the case, then the CEQA would not need to require cumulative impacts analysis, because most CEQA documents require mitigation for project-specific impacts. However, I have seen this argument many times while species of wildlife have continued to decline (e.g., Rosenberg et al. 2019, Miller 2024). In response to this common argument, my co-investigator and I performed an experiment to measure the effects of the purported efficacy of existing project-specific mitigation strategies. We revisited the project sites we had surveyed as experts to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration in order to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. All the developed sites had included mitigation measures to avoid, minimize or compensate for impacts on wildlife. Nevertheless, we found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. We reported that "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds (-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the

cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite the mitigation measures directed to project-specific impacts on wildlife. The reasoning of the SEIR is not supported by data.

MITIGATION STRATEGY

As I commented earlier, the mitigation strategy needs to be based on a sound understanding of the existing wildlife community. It needs to be known which species occur or are likely to occur on the project site as well as the nature of their occurrences. Are the occurrences of resident species? Migratory? For particular species such as special-status species, detection surveys should have been performed to either detect the species or to obtain evidence of absence. Surveys should have been performed to understand how wildlife use the site in their movement patterns. And what was found of wildlife species needs to be carefully interpreted by comparing the finding to the findings from other survey efforts at other sites. The mitigation strategy needs to follow the steps under Assess species occurrence likelihoods and Characterize wildlife community, followed by Step 7: Predict impacts (Figure 6). The SEIR's mitigation strategy does not follow from these steps. This pointed out, my comments follow in regular font the summary of each required mitigation measure in italics.

Any mitigation measures formulated in past documents such as the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) need re-evaluation before they are applied to this project, because this project includes 25 species with new assignments of special status since the 2017 EIR. Circumstances have changed.

SP-4.6-1 and **SP-4.6-2** *Restoration would be located in areas that have been disturbed … and adjacent to existing native habitat that support sensitive species…*

Problems with this measure include the lack of any objective criteria for what conditions qualify as "disturbed," what qualifies as "native habitat," and which species are sensitive species. As noted above, there are new assignments of special status to 25 additional species since 2017. This measure needs to be specific in its definitions and criteria, or else it would not be enforceable.

SP-4.6-3 – SP-4.6-15 *Restoration plans would be formulated, including monitoring and success criteria …*

There is no requirement for responding to restoration failures. There is no requirement of a performance bond, and no assurances that meaningful restoration would be completed.

SP-4.6-16 – SP-4.6-63 *These measures require habitat banking, restoration of oaks, and incidental take permit acquisition for wetlands…*

None of these measures go directly to take of wildlife, and there is no nexus provided between the conservation benefits of these measures and potential project impacts on the 25 species assigned new or additional special status since 2017.

RMDP/SCP-BIO-1 *Restates that **SP-4.6-1 – SP-4.6-16** would be required.*

This measure is redundant. See my comments above.

RMDP/SCP-BIO-2 – RMDP/SCP-BIO-49

None of these measures go directly to take of wildlife, and there is no nexus provided between the conservation benefits of these measures and potential project impacts on the 25 species assigned new or additional special status since 2017.

RMDP/SCP-BIO-52 *Conduct a Worker Environmental Awareness Program (WEAP) prior to initiation of construction activities.*

A WEAP should be implemented should the project go forward. However, it needs to be remembered that construction workers operate heavy machinery and otherwise work around heavy machinery and moving vehicles. Workers need to be aware primarily of their job performance and safety. It is misleading to imply that a measure entitled Worker Environmental Awareness Training is going to result in increased worker vigilance for any mouse or lizard in harm's way. This is not what should be expected or desired of construction workers. The conservation benefit of the WEAP would be *de minimis*.

RMDP/SCP-BIO-53 *Conduct preconstruction survey for western spadefoot, and mitigate for take at 2:1 ratio if the species is detected.*

Preconstruction surveys generally do not carry the same detection probabilities as do detection surveys. Moreover, the requirement of a preconstruction survey instead of a detection survey fails to disclose potential project impacts to the public and decision-makers. This measure is inappropriate.

RMDP/SCP-BIO-53 *Conduct preconstruction survey for coast horned lizard, silver legless lizard … coast patch-nosed snake.*

My comments on RMDP/SCP-BIO-52 apply to this measure, as well. Furthermore, it is unlikely that such a survey would find more than a tiny fraction of the populations of each of the 6 targeted species. Moreover, relocating the members of these species that are found would not change the carrying capacities of conspecifics in the receiving areas to where they are translocated. The net loss would be the same with or without translocations. The conservation benefits of this measure would be between *de minimis* and negative.

RMDP/SCP-BIO-54 and RMDP/SCP-BIO-55 *Conserve least Bell's vireo and coastal California gnatcatchers at higher ratios …*

I concur with these measures, but I note that there is no requirement for alternative prescriptions should these measures fail to achieve a no-net-loss of these birds. Nor is there any requirement of a performance bond.

RMDP/SCP-BIO-56 *Preconstruction surveys for nesting birds, with additional measures taken if active nests are found.*

There should be no doubt implied over the question of whether nesting birds would be found on the project site. I predict 8,631 nest sites on the project site; this is many more nests than biologists assigned to preconstruction surveys are ever going to be able to find. Should the project go forward, I concur with the need to perform preconstruction surveys, but it needs to be understood that most nest sites would not be found or salvaged.

Surveys to detect all nest sites consist of two steps, both of which are very difficult. First, the biologist(s) performing the survey must identify birds that are breeding. Second, the biologist(s) must locate the breeding birds' nests. The first step is typically completed by observing bird behaviors such as food deliveries and nest territory defense. To be successful these types of observations typically require many surveys on many dates spread throughout the breeding season even for a single species. To identify and locate the birds of all species nesting on a site requires a much greater survey effort four surveys in four weeks.

The SEIR fails to cite evidence of the efficacy of this measure where it has been applied elsewhere. The County needs to convince the public and decision-makers that the measure has already proven effective at other projects. It certainly has not prevented the permanent losses of nest sites, which are more important than nests because birds show much stronger fidelity to nest sites than to nest structures, and nest sites rather than just active nests compose the productive capacity of the project site.

Considering the importance of nest sites over nest structures, it needs to be understood that the conservation benefits of this measure would be *de minimis* compared to the project's potential impacts on breeding birds. This measure would not prevent the permanent loss of the avian productive capacity that I predict in my letter herein. Even assuming all the predicted 8,631 nest sites could be found (not likely), the mitigation measure would apply only to the breeding season of the survey. After the breeding season of the preconstruction survey, California would be denied the production of birds from the project site during all subsequent years. The project's impact on birds would be permanent and of large magnitude.

Finally, the mitigation language allows a single individual to make a subjective decision, outside the public's view, to determine the buffer area for any nest of a given species. This measure lacks objective criteria, and it is therefore unenforceable.

RMDP/SCP-BIO-57 *Preconstruction surveys for burrowing owls.*

Unlike in 2017 when the previous EIR was certified, the burrowing owl is now a candidate for listing under the California Endangered Species Act. Therefore, the applicant needs to consult with the CDFW as a first step and before the SEIR is certified. Furthermore, the CDFW (2012) survey guidelines need to be implemented in full, meaning that breeding-season detection surveys must be completed. A preconstruction survey cannot stand in for breeding season detection surveys, because preconstruction surveys carry nowhere near the same detection probabilities as do breeding-season detection surveys. For these reasons, this measure is flawed and deficient.

RMDP/SCP-BIO-58 *Preconstruction surveys for San Diego black-tailed jackrabbit and San Diego desert woodrat…*

Again, preconstruction surveys are not surrogates for detection surveys. Moreover, the requirement of a preconstruction survey instead of a detection survey fails to disclose potential project impacts to the public and decision-makers. This measure is inappropriate.

RMDP/SCP-BIO-60 *Preconstruction surveys for mountain lion natal den*

Scent-detection dogs would be needed for this survey. But again, preconstruction surveys are not surrogates for detection surveys. Moreover, the requirement of a preconstruction survey instead of a detection survey fails to disclose potential project impacts to the public and decision-makers. This measure is inappropriate.

RMDP/SCP-BIO-61 *Preconstruction surveys for bat maternity roosts and if necessary, provision of alternative roosts…*

It needs to be understood that the conservation benefits of this measure would be *de minimis* compared to the project's potential impacts on bats. It has been established that numerous bat species occur on the project site, including western mastiff bat. The project would destroy hundreds of acres of bat habitat, which cannot be replaced by provision of alternative maternity roosts. There would be the need for compensatory mitigation. I suggest a 5:1 mitigation ratio.

RMDP/SCP-BIO-63 *Homeowners' Association shall supply educational materials to future residents regarding pets, wildlife and open spaces, and stray dogs and cats might be rounded up and deposited with the local Society for the Prevention of Cruelty to Animals.*

Future residents ought to be educated about the impacts of free-ranging cats on wildlife, but many cat owners wrongly believe their cats would never take wildlife. Education alone has not worked and it will not work. The measure is noncommittal with regards to trapping cats, and as such it is unenforceable.

RMDP/SCP-BIO-68 *Day-roost sites of bats found during preconstruction surveys shall be mitigated with the provision of alternative roost sites.*

See my comments under RMDP/SCP-BIO-61. The conservation benefits of this measure would be *de minimis* compared to the project's potential impacts on bats.

RMDP/SCP-BIO-70 – RMDP/SCP-BIO-72 *Protection of vegetation from construction impacts…*

These measures should be implemented, but again their conservation benefits would be *de minimis* compared to the project's potential impacts on wildlife.

NEEDED MITIGATION MEASURES

Bird-Window Collision Mortality: If the project goes forward, it should at a minimum adhere to available Bird-Safe Guidelines, such as those prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced.

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Van Doren et al. (2021) found that nocturnal migrants contributed most of the collision fatalities in their study, and the largest predictors of fatalities were peak migration and

lit windows. Van Doren et al. (2021) predicted that a light-out mitigation measure could reduce bird-window collision mortality by 60%.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by collisions with windows of homes and with automobiles traveling to and from the project site, and by attempted predation by free-ranging house cats.

Landscaping: If the project goes forward, California native plant landscaping (i.e., grassland and locally appropriate scrub plants) should be considered to be used as opposed to landscaping with lawn and exotic shrubs and trees. Native plants offer more structure, cover, food resources, and nesting substrate for wildlife than landscaping with lawn and ornamental trees. Native plant landscaping has been shown to increase the abundance of arthropods which act as important sources of food for wildlife and are crucial for pollination and plant reproduction (Narango et al. 2017, Adams et al. 2020, Smallwood and Wood 2022.). Further, many endangered and threatened insects require native host plants for reproduction and migration, e.g., monarch butterfly. Around the world, landscaping with native plants over exotic plants increases the abundance and diversity of birds, and it is particularly valuable to native birds (Lerman and Warren 2011, Burghardt et al. 2008, Berthon et al. 2021, Smallwood and Wood 2022). Landscaping with native plants is a way to maintain or to bring back some of the natural habitat and lessen the footprint of urbanization by acting as interconnected patches of habitat for wildlife (Goddard et al. 2009, Tallamy 2020). Lastly, not only does native plant landscaping benefit wildlife, it requires less water and maintenance than traditional landscaping with lawn and hedges.

Thank you for your consideration,

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Shawn Smallwood, Ph.D.

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Kenneth Shawn Smallwood
Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 762 professional reports, including:
- 90 peer reviewed publications
- 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. Journal of Wildlife Management: e22216. https://doi.org/10.1002/jwmg.22216

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. Diversity 13, 540. https://doi.org/10.3390/d13110540.

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. Diversity 12(98); https://doi.org/10.3390/d12030098

Smallwood, K. S., D. A. Bell, and S. Standish. 2020. Dogs detect larger wind energy impacts on bats and birds. Journal of Wildlife Management 84:852-864. DOI: 10.1002/jwmg.21863.

Smallwood, K. S., and D. A. Bell. 2020. Relating bat passage rates to wind turbine fatalities.

Diversity 12(84); doi:10.3390/d12020084.

Smallwood, K. S., and D. A. Bell. 2020. Effects of wind turbine curtailment on bird and bat fatalities. Journal of Wildlife Management 84:684-696. DOI: 10.1002/jwmg.21844

Kitano, M., M. Ino, K. S. Smallwood, and S. Shiraki. 2020. Seasonal difference in carcass persistence rates at wind farms with snow, Hokkaido, Japan. Ornithological Science 19: 63 – 71.

Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

Smallwood, K. S. 2017. Long search intervals under-estimate bird and bat fatalities caused by wind turbines. Wildlife Society Bulletin 41:224-230.

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Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Turbine siting for raptors: an example from Repowering of the Altamont Pass Wind Resource Area. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel Micnemidocoptes mite in a Golden Eagle (*Aquila chrysaetos*). Journal of Avian Medicine and Surgery 29(3):231-237.

Smallwood, K. S. 2015. Habitat fragmentation and corridors. Pages 84-101 in M. L. Morrison and H. A. Mathewson, Eds., Wildlife habitat conservation: concepts, challenges, and solutions. John Hopkins University Press, Baltimore, Maryland, USA.

EXHIBIT B

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ROB BONTA
Attorney General

State of California
DEPARTMENT OF JUSTICE

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

Table of Contents

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In carrying out its duty to enforce laws across California, the California Attorney General's Bureau of Environmental Justice (Bureau)[1] regularly reviews proposed warehouse projects for compliance with the California Environmental Quality Act (CEQA) and other laws. When necessary, the Bureau submits comment letters to lead agencies regarding warehouse projects, and in rare cases the Bureau has filed litigation to enforce CEQA.[2] This document builds upon the Bureau's work on warehouse projects, collecting information gained from the Bureau's review of hundreds of warehouse projects across the state.[3] It is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development as they confront warehouse project proposals.[4] While CEQA analysis is necessarily project-specific, this document provides information on feasible best practices and mitigation measures, nearly all of which have been adapted from actual warehouse projects in California.

I. Background

In recent years, the proliferation of e-commerce and rising consumer expectations of rapid shipping have contributed to a boom in warehouse development.[5] California, with its ports, population centers, and transportation network, has found itself at the center of this trend. In 2020, the Ports of Los Angeles, Long Beach, and Oakland collectively accounted for over 34% of all United States international container trade.[6] The Ports of Los Angeles and Long Beach alone generate about 35,000 container truck trips every day.[7] Accordingly, the South Coast Air Basin now contains approximately 3,000 warehouses of over 100,000 square feet each, with a total warehouse capacity of approximately 700 million square feet, an increase of 20 percent over the last five years.[8] This trend has only accelerated, with e-commerce growing to

[1] https://oag.ca.gov/environment/justice.
[2] https://oag.ca.gov/environment/ceqa; *People of the State of California v. City of Fontana* (Super. Ct. San Bernardino County, No. CIVSB2121829); *South Central Neighbors United et al. v. City of Fresno et al.* (Super. Ct. Fresno County, No. 18CECG00690).
[3] This September 2022 version revises and replaces the prior March 2021 version of this document.
[4] Anyone reviewing this document to determine CEQA compliance responsibilities should consult their own attorney for legal advice.
[5] As used in this document, "warehouse" or "logistics facility" is defined as a facility consisting of one or more buildings that stores cargo, goods, or products on a short- or long-term basis for later distribution to businesses and/or retail customers.
[6] Data from the Bureau of Transportation Statistics, Container TEUs (Twenty-foot Equivalent Units) (2020), https://data.bts.gov/stories/s/Container-TEU/x3fb-aeda/ (Ports of Los Angeles, Long Beach, and Oakland combined for 14.157 million TEUs, 34% of 41.24 million TEUs total nationwide) (last accessed September 18, 2022).
[7] U.S. Dept. of Transportation, Federal Highway Administration, *FHWA Operations Support – Port Peak Pricing Program Evaluation* (2020), available at https://ops.fhwa.dot.gov/publications/fhwahop09014/sect2.htm (last accessed September 18, 2022).
[8] South Coast Air Qual. Mgmt. Dist., *Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305*, at 7-8, 41 (May 2021).

13% of all retail sales and 2021 being a second consecutive record year for new warehouse space leased.[9] The latest data and forecasts predict that the next wave of warehouse development will be in the Central Valley.[10]

When done properly, these activities can contribute to the economy and consumer welfare. However, imprudent warehouse development can harm local communities and the environment. Among other pollutants, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[11] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[12] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate contribute to traffic jams, deterioration of road surfaces, and traffic accidents.

These environmental impacts also tend to be concentrated in neighborhoods already suffering from disproportionate health impacts and systemic vulnerability. For example, a comprehensive study by the South Coast Air Quality Management District found that communities located near large warehouses scored far higher on California's environmental justice screening tool, which measures overall pollution and demographic vulnerability.[13] That

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[9] U.S. Census Bureau News, Quarterly Retail E-Commerce Sales 4th Quarter 2021 (February 22, 2022), https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf (last accessed September 18, 2022); CBRE Research, *2022 North America Industrial Big Box Report: Review and Outlook*, at 2-3 (March 2022), *available at* https://www.cbre.com/insights/reports/2022-north-america-industrial-big-box#download-report (last accessed September 18, 2022).

[10] CBRE Research, *supra note* 9, at 4, 36; New York Times, *Warehouses Are Headed to the Central Valley, Too* (Jul. 22, 2020), *available* at https://www.nytimes.com/2020/07/22/us/coronavirus-ca-warehouse-workers.html.

[11] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (last accessed September 18, 2022) (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts (last accessed September 18, 2022); Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (last accessed September 18, 2022) (DPM).

[12] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (last accessed September 18, 2022) (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

[13] South Coast Air Quality Management District, "Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305" (May 2021), at 4-5.

study concluded that, compared to the South Coast Air Basin averages, communities in the South Coast Air Basin near large warehouses had a substantially higher proportion of people of color; were exposed to more diesel particulate matter; had higher rates of asthma, cardiovascular disease, and low birth weights; and had higher poverty and unemployment rates.[14] Each area has its own unique history, but many of these impacts and vulnerabilities reflect historic redlining practices in these communities, which devalued land and concentrated poverty, racial outgroups, and pollution into designated areas.[15]

II. Proactive Planning: General Plans, Local Ordinances, and Good Neighbor Policies

To systematically guide warehouse development, we encourage local governing bodies to proactively plan for logistics projects in their jurisdictions. Proactive planning allows jurisdictions to prevent land use conflicts before they materialize and direct sustainable development. Benefits also include providing a predictable business environment, protecting residents from environmental harm, and setting consistent expectations jurisdiction-wide.

Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors[16] can help attract investment while avoiding conflicts between warehouse facilities and residential communities. Transition zones with lighter industrial and commercial land uses may also help minimize conflicts between residential and industrial uses.

In addition, general plan policies, local ordinances, and good neighbor policies should set minimum standards for logistics projects. General plan policies can be incorporated into existing economic development, land use, circulation, or other related general plan elements. Many jurisdictions alternatively choose to consolidate policies in a separate environmental justice element. Adopting general plan policies to guide warehouse development may also help

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[14] *Id*. at 5-7.

[15] Beginning in the 1930s, federal housing policy directed investment away from Black, immigrant, and working-class communities by color-coding neighborhoods according to the purported "riskiness" of loaning to their residents. In California cities where such "redlining" maps were drawn, nearly all of the communities where warehouses are now concentrated were formerly coded "red," signifying the least desirable areas where investment was to be avoided. *See* University of Richmond Digital Scholarship Lab, Mapping Inequality, https://dsl.richmond.edu/panorama/redlining/#loc=12/33.748/-118.272&city=los-angeles-ca (Los Angeles), https://dsl.richmond.edu/panorama/redlining/#loc=13/32.685/-117.132&city=san-diego-ca (San Diego), https://dsl.richmond.edu/panorama/redlining/#loc=11/37.81/-122.38&city=oakland-ca (Oakland), https://dsl.richmond.edu/panorama/redlining/#loc=13/37.956/-121.326&city=stockton-ca (Stockton), https://dsl.richmond.edu/panorama/redlining/#loc=12/36.751/-119.86&city=fresno-ca (Fresno) (all last accessed September 18, 2022).

[16] In this document, "sensitive receptors" refers to residences, schools, public recreation facilities, health care facilities, places of worship, daycare facilities, community centers, or incarceration facilities.

jurisdictions comply with their obligations under SB 1000, which requires local government general plans to identify objectives and policies to reduce health risks in disadvantaged communities, promote civil engagement in the public decision making process, and prioritize improvements and programs that address the needs of disadvantaged communities.[17]

Local ordinances and good neighbor policies that set development standards for all warehouses in the jurisdiction are a critical and increasingly common tool that serve several goals. When well-designed, these ordinances direct investment to local improvements, provide predictability for developers, conserve government resources by streamlining project review processes, and reduce the environmental impacts of industrial development. While many jurisdictions have adopted warehouse-specific development standards, an ordinance in the City of Fontana provides an example to review and build upon.[18] Good neighbor policies in Riverside County and by the Western Riverside Council of Government include additional measures worth consideration.[19]

The Bureau encourages jurisdictions to adopt their own local ordinances that combine the strongest policies from those models with measures discussed in the remainder of this document.

III. Community Engagement

Early and consistent community engagement is central to establishing good relationships between communities, lead agencies, and warehouse developers and tenants. Robust community engagement can give lead agencies access to community residents' on-the-ground knowledge and information about their concerns, build community support for projects, and develop creative solutions to ensure new logistics facilities are mutually beneficial. Examples of best practices for community engagement include:

- Holding a series of community meetings at times and locations convenient to members of the affected community and incorporating suggestions into the project design.
- Posting information in hard copy in public gathering spaces and on a website about the project. The information should include a complete, accurate project description, maps and drawings of the project design, and information about how the public can provide input and be involved in the project approval process. The

[17] For more information about SB 1000, *see* https://oag.ca.gov/environment/sb1000.
[18] https://oag.ca.gov/system/files/attachments/press-docs/Final%20Signed%20Fontana%20Ordinance.pdf (last accessed September 18, 2022).
[19] For example, the Riverside County policy requires community benefits agreements and supplemental funding contributions toward additional pollution offsets, and the Western Riverside Council of Governments policy sets a minimum buffer zone of 300 meters between warehouses and sensitive receptors. https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf (last accessed September 18, 2022) (Riverside County); http://www.wrcog.cog.ca.us/DocumentCenter/View/318/Good-Neighbor-Guidelines-for-Siting-Warehouse-Distribution-Facilities-PDF?bidId= (last accessed September 18, 2022) (Western Riverside Council of Governments).

information should be in a format that is easy to navigate and understand for members of the affected community.

- Providing notice by mail to residents and schools within a certain radius of the project and along transportation corridors to be used by vehicles visiting the project, and by posting a prominent sign on the project site. The notice should include a brief project description and directions for accessing complete information about the project and for providing input on the project.
- Providing translation or interpretation in residents' native language, where appropriate.
- For public meetings broadcast online or otherwise held remotely, providing for access and public comment by telephone and supplying instructions for access and public comment with ample lead time prior to the meeting.
- Partnering with local community-based organizations to solicit feedback, leverage local networks, co-host meetings, and build support.
- Considering adoption of a community benefits agreement, negotiated with input from affected residents and businesses, by which the developer provides benefits to the affected community.
- Creating a community advisory board made up of local residents to review and provide feedback on project proposals in early planning stages.
- Identifying a person to act as a community liaison concerning on-site construction activity and operations, and providing contact information for the community liaison to the surrounding community.
- Requiring signage in public view at warehouse facilities with contact information for a local designated representative for the facility operator who can receive community complaints, and requiring any complaints to be answered by the facility operator within 48 hours of receipt.

IV. Warehouse Siting and Design Considerations

The most important consideration when planning a logistics facility is its location. Warehouses located in residential neighborhoods or near sensitive receptors expose community residents and those using or visiting sensitive receptor sites to the air pollution, noise, traffic, and other environmental impacts they generate. Therefore, placing facilities away from sensitive receptors significantly reduces their environmental and quality of life harms on local communities. The suggested best practices for siting and design of warehouse facilities does not relieve lead agencies' responsibility under CEQA to conduct a project-specific analysis of the project's impacts and evaluation of feasible mitigation measures and alternatives; lead agencies' incorporation of the best practices must be part of the impact, mitigation and alternatives analyses to meet the requirements of CEQA. Examples of best practices when siting and designing warehouse facilities include:

- Per California Air Resources Board (CARB) guidance, siting warehouse facilities so that their property lines are at least 1,000 feet from the property lines of the nearest sensitive receptors.[20]
- Providing adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- Establishing setbacks from the property line of the nearest sensitive receptor to warehouse dock doors, loading areas, and truck drive aisles, and locating warehouse dock doors, loading areas, and truck drive aisles on the opposite side of the building from the nearest sensitive receptors—e.g., placing dock doors on the north side of the facility if sensitive receptors are near the south side of the facility.
- Placing facility entry and exit points from the public street away from sensitive receptors—e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- Ensuring heavy duty trucks abide by the on-site circulation plans by constructing physical barriers to block those trucks from using areas of the project site restricted to light duty vehicles or emergency vehicles only.
- Preventing truck queuing spillover onto surrounding streets by positioning entry gates after a minimum of 140 feet of space for queuing, and increasing the distance by 70 feet for every 20 loading docks beyond 50 docks.
- Locating facility entry and exit points on streets of higher commercial classification that are designed to accommodate heavy duty truck usage.
- Screening the warehouse site perimeter and onsite areas with significant truck traffic (e.g., dock doors and drive aisles) by creating physical, structural, and/or vegetative buffers that prevent or substantially reduce pollutant and noise dispersion from the facility to sensitive receptors.
- Planting exclusively 36-inch box evergreen trees to ensure faster maturity and four-season foliage.
- Requiring all property owners and successors in interest to maintain onsite trees and vegetation for the duration of ownership, including replacing any dead or unhealthy trees and vegetation.
- Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- Including signs and drive aisle pavement markings that clearly identify onsite circulation patterns to minimize unnecessary onsite vehicle travel.
- Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

[20] CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted in some scenarios. CARB, Concept Paper for the Freight Handbook (December 2019), *available at* https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf (last accessed September 18, 2022).

V. Air Quality and Greenhouse Gas Emissions Analysis and Mitigation

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of logistics facilities and adoption of all feasible mitigation of significant impacts. Although efforts by CARB and other authorities to regulate the heavy-duty truck and off-road diesel fleets have made excellent progress in reducing the air quality impacts of logistics facilities, the opportunity remains for local jurisdictions to further mitigate these impacts at the project level. Lead agencies and developers should also consider designing projects with their long-term viability in mind. Constructing the necessary infrastructure to prepare for the zero-emission future of goods movement not only reduces a facility's emissions and local impact now, but it can also save money as demand for zero-emission infrastructure grows. In planning new logistics facilities, the Bureau strongly encourages developers to consider the local, statewide, and global impacts of their projects' emissions.

Examples of best practices when studying air quality and greenhouse gas impacts include:

- Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts. In general, new warehouse developments are not ministerial under CEQA because they involve public officials' personal judgment as to the wisdom or manner of carrying out the project, even when warehouses are permitted by a site's applicable zoning and/or general plan land use designation.[21]
- When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.
- Preparing a quantitative air quality study in accordance with local air district guidelines.
- Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.
- Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA.
- Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.

[21] CEQA Guidelines § 15369.

- Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

Examples of measures to mitigate air quality and greenhouse gas impacts from construction are below. To ensure mitigation measures are enforceable and effective, they should be imposed as permit conditions on the project where applicable.

- Requiring off-road construction equipment to be hybrid electric-diesel or zero-emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

Examples of measures to mitigate air quality and greenhouse gas impacts from operation include:

- Requiring all heavy-duty vehicles engaged in drayage[22] to or from the project site to be zero-emission beginning in 2030.

[22] "Drayage" refers generally to transport of cargo to or from a seaport or intermodal railyard.

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of

trucks.

- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

VI. Noise Impacts Analysis and Mitigation

The noise associated with logistics facilities can be among their most intrusive impacts to nearby sensitive receptors. Various sources, such as unloading activity, diesel truck movement, and rooftop air conditioning units, can contribute substantial noise pollution. These impacts are exacerbated by logistics facilities' typical 24-hour, seven-days-per-week operation. Construction noise is often even greater than operational noise, so if a project site is near sensitive receptors, developers and lead agencies should adopt measures to reduce the noise generated by both construction and operation activities.

Examples of best practices when studying noise impacts include:

- Preparing a noise impact analysis that considers all reasonably foreseeable project noise impacts, including to nearby sensitive receptors. All reasonably foreseeable project noise impacts encompasses noise from both construction and operations, including stationary, on-site, and off-site noise sources.
- Adopting a lower significance threshold for incremental noise increases when baseline noise already exceeds total noise significance thresholds, to account for the cumulative impact of additional noise and the fact that, as noise moves up the decibel scale, each decibel increase is a progressively greater increase in sound

pressure than the last. For example, 70 dBA is ten times more sound pressure than 60 dBA.

- Disclosing and considering the significance of short-term noise levels associated with all aspects of project operation (i.e. both on-site noise generation and off-site truck noise). Considering only average noise levels may mask noise impacts sensitive receptors would consider significant—for example, the repeated but short-lived passing of individual trucks or loading activities at night.

Examples of measures to mitigate noise impacts include:

- Constructing physical, structural, or vegetative noise barriers on and/or off the project site.
- Planning and enforcing truck routes that avoid passing sensitive receptors.
- Locating or parking all stationary construction equipment as far from sensitive receptors as possible, and directing emitted noise away from sensitive receptors.
- Verifying that construction equipment has properly operating and maintained mufflers.
- Requiring all combustion-powered construction equipment to be surrounded by a noise protection barrier
- Limiting operation hours to daytime hours on weekdays.
- Paving roads where truck traffic is anticipated with low noise asphalt.
- Orienting any public address systems onsite away from sensitive receptors and setting system volume at a level not readily audible past the property line.

VII. Traffic Impacts Analysis and Mitigation

Warehouse facilities inevitably bring truck and passenger car traffic. Truck traffic can present substantial safety issues. Collisions with heavy-duty trucks are especially dangerous for passenger cars, motorcycles, bicycles, and pedestrians. These concerns can be even greater if truck traffic passes through residential areas, school zones, or other places where pedestrians are common and extra caution is warranted.

Examples of measures to mitigate traffic impacts include:

- Designing, clearly marking, and enforcing truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- Installing signs in residential areas noting that truck and employee parking is prohibited.
- Requiring preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should include measures for preventing truck queuing, circling, stopping, and parking on public streets, such as signage, pavement markings, and queuing analysis and enforcement. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license

is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.
- Constructing new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- Consulting with the local public transit agency and securing increased public transit service to the project area.
- Designating areas for employee pickup and drop-off.
- Implementing traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals.
- Placing facility entry and exit points on major streets that do not have adjacent sensitive receptors.
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors.
- Constructing roadway improvements to improve traffic flow.
- Preparing a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

VIII. Other Significant Environmental Impacts Analysis and Mitigation

Warehouse projects may result in significant environmental impacts to other resources, such as to aesthetics, cultural resources, energy, geology, or hazardous materials. All significant adverse environmental impacts must be evaluated, disclosed and mitigated to the extent feasible under CEQA. Examples of best practices and mitigation measures to reduce environmental impacts that do not fall under any of the above categories include:

- Appointing a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the lead agency, to be updated annually.
- Creating a fund to mitigate impacts on affected residents, schools, places of worship, and other community institutions by retrofitting their property. For example, retaining a contractor to retrofit/install HVAC and/or air filtration systems, doors, dual-paned windows, and sound- and vibration-deadening insulation and curtains.
- Sweeping surrounding streets on a daily basis during construction to remove any construction-related debris and dirt.
- Directing all lighting at the facility into the interior of the site.
- Using full cut-off light shields and/or anti-glare lighting.
- Requiring submission of a property maintenance program for agency review and approval providing for the regular maintenance of all building structures, landscaping, and paved surfaces.
- Using cool pavement to reduce heat island effects.

- Planting trees in parking areas to provide at least 35% shade cover of parking areas within fifteen years to reduce heat island impacts.
- Using light colored roofing materials with a solar reflective index of 78 or greater.
- Including on-site amenities, such as a truck operator lounge with restrooms, vending machines, and air conditioning, to reduce the need for truck operators to idle or travel offsite.
- Designing skylights to provide natural light to interior worker areas.
- Installing climate control and air filtration in the warehouse facility to promote worker well-being.

IX. Conclusion

California's world-class economy, ports, and transportation network position it at the center of the e-commerce and logistics industry boom. At the same time, California is a global leader in environmental protection and environmentally just development. The guidance in this document furthers these dual strengths, ensuring that all can access the benefits of economic development. The Bureau will continue to monitor proposed projects for compliance with CEQA and other laws. Lead agencies, developers, community advocates, and other interested parties should feel free to reach out to us as they consider how to guide warehouse development in their area.

Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

Attachment C

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September 22, 2025

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Re: Appeal of Trails at Lyons Canyon Project; September 23, 2025 Board of Supervisors Agenda Item 4

Dear Chair Barger and Honorable Board of Supervisors:

This comment is submitted on behalf of Appellant Supporters Alliance for Environmental Responsibility ("SAFER") and its members living and working in and around Los Angeles County regarding Trails at Lyons Canyon Project and the Final Environmental Impact Report ("EIR" or "FEIR") prepared for the Project, including the development of 37 lots on 233.49 gross acres, including 10 multi-family residential lots with 510 attached and detached dwelling units across 290 buildings on 10 lots (collectively, "Project".) SAFER's Appeal is scheduled to be heard as Agenda Item 4 at the Board of Supervisors September 23, 2025 meeting.

SAFER's review of the EIR was assisted by expert wildlife biologist Dr. Shawn Smallwood, Ph.D., and indoor air quality Francis Offermann, whose written comments and CVs are attached as Exhibits A and B, respectively.

As discussed below, after reviewing the FEIR, we conclude that the FEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Board of Supervisors grant our appeal and request staff to address these shortcomings in a revised environmental impact report ("REIR") and recirculate the REIR prior to considering approvals for the Project.

PROJECT DESCRIPTION

The Trails at Lyons Canyon Project involves a Vesting Tentative Tract Map No. 83301 (RPPL2021003061), Conditional Use Permit No. RPPL2021003113, and Oak Tree Permit (OTP) No. RPPL2021003070. The Project proposes the creation of 37 lots on 233.49 gross acres, including 10 multi-family residential lots with 510 attached and detached dwelling units across 290 buildings on 10 lots (253 detached for-sale dwelling units, 209 attached for-sale dwelling units or townhouses, and 47 senior rental dwelling units in one multi-family building with one manager's unit), 16 open space lots, two lots for the recreation center, seven debris basin lots, one water tank lot, and one lot for the water purveyor, and several street frontage waiver requests.

LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). (*See, e.g.*, Pub. Res. Code ("PRC") § 21100.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Comms. for a Better Env't v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98, 109.)

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. (CEQA Guidelines § 15002(a)(2) & (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." (CEQA Guidelines § 15002(a)(2).) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." (PRC § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).)

The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) CEQA requires that a lead agency analyze all potentially significant environmental impacts of its proposed actions in an EIR. (PRC § 21100(b)(1); CEQA Guidelines § 15126(a); *Berkeley Jets*, 91 Cal.App.4th 1344, 1354.) The EIR must not only identify the impacts, but must also provide "information about how adverse the impacts will be." (*Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 831.) The lead agency may deem a particular impact to be insignificant only if it produces rigorous analysis and concrete substantial evidence justifying the finding. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't*, 103 Cal.App.4th at 109.)

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Jets*, 91 Cal.App.4th at 1355 (quoting*, Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 391 409, fn. 12).) A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946.) As discussed below and in the attached expert comment letters, the EIR for this Project fails to adequately analyze and mitigate the Project's impacts.

DISCUSSION

A. The Project Will Have Significant Adverse Biological Impacts That the EIR Fails to Adequately Analyze and Mitigate.

Shawn Smallwood, Ph.D. reviewed the FEIR's analysis of the Project's biological impacts. Dr. Smallwood's comment letter and CV are attached as Exhibit A and his comments are briefly summarized here.

1. The EIR is inadequate in its characterization of the existing environmental setting as it relates to wildlife.

Dr. Smallwood's associate, Noriko Smallwood, performed a 2.65-hour site visit during the day and a 2-hour nocturnal survey of the site on September 17, 2025, and a 2.5-hour site visit during the day on September 18, 2025. (Ex. A, pp. 2-3.) During these surveys, Noriko Smallwood detected 42 species of vertebrate wildlife at or adjacent to the project site, including 13 species with special status. (*Id.*, pp. 2-15, see Table 1, Ex. A, pp. 14-15.)

Every CEQA document must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. (*Communities for a Better Envt. v. So. Coast Air Qual. Mgmt. Dist*. (2010) 48 Cal. 4th 310, 321.) Dr. Smallwood found that the reconnaissance surveys performed by Glenn Lukos Associates and Dudek for the EIR failed to give methodological details necessary to interpret the survey's results, such as survey start times, survey durations, and when each species was first detected. (Ex. A, p. 23.) Dr. Smallwood therefore found that the EIR's reporting of the survey results was misleading because "the reporting of the consultants' survey methods and survey outcomes does not enable any post-hoc model-fitting or analysis to estimate the numbers of species they missed." (*Id.*, p. 23.)

Dr. Smallwood found that the EIR and Glenn Lukos Associates and Dudek's analysis of special-status species was inadequate for several reasons. Dr. Smallwood found that "[t]he rare plant surveys reported in Dudek (2024) failed to meet the minimum survey standards of CDFW's ... guidelines for rare plant surveys." (Ex. A, p. 23.) Dr. Smallwood found that Dudek's burrowing owl surveys did not meet CDFW 2012 standards, lacked details on habitat and survey locations, omitted key reporting requirements, and were outdated by four years. (*Id.*) Similarly, focused surveys for gnatcatcher, least Bell's vireo, and willow flycatcher failed to specify where "suitable habitat" was surveyed, leaving uncertainty about coverage, and Dudek's four-year-old data may no longer reflect current site use. (*Id.*) Dr. Smallwood also found that bat survey methods were poorly reported, conducted outside peak activity season, omitted key details such as station locations and passive data collection, and detected far too few species compared to Noriko's surveys, rendering results unreliable. (*Id.*, pp. 23-24.) The Project's potential impacts on these special-status plant and vertebrate species therefore must be assessed in a Revised EIR.

A skewed baseline such as the one used by the County here ultimately "mislead(s) the public" by engendering inaccurate analyses of environmental impacts, mitigation measures and cumulative impacts for biological resources. (*See San Joaquin Raptor Rescue Center,* 149 Cal.App.4th 645, 656; *Woodward Park Homeowners,* 150 Cal.App.4th 683, 708-711.)

Glenn Lukos Associates and Dudek reported having reviewed the California Natural Diversity Data Base (CNDDB) to assess occurrence potentials of special-status species onsite. (See, Ex. A, pp. 24-25.) However, Dr. Smallwood found that Glenn Lukos Associates and Dudek improperly screened out species based on their absence from CNDDB, a use for which CNDDB is not intended. (*Id.*) CNDDB is a "positive sighting database" which relies on volunteer reporting, therefore the lack of a report of a species at a certain site does not automatically mean that species does not have the potential to occur. (*Id.*, p. 24.)

Based on Dr. Smallwood's own assessment, he found that "141 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 3)." (Ex. A, pp. 25-31.) Sufficient survey effort should be directed to the site to either confirm these species use the site or to support absence determinations.

2. <u>The EIR fails to analyze the Project's impact on habitat loss.</u>

Dr. Smallwood found that the Project would contribute to a decline in birds in North America, a trend that has been happening over the last approximately 50 years largely due to habitat loss and fragmentation and would be further exacerbated by this project. (See, Ex. A, pp. 35-36.) Based on studies on the subject, Dr. Smallwood estimates that the presence of the Project on the site could prevent the production of 10,408 fledglings per year, which would in turn contribute to the lost capacity of 11,699 birds per year. (*Id.*) The County must address this impact in a revised EIR.

3. The EIR fails to analyze the Project's impact on wildlife movement.

The EIR's assessment of whether the Project would interfere with wildlife movement is flawed. (Ex. A, pp. 36-37.) Dr. Smallwood explains that CEQA requires an analysis of whether a project would interfere with regional wildlife movement. (*Id.*, p. 36.) However, the EIR fails to do so. He notes that "the 106 species that Noriko and the applicant's consultants detected on the project site had at some point moved to the site," showing the site provides stopover opportunities during migration and dispersal. (*Id.*)

Dr. Smallwood explains that even though Glenn Lukos Associates and Dudek acknowledges that a the 144.43-acre onsite mitigation area as "a significant topographical component of a viable wildlife corridor" that "would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space," Dudek "does not similarly recognize the proposed project footprint as part of any wildlife corridor or as important to wildlife movement in the region," although the areas are adjacent and separated only by "an artificial boundary that no animal would recognize or understand." (*Id.*) As such, Dr. Smallwood concludes that "no empirical or logical basis" exists for the EIR's analysis of wildlife movement because "no program of observation was implemented to quantify wildlife movement" and "no serious analysis of wildlife movement exists in the DEIR." (*Id.*, p. 37.)

Dr. Smallwood further points out that lots 20, 29, 5, 15, 19, and 23 would "obviously interfere disproportionately with wildlife movement in the region," yet the EIR ignores these impacts. (*Id.*) To reduce harm, he recommends that the project layout be revised to "be more compact to minimize interference with wildlife movement in the region." (*Id.*) A Revised EIR should be prepared to properly analyze this impact.

4. The EIR fails to account for the increased possibility of bird-window collision mortality that will be caused by the project.

The Project proposes to add glass windows into an essential portion of avian habitat. According to Dr. Smallwood, the Project will most likely have a significant impact on birds as a result of window collisions. (Ex. A, pp. 37-40.) The County has not analyzed or mitigated these potential impacts to special-status birds.

Dr. Smallwood identifies the now widely-recognized impact of bird collisions with windows and other building structures:

> Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

(Ex. A, p. 37.) Noriko's site visit confirmed the presence of many bird species that would travel through the Project site's air space, as did Dr. Smallwood's review of databases. (*Id.*)

In an effort to assess the scope of the Project's impacts on bird species using the area, Dr. Smallwood calculated an estimate of the number of bird fatalities that would result from collisions with the Project. (Ex. A, pp. 39.) Dr. Smallwood used data from recent reviews he conducted of other commercial and residential projects to estimate the extent of glass that would be used as 17,412 m^2. (*Id.*, pp. 39-40.) Based on Dr. Smallwood's own data and review of a number of scientific studies, the mean fatality rate of bird deaths per m^2 of glass per year is 0.073. (*Id.*) He therefore estimates that the project could result in 1,289 bird deaths per year. (*Id*., p. 40) This death rate would continue every year until the structure were either renovated to reduce bird collisions, or was removed. (*Id*.)

Because this impact was not addressed in the EIR and Dr. Smallwood has presented substantial evidence that the Project's windows will significantly impact birds, including special-status species birds, the County must prepare a Revised EIR to analyze and mitigate the impact of window collisions on bird species.

5. <u>The EIR fails to analyze the project's impacts on wildlife from additional traffic generated by the Project.</u>

The EIR estimates that the Project would lead to an annual 13,431,088 VMT, yet it contains no analysis of the impacts on wildlife that will be caused by the traffic on the roadways servicing the Project. (Ex. A, pp. 41-43.) Vehicle collisions with special-status species is not a minor issue, but rather results in the death of millions of species each year. Dr. Smallwood explains: "the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014)." (*Id.*, p. 41.)

Using the Project's VMT estimates and information from a scientific study on road mortality, Dr. Smallwood was able to predict the Project-generated traffic impacts to wildlife. (*Id.*, p. 43.) Dr. Smallwood calculates that the Project would cause 5,713 wildlife fatalities per year. (*Id*.) He therefore states that project-generated traffic would "result in potentially significant adverse biological impacts." (*Id.* at 21.) A revised EIR should be

prepared which includes analysis and mitigation of the result increased traffic from the Project will have on wildlife.

6. The EIR failed to adequately address the cumulative impacts of past, ongoing, and future projects on wildlife.

The EIR failed to prepare an adequate analysis of cumulative effects on wildlife, due to its erroneous conclusion that "all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on special-status species would not be cumulatively considerable and cumulative impacts on special-status species would be less than significant with mitigation." (Ex. A, p. 43.) This characterization of cumulative impacts is not correct under CEQA, and the cumulative impacts analysis is therefore incomplete. (See, CCR tit. 14 § 15355; Ex. A, pp. 43-44.) The EIR must revise its cumulative impacts section to adequately meet CEQA requirements.

7. The EIR's mitigation measures to reduce the Project's significant adverse impacts on wildlife are inadequate.

Dr. Smallwood found that several of the EIR's mitigation measures to reduce impacts to biological resources are ineffective. (See, Ex. A, pp. 44-49.) He recommends several mitigation measures to help reduce impacts to biological resources that should be reviewed and incorporated in a Revised EIR. (See, *id.*, pp. 49-51.)

B. There is Substantial Evidence that the Project May Have a Significant Health Risk Impact from Indoor Air Quality Impacts which the EIR Failed to Analyze.

Certified Industrial Hygienist, Francis Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (September 21, 2025). Mr. Offermann concludes that it is likely that the Project will expose residents of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and curriculum vitae are attached as Exhibit B.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "[t]he primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." (Ex. B, p. 2.)

Formaldehyde is a known human carcinogen. Mr. Offermann states that future residents of the Project would be exposed to a 120 in one million cancer risk, ***even assuming*** all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. (*Id*., p. 3-5.) This potential exposure level exceeds the SCAQMD CEQA significance threshold for airborne cancer risk of 10 per million.

Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the applicant use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins in the buildings' interiors. (*Id*., pp. 11-13.) These significant environmental impacts should be analyzed in a Revised EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure.

CONCLUSION

For the foregoing reasons, SAFER believes that the EIR is wholly inadequate. SAFER urges the Board of Supervisors to grant this appeal and refrain from approving the Project and FEIR until staff address the concerns raised herein. Thank you for considering our comments and please include this letter in the record of proceedings for this project.

Sincerely,

Victoria Yundt
Lozeau | Drury LLP

EXHIBIT A

Shawn Smallwood, PhD
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21 September 2025

RE: Trails at Lyons Canyon

Dear Ms. Yundt,

I write to comment on potential impacts to biological resources that would result from development of the proposed Trails at Lyons Canyon project. Having reviewed the Draft Environmental Impact Report (DEIR) and the biological technical report (Dudek 2024), I understand the project would construct 510 dwelling units and a four-story apartment building on 89.34 acres located on APNs 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027 and 2826-022-035. These properties total 233.49 acres, 144.43 acres of which would be designated natural open space, consistent with its present condition. My comments that follow address my concerns that the DEIR mischaracterizes the existing environmental setting, and that its impacts analysis is flawed and its mitigation measures are inadequate.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

THE WILDLIFE COMMUNITY AS A BIOLOGICAL RESOURCE

Most environmental reviews pursuant to the California Environmental Quality Act (CEQA) focus on special-status species because CEQA's Checklist Evaluation of Environmental Impacts specifies that such evaluation includes potential impacts to special-status species. However, an important policy of CEQA is "to prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." Pub. Res. Code § 21001(c). This policy is not

restricted to special-status species, but it also applies to wildlife populations and plant and animal communities. In fact, the CEQA Guidelines Section 21155.1 defines wildlife habitat as "the ecological communities upon which wild animals, birds, plants, fish, amphibians, and invertebrates depend for their conservation and protection." This definition is consistent with the scientific definition of habitat, which is that portion of the environment that is used by members of a species for survival and reproduction (Hall et al. 1997). An essential portion of the environment used by any special-status species is composed of the collection of other species of plants and wildlife, because these species are forage, provisioners of refugia and nest substrates, and ecological mutualists; no special-status species can exist in a vacuum of other wildlife. The CEQA Checklist Evaluation assigns priority to special-status species to balance information and cost, but it does not exclude the need to evaluate environmental impacts to other species, which, after all, are members of the very communities within which special-status species inter-depend for survival and reproduction.

All wildlife species should be of concern in a CEQA review, but the CEQA prioritizes special-status species. The species I consider to be special-status species are those listed in California's Special Animals List inclusive of threatened and endangered species under the California and federal Endangered Species Acts, candidates for listing under CESA and FESA, California's Fully Protected Species, California species of special concern, and California's Taxa to Watch List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406), continental and region-specific US Fish and Wildlife Service Birds of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf), and naturally rare species such as raptors protected by California's Birds of Prey laws, Fish and Game Code Sections 3503, 3503.5, 3505 and 3513 (see https://wildlife.ca.gov/Conservation/ Birds/Raptors).

What follows is a summary of a site visit to detect as many of the species of wildlife as possible within the short time available. The survey was also intended to detect as many of the special-status species as possible, but with the understanding that most special-status species are less readily detectable due to rarity and crypticity. Nonetheless, the species detected can indicate the ecological integrity of the site and thus the likelihood of occurrence of special-status species not yet detected.

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master of Science Degree from California State University Los Angeles, visited the site of the proposed project for diurnal survey from 16:23 to 19:02 hours, and for nocturnal survey from 19:12 to 21:12 hours on 17 September 2025, and for 2.5 hours of diurnal survey starting at 07:01 hours on 18 September 2025. Noriko walked hiking trails on site where accessible, stopping to scan for wildlife with use of binoculars. At night, Noriko strapped a Pettersson M500 acoustic bat detector to a 10-foot pole, and cabled the detector to her computer, which ran Sonobat Live. Sonobat Live identifies bats to species based on the bats' sonograms that are detected by the M500. Noriko recorded all species of vertebrate wildlife she detected. Animals of uncertain species identity were either recorded to the Genus or higher taxonomic level.

Conditions were cloudy with 10 MPH south wind and 91-76° F during the 17 September 2025 diurnal survey, and cloudy with 10 MPH south wind and 76-74° F during the nocturnal survey. Conditions on 18 September 2025 were cloudy to rainy with 3 MPH northeast wind and 67-71° F. The site is undisturbed except for access roads and hiking trails. Vegetation communities include oak woodland, shrubland, annual grassland, and riparian (Photos 1 – 3).

Photos 1, 2, and 3. *Views of the project site, 18 September 2025. Photos by Noriko Smallwood.*

Noriko saw Cooper's hawk (Photo 4), American kestrel and red-tailed hawk (Photos 5 and 6), Anna's hummingbird and Allen's hummingbird (Photos 7 and 8), California scrub-jay (Photo 9), common raven and band-tailed pigeon (Photos 10 and 11), oak titmouse and Nuttall's woodpecker (Photo 12 and 13), bushtit (Photo 14), spotted towhee (Photo 15), western bluebird and wrentit (Photos 16 and 17), mourning dove (Photo 18), lark sparrow and Southern California rufous-crowned sparrow (Photos 19 and 20), California towhee and Wilson's warbler (Photos 21 and 22), mule deer (Photo 23), California ground squirrel and Great Basin fence lizard (Photos 24 and 25), western side-blotched lizard and raccoon (Photos 26 and 29) canyon bat and California myotis (Photos 27 and 28), among the other species listed in Table 1. Noriko detected 42 species of vertebrate wildlife at or adjacent to the project site, including 13 species with special status (Table 1).

Photo 4. *Cooper's hawk with a California scrub-jay on the project site, 17 September 2025. Photo by Noriko Smallwood.*

Photos 5 and 6. *American kestrel (left), and red-tailed hawk (right) on the project site, 18 and 17 September 2025. Photos by Noriko Smallwood.*

Photos 7 and 8. *Anna's hummingbird (left), and Allen's hummingbird (right) on the project site, 18 and 17 September 2025. Photos by Noriko Smallwood.*

Photo 9. *California scrub-jay on the project site, 17 September 2025. Photo by Noriko Smallwood.*

Photos 10 and 11. *Common raven on the project site (left), and band-tailed pigeon just off the project site (right), 17 September 2025. Photos by Noriko Smallwood.*

Photos 12 and 13. *Oak titmouse (left), and Nuttall's woodpecker (right) on the project site, 17 September 2025. Photos by Noriko Smallwood.*

Photo 14. *Bushtit on the project site, 17 September 2025. Photo by Noriko Smallwood.*

Photo 15. *Spotted towhee on the project site, 18 September 2025. Photo by Noriko Smallwood.*

Photos 16 and 17. *Western bluebird (left), and wrentit (right) on the project site, 18 and 17 September 2025. Photos by Noriko Smallwood.*

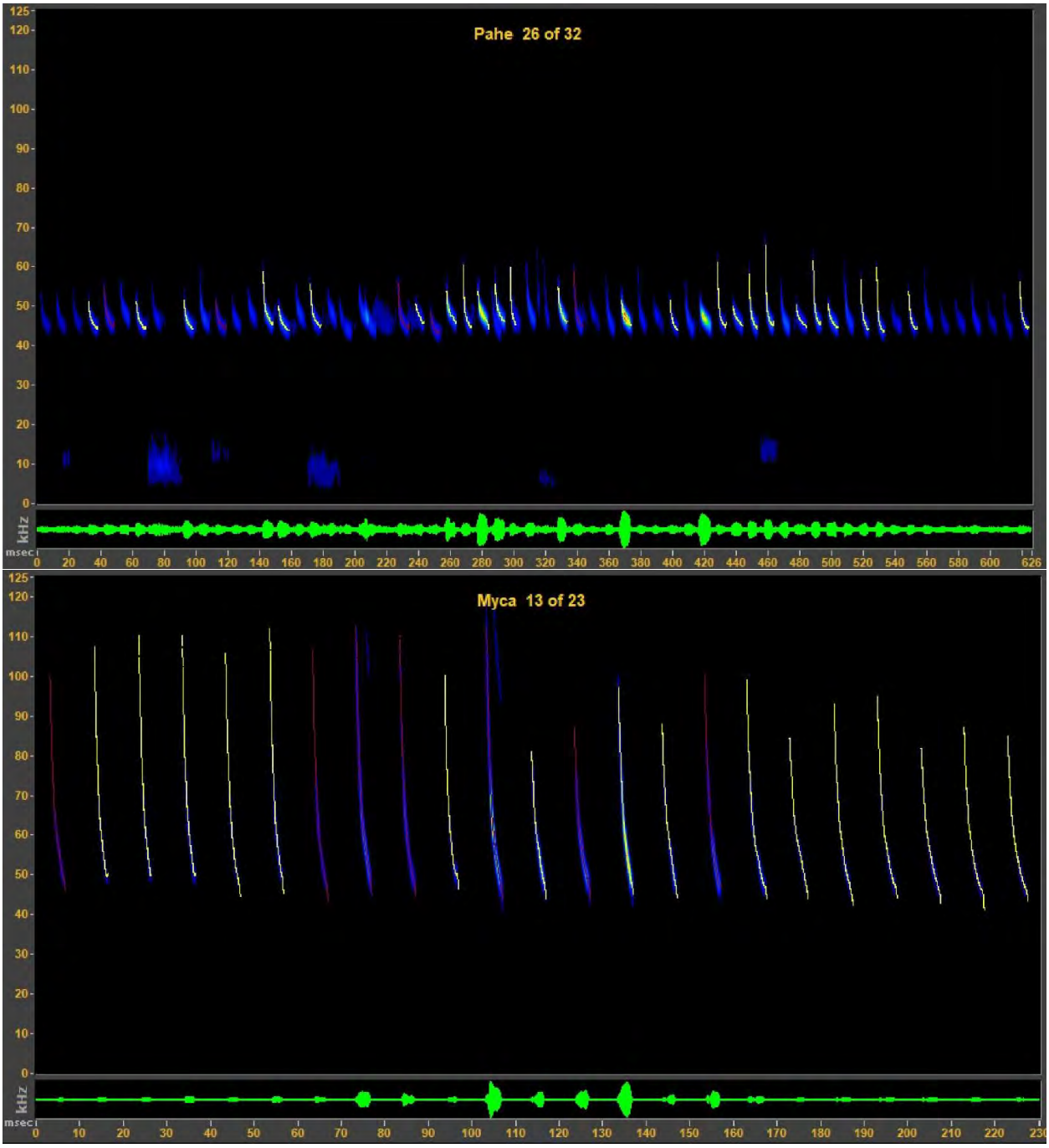
Photo 18. *Mourning doves on the project site, 18 September 2025. Photo by Noriko Smallwood.*

Photos 19 and 20. *Lark sparrow (left), and Southern California rufous-crowned sparrow (right) just off the project site, 18 September 2025. Photos by Noriko Smallwood.*

Photos 21 and 22. *California towhee on the project site (left), and Wilson's warbler just off the project site (right), 18 September 2025. Photos by Noriko Smallwood.*

Photo 23. *Mule deer just off the project site, 18 September 2025. Photo by Noriko Smallwood.*

Photo 24, 25, and 26. *California ground squirrel just off of the project site (top left), Great Basin fence lizard on the project site (top right), and western side-blotched lizard just off of the project site (bottom), 17 September 2025. Photos by Noriko Smallwood.*



Photos 27 and 28. *Sonogram of Mexican free-tailed Canyon bat (top), and California myotis (bottom) detected on site using Sonobat Live and a Pettersson M500, 17 September 2025.*

Photo 29. *Deceased raccoon that likely got hit by a car on The Old Road just east of the project site, 17 September 2025. Photo by Noriko Smallwood.*

Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood

Altogether, Noriko and the consultant biologists Glenn Lukos Associates and Dudek detected 106 species of vertebrate wildlife on the project site (Table 2). Of these species, 36 (34%) are special-status species. Also found was an invertebrate that is a candidate for listing under the federal Endangered Species Act. Only four of the vertebrate species are non-native. The evidence is overwhelming that the wildlife community is rich, and the ecological integrity of the site is high.

Table 1. *Species of wildlife Noriko observed during 2.65 hours of diurnal survey and 2 hours of nocturnal survey on 17 September 2025, and during 2.5 hours of diurnal survey on 18 September 2025.*

Common name	***Species name***	**Status[1]**	**Notes**
Great Basin fence lizard	*Sceloporus occidentalis longipes*		
Western side-blotched lizard	*Uta stansburiana elegans*		Many
California quail	*Callipepla californica*		Flock
Band-tailed pigeon	*Patagioenas fasciata*		
Mourning dove	*Zenaida macroura*		Many
Anna's hummingbird	*Calypte anna*		
Allen's hummingbird	*Selasphorus sasin*	BCC	
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Caught CASJ
Red-tailed hawk	*Buteo jamaicensis*	BOP	
Great horned owl	*Bubo virginianus*	BOP	Called at night
Western screech owl	*Megascops kennicotti*	BOP	Called at night
Acorn woodpecker	*Melanerpes formicivorus*		
Nuttall's woodpecker	*Picoides nuttallii*	BCC	
Northern flicker	*Colaptes auratus*		
American kestrel	*Falco sparverius*	BOP	
California scrub-jay	*Aphelocoma californica*		Many; 1 eaten by COHA
Common raven	*Corvus corax*		
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW	
Bushtit	*Psaltriparus minimus*		Many
Wrentit	*Chamaea fasciata*	BCC	
Bewick's wren	*Thryomanes bewickii*		
California thrasher	*Toxostoma redivivum*	BCC	
Western bluebird	*Sialia mexicana*		
House finch	*Haemorphous mexicanus*		
Lesser goldfinch	*Spinus psaltria*		
Lark sparrow	*Chondestes grammacus*		
Song sparrow	*Melospiza melodia*		
California towhee	*Melozone crissalis*	LACBW	
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW	
Spotted towhee	*Pipilo maculatus*		
Wilson's warbler	*Cardellina pusilla*	LACSBS	
Yuma myotis	*Myotis yumanensis*	WBWG:LM	Possible detection
Long-eared myotis	*Myotis evotis*	WBWG:M	Possible detection
Long-legged myotis	*Myotis volans*	WBWG:H	Possible detection
California myotis	*Myotis californicus*	WBWG:L	Confirmed
Canyon bat	*Parastrellus hesperus*	WBWG:M	Confirmed
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H	Possible detection
California ground squirrel	*Otospermophilus beecheyi*		Many

Virginia opossum	*Didelphis virginiana*	Non-native	Observed on site; 1 dead on The Old Road
Raccoon	*Procyon lotor*		Tracks on site; 1 dead on The Old Road
Skunk	*Mephitidae*		Likely striped skunk
Coyote	*Canis latrans*		Tracks and scat
Mule deer	*Odocoileus hemionus*		Multiple observed
Kangaroo rat	*Dipodomys sp.*		Burrows
California vole	*Microtus californicus*		Burrows
Botta's pocket gopher	*Thomomys bottae*		Burrows

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

Table 2. *Species of wildlife observed by Glenn Lukos and Associates and Dudek (GLA, Dudek) from 2020 to 2023, and by Noriko on 17 and 18 September 2025 (X) and possibly detected by Sonobat (P).*

Common name	***Species name***	**Status[1]**	**GLA, Dudek**	**NLS 2025**
Western honey bee	*Apis mellfera*	Non-native	X	
Crotch's bumble bee	*Bombus crotchii*	CCE	X	
Carpenter bee	*Xylocopa violacea*		X	
California harvester ant	*Pogonomyrmex californicus*		X	
Velvet ant	*Dasymutilla occidntalis*		X	
Funeral duskywing	*Erynnis funeralis*		X	
Fiery skipper	*Hylephila phyleus*		X	
Purplish copper	*Lycaena helloides*		X	
Common buckeye	*Precis coenia*		X	
Painted lady	*Vanessa cardui*		X	
American lady	*Vanessa virginiensis*		X	
Sara orangetip	*Anthrocharis sara*		X	
Horford's sulphur	*Colias harfordii*		X	
Cabbage white	*Pieris rapae*	Non-native	X	
Checkered white	*Pontia protodice*		X	
Great Basin fence lizard	*Sceloporus occidentalis longipes*		X	X
Western side-blotched lizard	*Uta stansburiana elegans*		X	X
California glossy snake	*Arizona elegans occidentalis*	SSC	X	
Pacific gophersnake	*Pituophis catenifer*		X	

California quail	*Callipepla californica*		X	X
Band-tailed pigeon	*Patagioenas fasciata*		X	X
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	X	
Mourning dove	*Zenaida macroura*		X	X
White-throated swift	*Aeronautes saxatalis*		X	
Anna's hummingbird	*Calypte anna*		X	X
Costa's hummingbird	*Calypte costae*	BCC	X	
Allen's hummingbird	*Selasphorus sasin*	BCC	X	X
Turkey vulture	*Cathartes aura*	BOP, LACSBS	X	
White-tailed kite	*Elanus leucurus*	CFP, BOP	X	
Cooper's hawk	*Accipiter cooperii*	WL, BOP	X	X
Red-shouldered hawk	*Buteo lineatus*	BOP	X	
Red-tailed hawk	*Buteo jamaicensis*	BOP	X	X
American barn owl	*Tyto furcata*	BOP	X	
Great horned owl	*Bubo virginianus*	BOP	X	X
Western screech owl	*Megascops kennicotti*	BOP		X
Acorn woodpecker	*Melanerpes formicivorus*		X	X
Nuttall's woodpecker	*Picoides nuttallii*	BCC	X	X
White-headed woodpecker	*Dryobates albolarvatus*	BCC	X	
Downy woodpecker	*Picoides pubescens*		X	
Northern flicker	*Colaptes auratus*		X	X
American kestrel	*Falco sparverius*	BOP	X	X
Merlin			X	
Ash-throated flycatcher	*Myiarchus cinerascens*		X	
Cassin's kingbird	*Tyrannus vociferans*		X	
Western kingbird	*Tyrannus verticalis*		X	
Hammond's flycatcher	*Empidonax hammondii*		X	
Western flycatcher	*Empidonax difficilis*		X	
Black phoebe	*Sayornis nigricans*		X	
Say's phoebe	*Sayornis saya*		X	
Warbling vireo	*Vireo gilvus*		X	
California scrub-jay	*Aphelocoma californica*		X	X
American crow	*Corvus brachyrhynchos*		X	
Common raven	*Corvus corax*		X	X
Mountain chickadee	*Poecile gambeli*		X	
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW	X	X
Violet-green swallow	*Tachycineta thalassina*		X	
Northern rough-winged swallow	*Stelgidopteryx serripennis*		X	
Barn swallow	*Hirundo rustica*		X	
Cliff swallow	*Petrochelidon pyrrhonota*		X	
Bushtit	*Psaltriparus minimus*		X	X
Wrentit	*Chamaea fasciata*	BCC	X	X
Ruby-crowned kinglet	*Regulus calendula*	LACBW	X	

Cedar waxwing	*Bombycilla cedrorum*		X	
Phainopepla	*Phainopepla nitens*		X	
White-breasted nuthatch	*Sitta carolinensis*		X	
Blue-gray gnatcatcher	*Polioptila caerulea*		X	
Bewick's wren	*Thryomanes bewickii*		X	X
House wren	*Troglodytes aedon*		X	
California thrasher	*Toxostoma redivivum*	BCC	X	X
Northern mockingbird	*Mimus polyglottos*		X	
European starling	*Sturnus vulgaris*	Non-native	X	
Western bluebird	*Sialia mexicana*		X	X
House finch	*Haemorphous mexicanus*		X	X
Lesser goldfinch	*Spinus psaltria*		X	X
Lawrence's goldfinch	*Spinus lawrencei*	BCC	X	
Lark sparrow	*Chondestes grammacus*		X	X
White-crowned sparrow	*Zonotrichia leucophrys*		X	
Song sparrow	*Melospiza melodia*		X	X
California towhee	*Melozone crissalis*	LACBW	X	X
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW	X	X
Spotted towhee	*Pipilo maculatus*		X	X
Hooded oriole	*Icterus cucullatus*		X	
Bullock's oriole	*Icterus bullockii*	BCC	X	
Brown-headed cowbird	*Molothrus ater*		X	
Orange-crowned warbler	*Oreothlypis celata*		X	
Common yellowthroat	*Geothlypis trichas*		X	
Yellow warbler	*Setophaga petechia*	SSC2	X	
Yellow-rumped warbler	*Setophaga coronata*		X	
Townsend's warbler	*Setophaga townsendi*		X	
Wilson's warbler	*Cardellina pusilla*	LACSBS	X	X
Western tanager	*Piranga ludoviciana*		X	
Black-headed grosbeak	*Pheucticus melanocephalus*	LACBW	X	
Blue grosbeak	*Passerina caerulea*		X	
Yuma myotis	*Myotis yumanensis*	WBWG:LM		P
Long-eared myotis	*Myotis evotis*	WBWG:M		P
Long-legged myotis	*Myotis volans*	WBWG:H		P
California myotis	*Myotis californicus*	WBWG:L		X
Canyon bat	*Parastrellus hesperus*	WBWG:M	X	X
Hoary bat	*Lasiurus cinereus*	WBWG:M	X	
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H		P
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	X	
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	X	

Desert cottontail	*Sylvilagus audubonii*		X	
California ground squirrel	*Otospermophilus beecheyi*		X	X
Virginia opossum	*Didelphis virginiana*	Non-native		X
Raccoon	*Procyon lotor*			X
Skunk	*Mephitidae*			X
Striped skunk	*Mephitis mephitis*		X	
Bobcat	*Felis rufous*		X	
Mountain lion	*Puma concolor*	SA	X	
Feral dog	*Canis familiaria*	Non-native	X	
Coyote	*Canis latrans*		X	X
Gray fox	*Urocyon cinereoargenteus*		X	
Mule deer	*Odocoileus hemionus*		X	X
San Diego Bryant's woodrat	*Neotoma bryanti (formerly lepida intermedia)*	SSC	X	
Kangaroo rat	*Dipodomys sp.*			X
Deer mouse	*Peromyscus maniculatus*		X	
Western harvest mouse	*Reithrodontomys megalotis*		X	
California vole	*Microtus californicus*			X
Botta's pocket gopher	*Thomomys bottae*			X
American badger	*Taxidea taxus*	SSC	X	

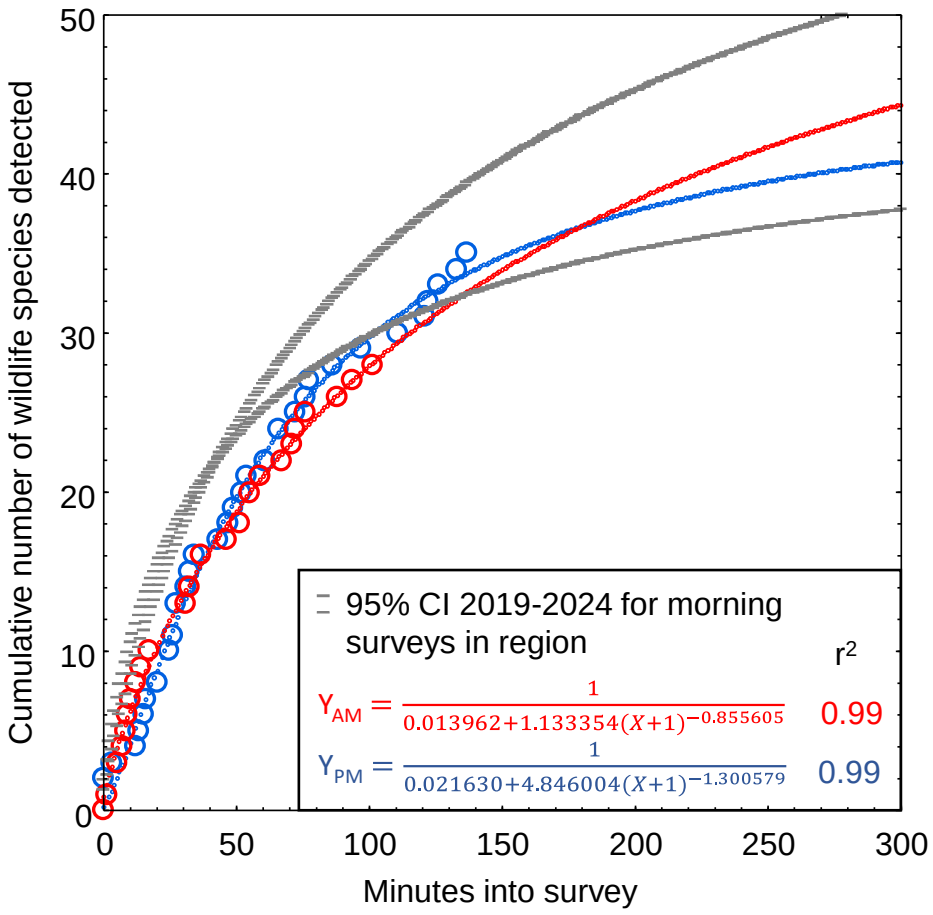
[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); and BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

ANALYSIS OF RECONNAISSANCE SURVEY DATA

Noriko detected 46 species of vertebrate willdife in little more than seven hours of survey. However, the species of wildlife Noriko detected at the project site were not the only species that were present during her surveys, as there are always species that are not detected. To demonstrate this, I fit nonlinear regression models to Noriko's cumulative numbers of vertebrate species detected with time into her daytime surveys to predict the number of species that she would have detected with longer surveys or perhaps with additional biologists available to assist her. The type of model is a logistic growth model, which reaches an asymptote that corresponds with the theoretical maximum number of vertebrate wildlife species that could have been detected during

the survey. The model fit to Noriko's survey data from the morning of 18 September, for example, predicts 72 species of vertebrate wildlife were available to be detected, or 40 more species than she detected that morning (Figure 1).

Figure 1. *Actual and predicted relationships between the numbers of vertebrate wildlife species detected and the elapsed survey time based on Noriko's visual-scan surveys on 17 and 18 September 2025.*



Unknown are the identities of the species Noriko missed, but the species that Noriko did and did not detect on 17 and 18 September 2025 composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence, some require more survey effort because they are highly cryptic, and the members of other species would visit the site only periodically while patrolling large home ranges. A survey on only one or two days cannot possibly detect all of the species of the local wildlife community.

At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's two surveys. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. This analytical bridge draws inference from the pattern of species detections more than it does from the research site, and I note that the pattern, i.e., rate, of species detections is consistent from site to site.

As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 17.6 species over my first 5.15 hours of diurnal surveys at my research site in the Altamont Pass (5.15 hours to match the 5.15 hours Noriko surveyed during daylight hours at the project site), which composed 30.9% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 39 diurnally active species Noriko detected after her 5.15 hours of daylight survey at the project site likely represented 30.9% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, Noriko would likely detect $39/0.309 = 126$ species of diurnally active vertebrate wildlife at the site. Assuming Noriko's ratio of special-status to non-special-status species was to hold through the detections of all 126 predicted species, then continued surveys would eventually detect 32 special-status species of diurnally active vertebrate wildlife.

Because my prediction of 126 species of vertebrate wildlife, including 32 special-status species, is derived from daytime visual-scan surveys, and would detect few nocturnal mammals such as bats, the true number of species composing the wildlife community of the site must be larger. Noriko's reconnaissance surveys should serve only as a starting point toward characterization of the site's wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than her two surveys to produce an inventory the project site's wildlife community. Nevertheless, the large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort.

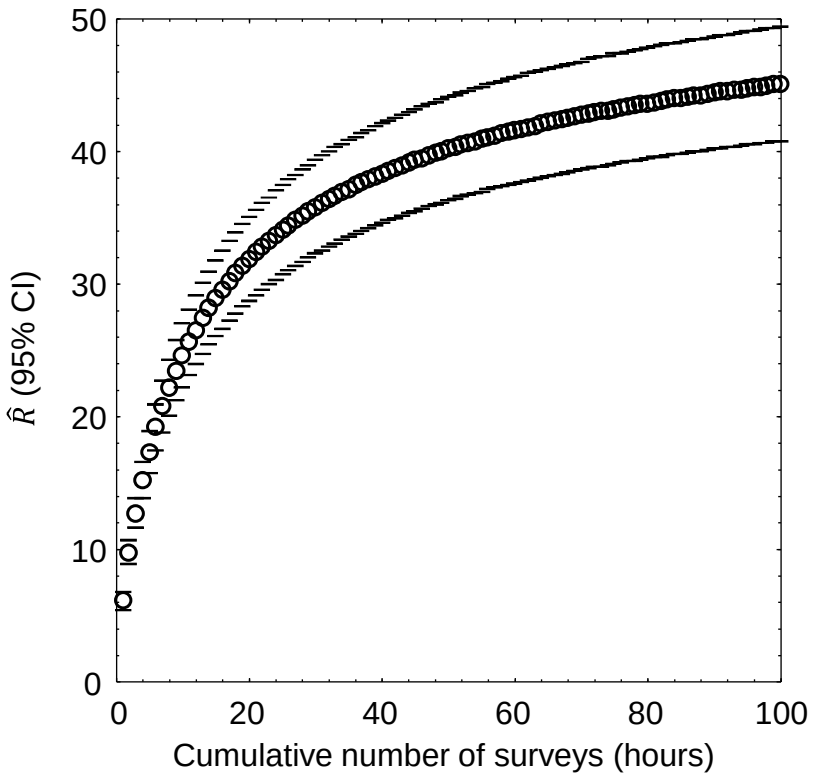
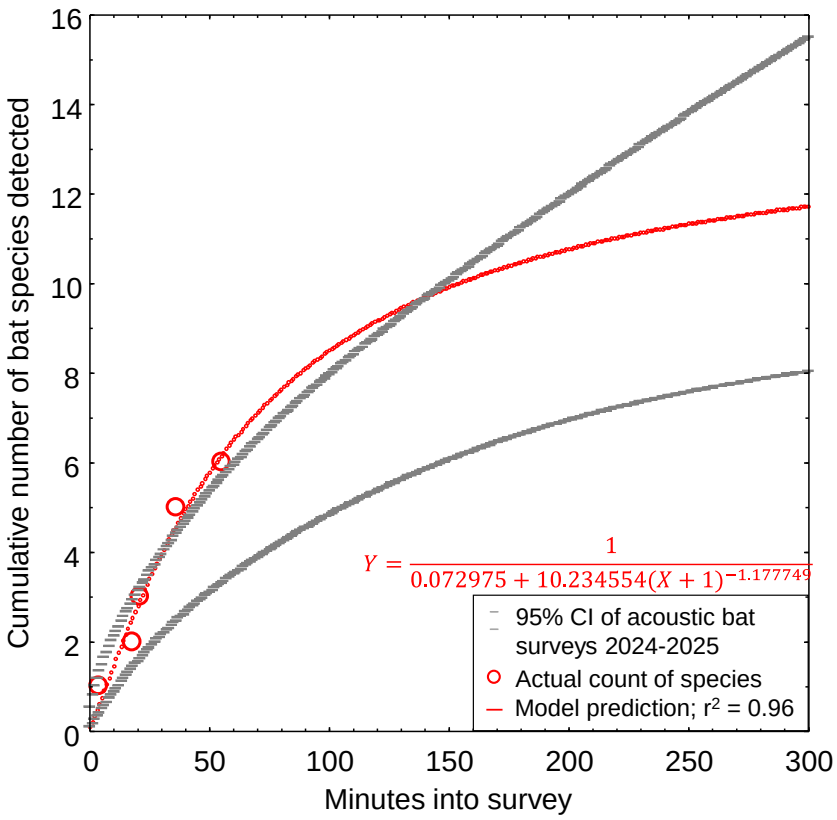


Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.*

In fact, with the surveys of Glenn Lukos Associates and Dudek, and with the nocturnal surveys, 106 speecies of vertebrate wildlife have been detected, including 36 special-status species. Nine of these species were bats, six of which Noriko detected in only two hours of acoustic survey. And as was the case for diurnally active species, the bat species that Noriko detected represented only some of the bat species that were present that night. The nonlinear model that I fit to her data predicts that had she surveyed all night, she would have detected 13 species of bats (Figure 3). Also noteworthy is that her rate of bat detections followed the upper bound of the 95% confidence intervals of bat detection rates at other sites where we performed bat surveys. The bat community of the project site is exceptional.

Over the course of a year, there are likely 19 species of bats that occur on the project site. The same pattern would be found for small mammals, many of which are not detectable without trapping. Considering the many species of reptiles and amphibians, small mammals and bats that are more difficult to detect than those vertebrate species already detected, the wildlife community of the project site likely numbers about 190 to 210. Only about half the membership of the wildlife community has been detected, leaving half the composition of the wildlife community undescribed. The existing environmental setting of the project site has yet to be accurately characterized.

Figure 3. *Actual and predicted relationships between the numbers of bat species detected and the elapsed survey time based on Noriko's visual-scan survey on 17 September 2025.*



EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the wildlife community and any key ecological relationships and known and ongoing threats to special-status species. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of the CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these required steps remain incomplete and misleading.

Environmental Setting informed by Field Surveys

To the CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources. In the case of this project,

however, no analysts obtained the information needed to accurately predict impacts to wildlife.

Glenn Lukos Associates and Dudek committed more wildlife survey effort to the project site than I typically see in modern environmental reviews. More could have been done, however, as Noriko's brief survey effort demonstrates. Noriko detected an additional 11 species of vertebrate wildlife, including up to five species of bats. Unlike with Noriko's survey data, the reporting of the consultants' survey methods and survey outcomes does not enable any post-hoc model-fitting or analysis to estimate the numbers of species they missed. This is because Dudek (2024) does not report survey start times or survey durations of the reconnaissance surveys, and because Dudek (2024) does not report when each species was first detected. It would have helped had Dudek (2024) reported the species detected by each survey, rather than listing all detected species in a compendium. It also would have helped had the reporting been more careful such as including in the species compendium all the species that appear in the main body of text of the report. As examples, black phoebe, canyon bat, and hoary bat appear in the text but not the compendium of species detected. Considering this pattern, it is likely that the consultants detected additional species that did not get reported.

The rare plant surveys reported in Dudek (2024) failed to meet the minimum survey standards of CDFW's (2018) guidelines for rare plant surveys. There was no crosswalk of survey dates with blooming periods of potentially occurring special-status species of plants, nor was there any use of reference sites. Dudek (2024) fails to even mention or cite CDFW (2018).

The focused burrowing owl surveys reported by Dudek (2024) failed to meet the minimum standards of the survey guidelines of CDFW (2012). According to Dudek (2024:24), "Surveys were conducted in accordance with survey guidelines described in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012)." Although four breeding-season surveys are reported, and although these surveys were scheduled correctly, the surveys averaged only about three hours per survey indicating only a small portion of the project area was covered. Dudek (2024) reports that the burrowing owl surveys were on suitable habitat, but Dudek (2024) does not describe what it means by suitable habitat, and no map is provided of where the surveys were conducted. Few if any of the reporting standards were met on qualifications of survey personnel, survey preparation, and reporting of findings. Moreover, the surveys were completed four years ago, and are therefore out of date.

Focused surveys were reportedly completed for California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher, and again Dudek (2024) reports that these surveys were in suitable habitat but fails to report where these suitable habitat areas occurred. This failure to report the extents of the surveys is a fundamental flaw in the reporting. The reader cannot determine whether all appropriate portions of the project site were surveyed for these species. Finally, as was the case for burrowing owl surveys, the focused surveys for these other species occurred four years ago, and they therefore might not represent the present use of the project site by these species.

Dudek (2024) reports that acoustic surveys were conducted for bats, but the reporting of methods is confused. Three survey dates are reported between April and July 2021. These dates were earlier than the season of peak bat activity, which might explain the few bat species detected. Unreported, however, were the locations of passive acoustic detection stations that were operated for up to 10 days. The total survey time in Table 8 was 12 hours, assuming the end time of 1045 was intended to read 2245 hours, but these hours do not account for the reported 10 days of passive data collection. On the whole, the reporting of bat survey methods is incomplete and vague, and the number of bat species detected is too small. Noriko detected twice the number of bat species in only two hours using only one detector.

Environmental Setting informed by Desktop Review

The purpose of literature and database reviews and of consulting with local experts is to inform the field survey, and to augment interpretation of its outcome. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and migration flight paths. In the case of this project, the desktop review was incomplete, and the review that was completed was distorted to minimalize the likelihoods of occurrence of special-status species.

Dudek (2024) reports, "pertinent literature on the flora of the region was examined." I assume this reporting inadvertently omitted wildlife, but I cannot be sure about this. In any case, there is no evidence that Dudek made use of eBird (https://eBird.org) or iNaturalist (https://www.inaturalist.org) for documented occurrence records at or near the project site. Instead, Dudek appears relied on queries of the California Natural Diversity Data Base (CNDDB) for documented occurrences of special-status species within USGS Quadrangles inclusive of and immediately surrounding the project site.

By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, Dudek (2024) screens out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." Dudek (2024) and hence the DEIR misuse the CNDDB.

The CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently

assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence. And again, the screening out of a species due to lack of occurrence records in the CNDDB is the same as making an absence determination, and this step is being taken without adequate support of field surveys.

In my assessment based on a database review and site visits, 141 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 3). Of these 141 special-status species, 24 were recorded on the project site, 4 were possibly recorded on the site (combined 20%), and another 31 (22%) species have been documented within 1.5 miles of the site (Very close), another 20 (15%) within 1.5 and 4 miles (Nearby), and another 55 (39%) within 4 to 30 miles (In region). More than half (56%) the species in Table 3 have been reportedly seen within 4 miles of the project site. The site therefore supports at least 24 to 28 special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on the proximities of recorded occurrences.

Counting the 13 special-status species Dudek (2024) reports having been detected on the project site, Dudek (2024) analyzes the occurrence potentials of only 45 (32%) of the special-status species listed in Table 3. Again, Dudek (2024) analyzes the occurrence potential of fewer than a third of the species it should analyze because it inappropriately uses the lack of CNDDB records in its query to determine the other two-thirds of the potentially occurring species as absent. Of the 45 special-status species that Dudek analyzes for occurrence potential, Dudek determines 20 are not expected, and the occurrence likelihoods of 5 are low, 4 are moderate, and only 3 are high. However, these determinations comport poorly with the occurrence records in eBird and iNaturalist. For example, of the 25 species Dudek determines are not expected or of only low occurrence likelihood, 5 (20%) have been documented within 1.5 miles of the site, and another 6 (24%) have been documented between 1.5 and 4 miles of the site.

Noriko's surveys detected between 11 and 15 special-status species that Dudek (2024) does not even analyze for occurrence potential because Dudek failed to find CNDDB records for these species. This discrepancy again goes to the inappropriateness of Dudek's use of the CNDDB. Of the 96 special-status species not analyzed by Dudek for their occurrence potentials, eBird and iNaturalist records exist for another 22 species within 1.5 miles of the site, and for another 12 species between 1.5 and 4 miles of the site, and for another 41 species between 4 and 30 miles of the site.

Table 3. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species detected by Noriko Smallwood during her site visit.*

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	Not expected	In region
Riverside fairy shrimp	*Streptocephalus woottoni*	FE		In range
Monarch	*Danaus plexippus*	FC	Moderate	Very close
Crotch's bumble bee	*Bombus crotchii*	CCE	Present	Very close
Coast Range newt	*Taricha torosa*	SSC	Not expected	In region
Western spadefoot	*Spea hammondii*	FC, SSC	Not expected	In region
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Not expected	In region
California red-legged frog	*Rana draytonii*	FT, SSC	Not expected	In region
Southwestern pond turtle	*Actinemys pallida*	FC, SSC	Not expected	Nearby
Coast horned lizard	*Phrynosoma blainvillii*	SSC	High	In region
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	High	Very close
San Diegan legless lizard	*Anniella stebbinsi*	SSC	High	Very close
California glossy snake	*Arizona elegans occidentalis*	SSC	Present	In region
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC	Not expected	In region
South coast gartersnake	*Thamnophis sirtalis pop. 1*	SSC		In region
Brant	*Branta bernicla*	SSC2		In region
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL		In region
Redhead	*Aythya americana*	SSC2		In region
Western grebe	*Aechmophorus occidentalis*	BCC		Nearby
Clark's grebe	*Aechmophorus clarkii*	BCC		In region
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	Not expected	In region
Black swift	*Cypseloides niger*	SSC3, BCC		Nearby
Vaux's swift	*Chaetura vauxi*	SSC2		Very close

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
Calliope hummingbird	*Selasphorus calliope*	BCC		In region
Rufous hummingbird	*Selasphorus rufus*	BCC		Very close
Allen's hummingbird	*Selasphorus sasin*	BCC		Very close/**On site**
Light-footed Ridgway's rail	*Rallus obsoletus levipes*	FE, CE, CFP		In range
Mountain plover	*Charadrius montanus*	SSC2, BCC		In region
Snowy plover	*Charadrius nivosus*	BCC		In region
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC		In range
Long-billed curlew	*Numenius americanus*	WL, LACSBS		Nearby
Marbled godwit	*Limosa fedoa*	BCC		In region
Red knot (Pacific)	*Calidris canutus*	BCC		In region
Pectoral sandpiper	*Calidris melanotos*	BCC		In region
Short-billed dowitcher	*Limnodromus griseus*	BCC		In region
Lesser yellowlegs	*Tringa flavipes*	BCC		In region
Willet	*Tringa semipalmata*	BCC		Nearby
Laughing gull	*Leucophaeus atricilla*	WL		In region
Franklin's gull	*Leucophaeus pipixcan*	BCC		In region
Heermann's gull	*Larus heermanni*	BCC		In region
Western gull	*Larus occidentalis*	BCC		Nearby
California gull	*Larus californicus*	BCC, WL		Very close
California least tern	*Sternula antillarum browni*	FE, CE, CFP		In region
Black tern	*Chlidonias niger*	SSC2, BCC		In region
Elegant tern	*Thalasseus elegans*	BCC, WL, LACSBS		In region
Black skimmer	*Rynchops niger*	BCC, SSC3		In region
Common loon	*Gavia immer*	SSC		In region
Double-crested cormorant	*Phalacrocorax auritus*	WL		Very close
American white pelican	*Pelacanus erythrorhynchos*	SSC1		Very close
Least bittern	*Ixobrychus exilis*	SSC2		In region
Reddish egret	*Egretta rufescens*	BCC		In region
White-faced ibis	*Plegadis chihi*	WL, LACSBS		Nearby

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
California condor	*Gymnogyps californianus*	FE, CE, CFP	Low	Very close
Turkey vulture	*Cathartes aura*	BOP, LACSBS	Present	Very close
Osprey	*Pandion haliaetus*	WL, BOP		Very close
White-tailed kite	*Elanus luecurus*	CFP, BOP	Present	Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	Not expected	Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP, LACBW		Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Present	On site/**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP		Nearby
Red-shouldered hawk	*Buteo lineatus*	BOP		Very close
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Not expected	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP		On site/**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP, LACSBS		Very close
Zone-tailed hawk	*Buteo albonotatus*	BOP		In region
Harris' hawk	*Parabuteo unicinctus*	WL, BOP		In region
Rough-legged hawk	*Buteo lagopus*	BOP		In region
American barn owl	*Tyto furcata*	BOP		Very close
Western screech-owl	*Megascops kennicotti*	BOP		Very close/**On site**
Great horned owl	*Bubo virginianus*	BOP		Very close/**On site**
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP, CCE	Moderate/Low	Nearby
Long-eared owl	*Asio otus*	BCC, SSC3, BOP, LACSBS		In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP, LACSBS		In region
Northern saw-whet owl	*Aegolius acadicus*	BOP		In region
Northern pygmy-owl	*Glaucidium gnoma*	BOP, LACBW		In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		Very close
Nuttall's woodpecker	*Picoides nuttallii*	BCC		Very close/**On site**
White-headed woodpecker	*Dryobates albolarvatus*	BCC		In region

Common name	*Species name*	Status[1]	Occurrence potential	
			Dudek	**Database records, Site visits**
American kestrel	*Falco sparverius*	BOP		Very close/**On site**
Merlin	*Falco columbarius*	WL, BOP		Very close
Peregrine falcon	*Falco peregrinus*	BOP		Very close
Prairie falcon	*Falco mexicanus*	WL, BOP, LACSBS	Not expected	Nearby
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		Very close
Willow flycatcher	*Empidonax trailii*	CE		Very close
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE		In region
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Very close
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	Not expected	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2, LACSBS	Low	Very close
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW		On site/**On site**
California horned lark	*Eremophila alpestris actia*	WL, LACSBS	Low	Nearby
Bank swallow	*Riparia riparia*	CT	Not expected	Nearby
Purple martin	*Progne subis*	SSC2		Nearby
Wrentit	*Chamaea fasciata*	BCC		Very close/**On site**
California gnatcatcher	*Polioptila c. californica*	FT, SSC2	Not expected	In region
California thrasher	*Toxostoma redivivum*	BCC		Very close/**On site**
Cassin's finch	*Haemorhous cassinii*	BCC		Nearby
Lawrence's goldfinch	*Spinus lawrencei*	BCC		Very close
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	Not expected	Nearby
Black-chinned sparrow	*Spizella atrogularis*	BCC, LACBW		Nearby
Gray-headed junco	*Junco hyemalis caniceps*	WL		Nearby
Bell's sparrow	*Amphispiza b. belli*	WL, LACBW	Moderate	Nearby
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, LACSBS		In range
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW	Present	Very close/**On site**
Yellow-breasted chat	*Icteria virens*	SSC3	Not expected	Very close
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3		Very close

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
Bullock's oriole	*Icterus bullockii*	BCC		Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Not expected	Nearby
Lucy's warbler	*Leiothlypis luciae*	SSC3		In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC		In region
Prothonotary warbler	*Protonotaria citrea*	BCC		In region
Prairie warbler	*Setophaga discolor*	BCC		In region
Yellow warbler	*Setophaga petechia*	SSC2	Present	Very close
Summer tanager	*Piranga rubra*	SSC1		Very close
Little brown bat	*Myotis lucifugus*	WBWG:M		In region
Yuma myotis	*Myotis yumanensis*	WBWG:LM		In region/**Possibly on site**
Long-eared myotis	*Myotis evotis*	WBWG:M		In region/**Possibly on site**
Fringed myotis	*Myotis thysanodes*	WBWG:H		In range
Long-legged myotis	*Myotis volans*	WBWG:H		In range/**Possibly on site**
California myotis	*Myotis californicus*	WBWG:L		Very close/**On site**
Small-footed myotis	*Myotis ciliolabrum*	WBWG:M		In region
Canyon bat	*Parastrellus hesperus*	WBWG:M		Very close/**On site**
Big brown bat	*Episticus fuscus*	WBWG:L		Very close
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M	Not expected	In region
Hoary bat	*Lasiurus cinereus*	WBWG:M	Present	In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H		In region/**Possibly on site**
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H		In range
Spotted bat	*Euderma maculatum*	SSC, WBWG:H	Not expected	In range

Common name	*Species name*	Status[1]	Occurrence potential	
			Dudek	**Database records, Site visits**
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H	Low	In range
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	Present	In region
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L		Nearby
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG:MH		In region
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	Present	In region
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC	Moderate	In range
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC	Not expected	In region
San Diego Bryant's woodrat	*Neotoma bryanti (formerly lepida intermedia)*	SSC	Present	In region
Ringtail	*Bassariscus astutus*	CFP		In region
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC	Low	In range
American badger	*Taxidea taxus*	SSC	Present	Nearby
Mountain lion	*Puma concolor*	SA	Present	Very close

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); and BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

BIOLOGICAL IMPACTS ASSESSMENT

An impacts analysis involves prediction. Predictions are necessary because measuring the impacts directly could not happen until after the impacts occur, and this type of measurement would prevent the formulations of avoidance and minimization mitigation strategies that are prioritized by the CEQA. Impact predictions are needed in the environmental review. The accuracy of the predictions of impacts and their significance ultimately relies on the degree of accuracy in the characterization of the existing environmental setting (Figure 4).

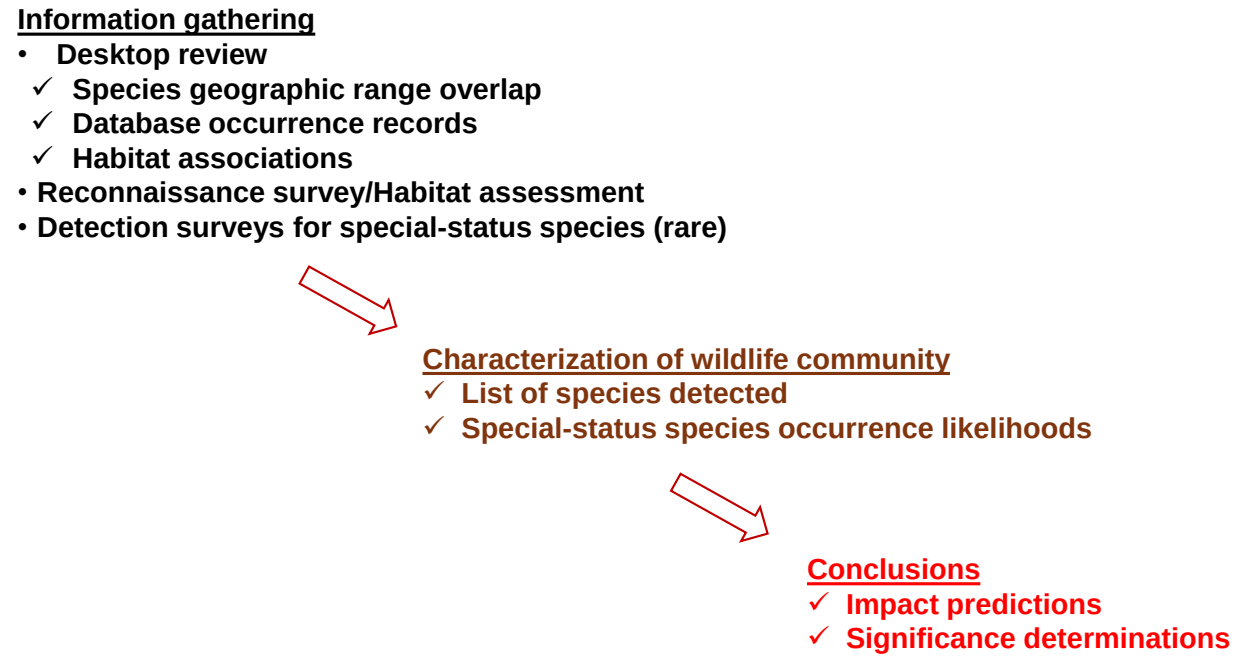


Figure 4. *General flow of information from the gathering stage through the characterization of the existing environment to predictions of impacts and their significance.*

Impact predictions can derive from speculation or from some level of experience (Figure 5). Speculation is repeatedly discouraged in the CEQA Guidelines, and for good reason because prediction accuracy improves with experience. But there are also different types of experience that can be brought to bear on impact predictions, ranging from anecdotes to careful use of scientific inference. Any type of experience is usually better than relying on speculation, but careful scientific inference, especially inference drawn from mensurative (unmanipulated observations of naturally replicated and interspersed treatments) or manipulative experiments, have proven most effective. An analogy would be predicting the boiling temperature of water at a certain place with a known atmospheric pressure after having measured it hundreds of times at other places under various atmospheric pressures. The experience of measuring the boiling temperature at all these other places would certainly result in a more accurate prediction at the certain place as compared to a speculative prediction. We know that use of inference in this example is certainly more predictive, and not potentially more predictive, because we

have a long successful history with the application of this type of experimentation to draw predictive inference.

It was scientific inference that allowed me to accurately predict the numbers of additional wildlife species Noriko would detect in her survey of the project site. And my predictions were accurate based on inference drawn from both the research site I cited. If the pattern of species detections is repeatable, then it is predictive. The same should apply to impact predictions.

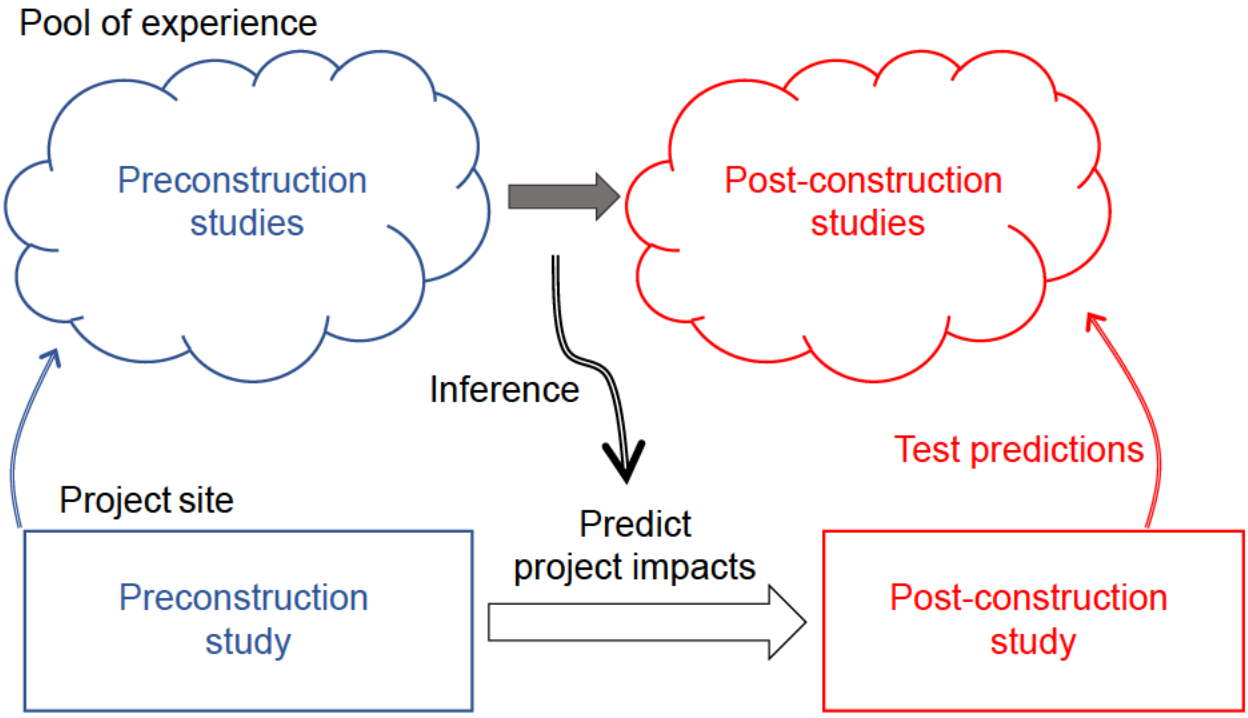


Figure 5. *The ideal framework for arriving at predicted project impacts based on experience with other project sites. Ideally, there is a pool of similar projects in similar circumstances where predicted impacts were compared to realized impacts, and into which the proposed project can also contribute to experience. In the reality of review under CEQA, impact predictions are rarely if ever tested, and they rarely if ever contribute to impact predictions for the proposed project.*

THE DEIR'S IMPACT ASSESSMENT METRIC

The DEIR is flawed in in its basis for analyzing project impacts on special-status species of wildlife. The metric used to analyze impacts is acres of habitat, but acres are not animals, and an acre of habitat does not carry the same abundance or demographic meanings among species that vary in trophic levels, seasonal movement patterns, and body mass. An acre of habitat of a given species could be at carrying capacity or it could be vacant depending on the status of the population relative to its multi-annual population cycle, where the centers of activity might have naturally shifted from one generation to the next (Taylor and Taylor 1979), or multiple other factors. Unless a

relationship is established between a species' average abundance and habitat acreage, the use of acreage as a surrogate for numerical abundance is meaningless and potentially misleading.

The use of acreage as the impact metric is also incomparable per the framework expected in Figure 5, and in fact neither Dudek (2024) nor the DEIR attempts to compare values of its impact metric between the project site and any other site, or between the existing setting to any other moment in time. There is some comparison of habitat acres between the project footprint and the "onsite" mitigation area, but these acreages are not linked to abundance or any demographic unit of the species at issue (see below). Certainly, there are no predictions of impacts in terms of numbers of animals or numbers of nests, and there are no comparisons of these numbers to those that might occur on the onsite mitigation area or anywhere else. On their own and without any means to interpret them, acres of impact are meaningless.

A major shortcoming of the DEIR's habitat assessment approach is the pigeon-holing of species into unrealistically narrow portions of the environment. An example applies to Cooper's hawk, which Dudek's Table 17 claims to have only 13.09 acres of habitat available to it on the project site. As Dudek (2024) reports, Cooper's hawks are not confined to riparian forests. In fact, there is no portion of the project site that would be unusable by Cooper's hawk. The Cooper's hawk found and photographed by Noriko was near a riparian area, but in fact it was in oak woodland. Based on our experience with many Cooper's hawk detections throughout California, the appropriate habitat area available to Cooper's hawk is the entirety of the project site.

Another example applies to Southern California rufous-crowned sparrow. Dudek (2024) claims there are only 33.16 acres of shrubland habitat available to Southern California rufous-crowned sparrow. However, Noriko found Southern California rufous-crowned sparrow in both shrubland and oak woodland. And in our broader experience, we have found Southern California rufous-crowned sparrows in various vegetation communities. The appropriate habitat area available to Southern California rufous-crowned sparrow is the entirety of the project site.

Dudek (2024) claims that both hairy woodpecker and yellow warbler are limited to 0.75 acres on the project site. These claims are absurd. The entirety of the project site is habitat to both of these species, both of which I have detected in a variety of vegetation complexes.

The same absurd level of pigeon-holing applies to American badger, which Dudek (2024) claims is constrained to 18.49 acres. Based on my experience with American badger, there is no part of the project site that should be considered anything other than American badger habitat.

The same applies to greater roadrunner, which Dudek (2024) claims to be constrained to 33.16 acres. And the same applies to San Diego black-tailed jackrabbit, which could be found anywhere on the project site, but which Dudek claims is constrained to a mere 6.15 acres. And the same applies to Blainville's horned lizard, which could be found

anywhere on the project site, but which Dudek claims is constrained to a mere 5.11 acres. None of these examples of pigeon-holing are based on surveys, and none are even close to realistic.

The foregoing examples of pigeon-holing of species into unrealistically narrow portions of the environment bear on my earlier concerns about the spatial extents of forcused surveys for burrowing owl, California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. The surveys were reportedly performed in "suitable habitat," but Dudek (2024) fails to report maps of what it regarded as suitable habitat. If the suitable habitat of each of these species was just as severely pigeon-holed as it was in the foregoing examples, then the focused surveys should be disregarded.

Another problem arising from the foregoing examples of pigeon-holing is that the resulting acreages are used as the bases for calculating mitigation. Because the habitat bases are flawed, the calculated mitigation requirements are also flawed, and they are inadequate.

In the following, I analyze several types of impacts likely to result from the project, but which are not analyzed in the DEIR.

REDUCED PRODUCTIVE CAPACITY FROM HABITAT LOSS

Habitat loss results in a reduced productive capacity of affected wildlife species, and habitat fragmentation multiples the effects of habitat loss by leaving isolated, insufficiently sized patches of open space that looks like habitat but no longer functions as habitat (Smallwood 2015). The project site is proven to serve as habitat to at least 106 species of vertebrate wildlife which Noriko and the applicant's consultants observed on the site, and the basis exists for my estimate that about 200 species of vertebrate wildlife rely on the site for its habitat. Many of these species are birds, but the number of avian nest sites remains unknown. Because none of the surveys were suitable for detecting all bird nests on the project site, estimating total nest density of birds was not possible. The alternative method would be to infer productive capacity from estimates of total nest density measured or estimated elsewhere.

Two study sites in grassland/wetland/woodland complexes had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. To acquire a total nest density closer to conditions in California, I surveyed a 12.74-acre site in Rancho Cordova 30 times from March through August 2023. Total nest density of birds was 18.05 nests per acre. The average of the above three estimates is 28.9 nests/acre. This density applied to the 89.34 acres of the project site would predict 2,582 nest sites. Assuming 1.39 broods per nest site based on a review of 322 North American bird species, which averaged 1.39 broods per year, then I estimate 3,589 nest attempts per year on the project site. Assuming Young's (1948) study site typifies bird productivity of 2.9 fledged birds per nest attempt, then I predict 10,408 fledglings/year at the project site.

The loss of 2,582 nest sites and 3,589 nest attempts per year would qualify as significant impacts that have not been analyzed by the City of Fontana. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The project would prevent the production of 10,408 fledglings per year. Assuming an average bird generation time of 4 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 11,699 birds per year denied to California.

The loss of 11,699 birds per year would be a loss of significant habitat value that is currently provided by the project site. Most if not all these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which are intended to most strongly protect breeding migratory birds. The loss of this many birds would easily qualify as an unmitigated significant impact.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. The 106 species that Noriko and the applicant's consultants detected on the project site had at some point moved to the site, and in fact members of some of these species were in flight when Noriko detected them. At minimum, the project site provides wildlife with stopover opportunities during migration or dispersal of young. There is doubt that the project site is important to wildlife movement in the region.

Dudek (2024:93) recognizes the 144.43-acre onsite mitigation area as important to wildlife movement in the region: "the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement and genetic health of the species by allowing for breeding, foraging, and dispersal opportunities between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains." And on page 100, Dudek (2024) writes, "Dedication of the on-site Conservation Area (MM-BIO-1) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east, as shown in Figure 3; therefore, preserving, and thereby avoiding further encroachment on, movement opportunities between regional conserved habitat blocks, and reducing potential Project impacts to SEA Resources." Inexplicably, Dudek (2024) does not similarly recognize the proposed project footprint as part of any wildlife corridor or as important to wildlife movement in the region. Both areas are adjacent to each other, separated only by an artificial boundary that no animal would recognize or understand, but yet one area is considered important to wildlife movement in the region and the other is not.

There is no empirical or logical basis for the DEIR's analysis of whether the project would interfere with wildlife movement in the region. No program of observation was implemented to quantify wildlife movement. No effort was made to examine topographic features for their potential roles in channeling wildlife movement. No serous analysis of wildlife movement exists in the DEIR.

There is also no consideration in the DEIR for how lots 20 and 29 would disproportionately interfere with wildlife movement in the region. Many animals encountering lots 20 and 29 while heading southeast would find themselves at a dead-end, and if these animals attempt to cross lots 20 and 29, they might be killed or injured by human activities or by human pets such as house cats. Lots 5, 15, 19, and 23 extend the project southward, and would also interfere substantially with east-west wildlife movement. The shape and extent of the project resulting from these lots would obviously interfere disproportionately with wildlife movement in the region, but the DEIR does not analyze this. Should the project go forward, the project layout should be revised so that it is more compact to minimize interference with wildlife movement in the region.

BIRD-WINDOW COLLISION MORTALITY

The project would introduce glass windows into an essential portion of avian habitat – that portion of the gaseous atmosphere that is referred to as the aerosphere (Davy et al. 2017, Diehl et al. 2017). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate. Birds are some of the many types of animals that evolved wings as a morphological adaptation to thrive by moving through the medium of the aerosphere. The aerosphere is habitat, to which an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008).

Many special-status species of birds have been recorded at or near the aerosphere of the project site. My database review and the surveys that have been done on site indicate there are 99 special-status species of birds with potential to use the site's aerosphere (Table 3). All the birds represented in Table 3 can quickly fly from wherever they have been documented to the project site, so they would all be within brief flights to the proposed project's windows.

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but they are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At

Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only two of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend

to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The DEIR does not report the number and extent of structural glass on the project's building façades. The rendering of the senior citizen housing complex shows about 220 m2 of windows. Based on other residential projects I have reviewed, and assuming 2,000 sf per home and 0.0170706 m^2/sf, I predict 17,412 m^2 of windows among the 510 homes. This window area added to the senior citizen housing complex would be 17,632 m^2. This window area multiplied by my estimated average bird collision deaths per m^2 of glass per year predicts 1,289 (95% CI: 765–1,813) bird collision fatalities per year.

The vast majority of these predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds and other sensitive species. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the project's airspace into a lethal collision trap to birds.

WILDLIFE DEPREDATION BY HOUSE CATS

Considering national trends, it is safe to assume that house cats would be introduced to the project area by residents of the proposed residential units. This is significant because house cats serve as one of the largest sources of avian mortality in North America (Dauphiné and Cooper 2009, Blancher 2013, Loss et al. 2013, Loyd et al. 2017). Loss et al. (2013) estimated 139 million cats in the USA in 2013 (range 114 to 164 million), which killed an estimated 16.95 billion vertebrate wildlife annually (range 7.6 to 26.3 billion). In 2012 there were 0.44 house cats per human in the USA, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. The DEIR predicts there would be 1,785 new residents. This number of residents applied to Loss et al.'s (2013) house cats/resident predicts 785 new cats, which based on the findings of Loss et al. (2013) would kill 95,770 vertebrate wildlife per year.

House cats also contribute to downstream loading of *Toxoplasma gondii*. According to a UC Davis wildlife health research program, "*Toxoplasma gondii is a parasite that can infect virtually all warm-blooded animals, but the only known definitive hosts are cats – domesticated and feral house cats included. Cats catch the parasite through hunting rodents and birds and they offload it into the environment through their feces… and …rain that falls on cement creates more runoff than rain that falls on natural earth, which contributes to increased runoff that can carry fecal pathogens to the sea*" (Thje original link is no longer active, but the quote came from the program described at: https://whc.vetmed.ucdavis.edu/programs-projects/ca-conservation/sea-otter).

Impacts to wildlife from the introduction of house cats into the environment would be highly significant, and yet these impacts are not considered in the DEIR. An obvious mitigation measure would be to constrain house cat ownership such as requiring cats to remain indoors. However, the proposed mitigation measures would require no restrictions on house cat ownership or house cat management.

TRAFFIC IMPACTS TO WILDLIFE

The DEIR neglects to address one of the project's most obvious, substantial impacts to wildlife, and that is wildlife mortality and injuries caused by project-generated traffic. Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic (Photos 29 and 30—32), including along roads far from the project footprint but which would nevertheless by traversed by automobiles head to or from the project's building. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

Photo 30. *A white-tailed antelope squirrel runs across the road just in the Coachella Valley, 26 May 2022. Such road crossings are usually successful, but too often prove fatal to the animal.*

Photo 31. *A coyote uses the crosswalk to cross a road on 2 February 2023. Not all drivers stop, nor do all animals use the crosswalk. Too often, animals are injured or killed when they attempt to cross roads.*

Photo 32. *Mourning dove killed by vehicle on a California road (photo by Noriko Smallwood, 21 June 2020.*)

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 9,462 animals killed by traffic on the road. This fatality number projected over 1.25 years and 2.5 miles of road translates to 3,028 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 188,191 animals killed per 100 km of road per year, or 22 times that of Loss et al.'s (2014) upper bound estimate and 53 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data

resulted in an estimated 3,028 animals killed per mile along a county road in Contra Costa County. The estimated numbers of fatalities were 1.75% birds, 26.4% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 67.4% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 4.4% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts to wildlife

The DEIR predicts 13,431,088 annual VMT would be generated by the project. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road in Contra Costa County daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 9,462 wildlife fatalities, or 2,351 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 5,713 vertebrate wildlife fatalities per year due to project-generated traffic.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The DEIR does not address this potential impact, let alone propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, and that, as the DEIR is currently written, these impacts would be unmitigated.

CUMULATIVE IMPACTS

The cumulative impacts analysis is fundamentally flawed. According to the DEIR, the implementation of MM-BIO-1 through MMBIO-13 would reduce all impacts on plant and wildlife species to less than significant levels. The DEIR concludes (p. 4.4-64), “all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project’s incremental effect on special-status species would not be cumulatively considerable and cumulative impacts on special-status species would be less than significant with mitigation.” The DEIR’s conclusion follows from two false standards for determining whether a project would contribute to cumulative impacts and whether those contributions would be significant.

The first false standard is that a given project impact is cumulatively considerable only when it has not been fully mitigated at the project level. The DEIR implies that cumulative impacts are really just residual impacts that were not fully mitigated. This

notion of residual impacts being the source of cumulative impacts is inconsistent with the CEQA's definition of cumulative effects. Individually mitigated projects do not negate the significance of cumulative impacts. If they did, then CEQA would not require a cumulative effects analysis.

The second false standard is that future permit restrictions or regulations applied to other future projects would themselves prevent cumulative impacts. Not only does this standard rely on speculation, but it is inconsistent with the CEQA Guidelines §15064(h)(3): "When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable." The City does not even know what permit restrictions or regulations would be in place, so there is none of the explanation required by the CEQA.

Because I had seen these same fallacious arguments made in CEQA reviews prepared by other lead agencies, I decided to test them (Smallwood and Smallwood 2023). To measure the impacts of habitat loss to wildlife caused by development projects, and to measure cumulative impacts of development, Noriko Smallwood and I revisited 80 sites of proposed projects that we had originally surveyed in support of comments on CEQA review documents. We revisited the sites to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration in order to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. All the developed sites had included mitigation measures to avoid, minimize or compensate for impacts to wildlife. Nevertheless, we found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. We reported that "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds (-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite all the mitigation measures and existing policies and regulations.

The DEIR's cumulative impacts analysis is flawed. The DEIR needs to be removed from public circulation so that an appropriate cumulative impacts analysis can be prepared.

MITIGATION MEASURES

MM-4.4-1 On-Site Habitat Preservation *Establish Conservation Easement that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area ("On-Site Conservation Area"). A Table shows that the on-site acreage would conserve <3% of what is needed of SEA Resource Category 1 vegetation communities, and 24.3% of SEA*

Resource Category 3 vegetation communities. A Conservation Management Plan would be prepared, and it would include a list of rules to prevent wildfires and impacts caused by human and pet intrusions and wildlife mortality from use of rodenticides. Enforcement would be the responsibility of the holder of the conservation easement, to be overseen by CDFW or perhaps the Homeowners' Association.

This mitigation strategy is misleading by claiming to be "on-site" when it is truly on an adjacent property held by the applicant. Relative to the project footprint, MM-4.4-1 would be off-site.

The 144.43 acres at issue in MM-4.4-1 does not include sufficient acreages of SEA Resource Categories 1 and 3 vegetation complexes to achieve the minimum mitigation of the SEA.

A larger issue, however, is the acreage calculations of SEA Resource Categories. The acreages are calculated from mapped GIS polygons, the boundaries of which are assumed to be hard and accurate. The assumed hardness of the boundaries is unrealistic, and for many species of plants and animals there are no boundaries at all. As for the accuracy of the boundaries, I do not see evidence in the DEIR that much of an effort was made to ground-truth the mapped polygons for accuracy in categorization and delineation.

Moreover, and as commented on earlier, the habitat acreages from which mitigation calculations are based have been biased low by pigeon-holding species into unrealistically small portions of the project area.

MM-4.4-2 Habitat Mitigation and Monitoring Plan *After implementation of MM-4.4-9, if the Los Angeles County Department of Regional Planning (Planning) determines that sufficient habitat is not preserved off site, per MM-4.4-9, then on-site establishment and restoration shall be conducted in the On-Site Conservation Area (MM-4.4-1). Prior to the issuance of a grading permit, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for … on-site establishment … of 16.24 acres of Brassica nigra–Centaurea melitensis herbaceous semi-natural stands. A list of best management practices and stress-relieving actions are included, and so is the requirement for 10 years of performance monitoring along with reporting. Adaptive management is identified as the process by which the restoration would proceed*.

Should the project go forward, and should habitat restoration go forward to achieve the minimum mitigation acreage of the SEA Resource Category at issue, then I concur with implementation of MM-4.4-2 as written. However, the DEIR does not make the case that the identified 16.24 acres is in need of restoration, nor does it make the case that restoring these 16.24 acres would avoid additional significant impacts to plants and wildlife. With this restoration in mind, the environmental review needs directed focus to the 16,24 acres at issue. Focused surveys are needed on these 16.24 acres to determine which species of plants and wildlife occur there.

The planning and implementation details of MM-4.4-2 would have been better directed to greater rigor in the environmental review. MM-4.4-2 gives the impression that greater rigor is promised at a later date -- much of it post-construction -- than was committed to the DEIR. Per MM-4.4-2, much of the rigor in the environmental review is deferred to later dates, thereby effectively excluding the public from meaningful participation with it.

MM-4.4-2 requires adaptive management, but it mischaracterizes adaptive management. Adaptive management is a structured scientific process (Holling 1978, Walters 1986, Lancia et al. 1996, McClain and Lee 1986). MM-4.4-2 accurately identifies monitoring and performance standards and remedial contingency measures, but it fails to identify the other steps that are essential to adaptive management. To be true adaptive management, the measures would need to be formulated ahead of time, along with thresholds of success and alternative prescriptions. Adaptive management begins with the full participation of all stakeholder groups to identify goals and objectives and then to formulate the plan. Furthermore, the plan needs to be informed by adequate, directed pre-construction surveys to establish baseline characterizations of the abundance and spatial distribution of each species at issue.

There has yet to be any assembly of stake-holder groups nor the identification of agreed-upon goals and objectives, so there remains no foundation for adaptive management. Furthermore, the currently available surveys are not adequate for informing adaptive management, as they do not even establish the presence or absence of many of the special-status species.

MM-4.4-3 Special-status Plants Seed and Bulb Survey, Salvage, and Translocation *Requires the preparation of a plan for preconstruction survey to locate specific special-status species of plants for collection of material for translocation. Also requires 5 years of performance monitoring.*

Again, no environmental review has been directed to the receiving sites of translocated seeds and bulbs. Translocations to unsuitable sites or to sites in no need of restoration could result in additional significant project impacts.

MM-4.4-4 Biological Monitoring *Requires County Planning-approved Biological Monitor(s) during Project construction to monitor construction activities and to ensure compliance with all mitigation measures. … Requires focused pre-construction surveys for burrowing owl shall be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused pre-construction surveys, … California Department of Fish and Wildlife (CDFW) shall be notified. … The Biological Monitor shall also monitor any colonial roosts located within 500 feet from the Project limits to determine if Project activities are having a detrimental effect on the roost. If bats are exhibiting distress due to noise generated by Project activities, the Biological Monitor shall work with the construction contractor on ways to reduce activities in the proximity of the roost (e.g., limiting the number of tractors in the area). …The*

Biological Monitor shall regularly inspect the Project site as needed after the completion of all grading activities. …

Should the project go forward, I concur with the measure but I point out that the conservation benefits of this measure would be *de minimis* in comparison to the project's impacts on biological resources. Also, the preconstruction surveys for burrowing owl need to be preceded by breeding-season detection surveys, and before this step is initiated, the applicant needs to consult with CDFW. The burrowing owl is a candidate for listing under the California Endangered Species Act, and the on-site surveys for burrowing owl are outdated at having been completed four years ago.

MM-4.4-5 Demarcation of Disturbance Limits *Prior to commencement of earthwork for each phase of Project construction, the construction limits shall be clearly demarcated …*

This measure should be implemented, but the conservation benefits of this measure would be *de minimis* in comparison to the project's impacts on biological resources.

MM-4.4-6 Invasive Species Prevention

This measure should be implemented, but the conservation benefits of this measure would be *de minimis* in comparison to the project's impacts on biological resources.

MM-4.4-7 Landscaping Plan *Prior to the issuance of the first grading permit, the Applicant shall prepare a Landscaping Plan for the areas maintained by the Homeowners' Association (HOA) …*

Should the project go forward, I concur with this measure.

MM-4.4-8 Crotch's Bumble Bee Habitat Preservation and Minimization Measures *Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee.*

This consultation with CDFW should have happened already, prior to the public circulation of the DEIR. The Crotch's bumble bee is known to be present, so the consultation should have already begun.

MM-4.4-9 Off-Site Habitat Preservation *Applicant shall demonstrate recordation of a conservation easement … that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). … One or more of the following options shall be used to provide adequate preservation for Project-related impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with*

other natural open space areas. To determine that these conditions are present, the Applicant shall fund a biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation…

The analysis of required habitat areas needed for compensatory mitigation needs to be revised by assuming much larger impacts in terms of habitat acreages. The current bases of habitat areas of special-status species resulted from pigeon-holing species into unrealistically small portions of the environment on the project site.

MM-4.4-10 Special-Status Wildlife Relocation Plan *Prior to commencement of any earthmoving activities …, the Project Applicant shall contract with a biologist approved by the County of Los Angeles (County) to develop a Pre-construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (Taricha torosa), two-striped gartersnake (Thamnophis hammondii), Southern California legless lizard (Anniella stebbinsi), and coastal whiptail* (*Aspidoscelis tigris stejnegeri*).

Newts are not reptiles.

Translocation risks additional significant project impacts to populations of animals in the receiving areas. The receiving areas should be assumed to be at carrying capacity for each species at issue. Adding individuals to areas already at carrying capacity would generate competition for limited resources, and they could result in deaths or injuries to residents of the receiving areas. The DEIR needs to be revised to include analysis of these potential translocation impacts.

MM-4.4-11 Nesting Bird Avoidance *…Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors. For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors*).

This measure is internally inconsistent by stating construction shall avoid the avian breeding season, and then stating remaining project activities shall be preceded by preconstruction nest surveys. This internal inconsistency indicates the applicant is not serious about avoiding the breeding season to minimize impacts to breeding birds.

MM-4.4-11 Nesting Bird Avoidance *If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. … Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines*

that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.

Should the project go forward, preconstruction surveys should be implemented for nesting birds. However, it should be understood that the task would be overwhelming. Based on available estimates of total avian nest densities, I predict 2,582 nest sites on the project site. Finding these nest sites would require the simultaneous efforts of many qualified biologists. Preconstruction, take-avoidance surveys consist of two steps, both of which are very difficult. First, the biologist(s) performing the survey must identify birds that are breeding. Second, the biologist(s) must locate the breeding birds' nests. The first step is typically completed by observing bird behaviors such as food deliveries and nest territory defense. To be successful these types of observations typically require many surveys on many dates spread throughout the breeding season even for a single species. To identify and locate the birds of all species nesting on a site requires a much greater survey effort. Even assuming all the predicted 2,582 nest sites could be found (not likely), the mitigation measure would apply only to the breeding season of the survey. After the breeding season of the preconstruction survey, California would be denied the production of birds from the project site during every subsequent year. The impacts of the project on birds would be permanent and of large magnitude (see my prediction, above, of the lost productive capacity of breeding birds).

Lastly, the mitigation language allows a single individual to make a subjective decision, outside the public's view, to determine the buffer area for any given species. This measure lacks objective criteria, and it is unenforceable.

NEEDED MITIGATION MEASURES

Habitat loss: Should the project go forward, the project's layout should be modified for increased compactness, and compensatory mitigation is needed for the loss of habitat. A habitat three times the area of the project's footprint should be protected as close to the project site as feasible.

Bird-Window Collision Mortality: If the project goes forward, it should at a minimum adhere to available Bird-Safe Guidelines, such as those prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For

example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced.

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Van Doren et al. (2021) found that nocturnal migrants contributed most of the collision fatalities in their study, and the largest predictors of fatalities were peak migration and lit windows. Van Doren et al. (2021) predicted that a light-out mitigation measure could reduce bird-window collision mortality by 60%.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

House Cats: If the project goes forward, homeowners should not be allowed to let their cats range free. A fund should be established for long-term management of house cats in the project. Management could include public education about the environmental effects of outdoor and free-ranging cats. It could also include a program to spade and neuter cats, especially free-ranging cats. It could also involve some removals of feral cats.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by the project-generated road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by house cats and by collisions with building windows and with automobiles traveling to and from the project's homes.
Thank you for your consideration,

Shawn Smallwood, Ph.D.

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Photo 33. *Mule deer next to the project site. Photo by Noriko Smallwood.*

Kenneth Shawn Smallwood
Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 762 professional reports, including:
- 90 peer reviewed publications
- 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. Journal of Wildlife Management: e22216. https://doi.org/10.1002/jwmg.22216

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. Diversity 13, 540. https://doi.org/10.3390/d13110540.

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. Diversity 12(98); https://doi.org/10.3390/d12030098

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EXHIBIT B

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(IEE File Reference: P-4899)

Pages: 18

Indoor Air Quality Impacts

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,

2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m^3. The median indoor formaldehyde concentration was 36 µg/m^3, and ranged from 4.8 to 136 µg/m^3, which corresponds to a median exceedance of the 2 µg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the San Diego County Air Pollution Control District (SDAPCD, 2021).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m^3 to 28% for the Acute REL of 55 µg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019) and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 $\mu g/m^3$ (18.2 ppb) as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 $\mu g/m^3$, which is 33% lower than the 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the Trails at Lyons Canyon Project, Los Angeles, CA, the buildings consist of residential spaces.

The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks

resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 µg/day for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

In addition, we note that the average outdoor air concentration of formaldehyde in California is 3 ppb, or 3.7 $\mu g/m^3$, (California Air Resources Board, 2004), and thus represents an average pre-existing background airborne cancer risk of 1.85 per million. Thus, the indoor air formaldehyde exposures describe above exacerbate this pre-existing risk resulting from outdoor air formaldehyde exposures.

Additionally, the SCAQMD's Multiple Air Toxics Exposure Study ("MATES V") identifies an existing cancer risk at the Project site of 306 per million due to the site's elevated ambient air contaminant concentrations, which are due to the area's high levels of vehicle traffic. These impacts would further exacerbate the pre-existing cancer risk to the building occupants, which result from exposure to formaldehyde in both indoor and outdoor air.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from

composite wood products.

Even composite wood products manufactured with CARB certified ultra-low emitting formaldehyde (ULEF) resins do not ensure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can ensure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m^2-h) and the area (m^2) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., $\mu g/m^2$-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 $\mu g/m^2$-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 $\mu g/m^2$-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the

total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m^3) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m^3/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m^3)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m^3/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section 3.10.2 "Calculation of Estimated Building Concentrations" of the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test

Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The Trails at Lyons Canyon Project, Los Angeles, CA is close to roads with moderate to high traffic (e.g., I-5, The Old Road, Pico Canyon Road, Calgrove Road, etc.). Thus, the Project is located in a sound impacted area.

The Draft Environmental Impact Report - Trails at Lyons Canyon Project, Los Angeles, CA (Dudek, 2024) states in Table 4.13-19 that the modeled existing with Project traffic noise levels will range from 68.6 to 73.2 dBA CNEL and the future 2029 with Project traffic noise levels will range from 68.7 to 73.7 dBA CNEL.

In order to design the building for this Project such that interior noise levels are acceptable, an acoustic study with actual on-site measurements of the existing ambient noise levels and modeled future ambient noise levels needs to be conducted. The acoustic study of the existing ambient noise levels should be conducted over a minimum of a one-week period and report the dBA CNEL or Ldn. This study will allow for the selection of a building envelope and windows with a sufficient STC such that the indoor noise levels are acceptable. A mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors will also be required. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Draft Environmental Impact Report - Trails at Lyons Canyon Project, Los Angeles, CA

(Dudek, 2024), the Project is located in the South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

Additionally, the SCAQMD's MATES V study cites an existing cancer risk of 306 per million at the Project site due to the site's high concentration of ambient air contaminants resulting from the area's high levels of motor vehicle traffic.

An air quality analyses should be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. at least MERV 13, or possibly MERV 14 or 15 depending on the results of the Project ambient $PM_{2.5}$ concentrations) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB,

2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not ensure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can ensure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California".* In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality"* when CARB Phase 2 products are utilized. As shown in the Singer et. al., 2020 study of new California homes, the median indoor formaldehyde concentration was of 22.3 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California Department of Public Health,

Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates, I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA

cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra-low emitting formaldehyde (ULEF) resins do not ensure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can ensure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to ensure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

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Education

M.S. Mechanical Engineering (1985)
Stanford University, Stanford, CA.

Graduate Studies in Air Pollution Monitoring and Control (1980)
University of California, Berkeley, CA.

B.S. in Mechanical Engineering (1976)
Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Experience

President: Indoor Environmental Engineering, San Francisco, CA. December, 1981 - present.

Direct team of environmental scientists, chemists, and mechanical engineers in conducting State and Federal research regarding indoor air quality instrumentation development, building air quality field studies, ventilation and air cleaning performance measurements, and chemical emission rate testing.

Provide design side input to architects regarding selection of building materials and ventilation system components to ensure a high quality indoor environment.

Direct Indoor Air Quality Consulting Team for the winning design proposal for the new State of Washington Ecology Department building.

Develop a full-scale ventilation test facility for measuring the performance of air diffusers; ASHRAE 129, Air Change Effectiveness, and ASHRAE 113, Air Diffusion Performance Index.

Develop a chemical emission rate testing laboratory for measuring the chemical emissions from building materials, furnishings, and equipment.

Principle Investigator of the California New Homes Study (2005-2007). Measured ventilation and indoor air quality in 108 new single family detached homes in northern and southern California.

Develop and teach IAQ professional development workshops to building owners, managers, hygienists, and engineers.

Air Pollution Engineer: Earth Metrics Inc., Burlingame, CA, October, 1985 to March, 1987.

Responsible for development of an air pollution laboratory including installation a forced choice olfactometer, tracer gas electron capture chromatograph, and associated calibration facilities. Field team leader for studies of fugitive odor emissions from sewage treatment plants, entrainment of fume hood exhausts into computer chip fabrication rooms, and indoor air quality investigations.

Staff Scientist: Building Ventilation and Indoor Air Quality Program, Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA. January, 1980 to August, 1984.

Deputy project leader for the Control Techniques group; responsible for laboratory and field studies aimed at evaluating the performance of indoor air pollutant control strategies (i.e. ventilation, filtration, precipitation, absorption, adsorption, and source control).

Coordinated field and laboratory studies of air-to-air heat exchangers including evaluation of thermal performance, ventilation efficiency, cross-stream contaminant transfer, and the effects of freezing/defrosting.

Developed an *in situ* test protocol for evaluating the performance of air cleaning systems and introduced the concept of effective cleaning rate (ECR) also known as the Clean Air Delivery Rate (CADR).

Coordinated laboratory studies of portable and ducted air cleaning systems and their effect on indoor concentrations of respirable particles and radon progeny.

Co-designed an automated instrument system for measuring residential ventilation rates and radon concentrations.

Designed hardware and software for a multi-channel automated data acquisition system used to evaluate the performance of air-to-air heat transfer equipment.

Assistant Chief Engineer: Alta Bates Hospital, Berkeley, CA, October, 1979 to January, 1980.

Responsible for energy management projects involving installation of power factor correction capacitors on large inductive electrical devices and installation of steam meters on physical plant steam lines. Member of Local 39, International Union of Operating Engineers.

Manufacturing Engineer: American Precision Industries, Buffalo, NY, October, 1977 to October, 1979.

Responsible for reorganizing the manufacturing procedures regarding production of shell and tube heat exchangers. Designed customized automatic assembly, welding, and testing equipment. Designed a large paint spray booth. Prepared economic studies justifying new equipment purchases. Safety Director.

Project Engineer: Arcata Graphics, Buffalo, N.Y. June, 1976 to October, 1977.

Responsible for the design and installation of a bulk ink storage and distribution system and high speed automatic counting and marking equipment. Also coordinated material handling studies which led to the purchase and installation of new equipment.

PROFESSIONAL ORGANIZATION MEMBERSHIP

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Chairman of SPC-145P, Standards Project Committee - Test Method for Assessing the Performance of Gas Phase Air Cleaning Equipment (1991-1992)
- Member SPC-129P, Standards Project Committee - Test Method for Ventilation Effectiveness (1986-97)
  - Member of Drafting Committee
- Member Environmental Health Committee (1992-1994, 1997-2001, 2007-2010)
  - Chairman of EHC Research Subcommittee
  - Member of Man Made Mineral Fiber Position Paper Subcommittee
  - Member of the IAQ Position Paper Committee
  - Member of the Legionella Position Paper Committee
  - Member of the Limiting Indoor Mold and Dampness in Buildings Position Paper Committee
- Member SSPC-62, Standing Standards Project Committee - Ventilation for Acceptable Indoor Air Quality (1992 to 2000)
  - Chairman of Source Control and Air Cleaning Subcommittee
- Chairman of TC-4.10, Indoor Environmental Modeling (1988-92)
  - Member of Research Subcommittee
- Chairman of TC-2.3, Gaseous Air Contaminants and Control Equipment (1989-92)
  - Member of Research Subcommittee

American Society for Testing and Materials (ASTM)

- D-22 Sampling and Analysis of Atmospheres
  - Member of Indoor Air Quality Subcommittee
- E-06 Performance of Building Constructions

American Board of Industrial Hygiene (ABIH)

American Conference of Governmental Industrial Hygienists (ACGIH)

- Bioaerosols Committee (2007-2013)

American Industrial Hygiene Association (AIHA)

Cal-OSHA Indoor Air Quality Advisory Committee

International Society of Indoor Air Quality and Climate (ISIAQ)

- Co-Chairman of Task Force on HVAC Hygiene

U. S. Green Building Council (USGBC)
- Member of the IEQ Technical Advisory Group (2007-2009)
- Member of the IAQ Performance Testing Work Group (2010-2012)

Western Construction Consultants (WESTCON)

PROFESSIONAL CREDENTIALS

Licensed Professional Engineer - Mechanical Engineering

Certified Industrial Hygienist - American Board of Industrial Hygienists

SCIENTIFIC MEETINGS AND SYMPOSIA

Biological Contamination, Diagnosis, and Mitigation, Indoor Air'90, Toronto, Canada, August, 1990.

Models for Predicting Air Quality, Indoor Air'90, Toronto, Canada, August, 1990.

Microbes in Building Materials and Systems, Indoor Air '93, Helsinki, Finland, July, 1993.

Microorganisms in Indoor Air Assessment and Evaluation of Health Effects and Probable Causes, Walnut Creek, CA, February 27, 1997.

Controlling Microbial Moisture Problems in Buildings, Walnut Creek, CA, February 27, 1997.

Scientific Advisory Committee, Roomvent 98, 6th International Conference on Air Distribution in Rooms, KTH, Stockholm, Sweden, June 14-17, 1998.

Moisture and Mould, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Ventilation Modeling and Simulation, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Microbial Growth in Materials, Healthy Buildings 2000, Espoo, Finland, August, 2000.

Co-Chair, Bioaerosols X- Exposures in Residences, Indoor Air 2002, Monterey, CA, July 2002.

Healthy Indoor Environments, Anaheim, CA, April 2003.

Chair, Environmental Tobacco Smoke in Multi-Family Homes, Indoor Air 2008, Copenhagen, Denmark, July 2008.

Co-Chair, ISIAQ Task Force Workshop; HVAC Hygiene, Indoor Air 2002, Monterey, CA, July 2002.

Chair, ETS in Multi-Family Housing: Exposures, Controls, and Legalities Forum, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

Chair, Energy Conservation and IAQ in Residences Workshop, Indoor Air 2011, Austin, TX, June 6, 2011.

Chair, Electronic Cigarettes: Chemical Emissions and Exposures Colloquium, Indoor Air 2016, Ghent, Belgium, July 4, 2016.

SPECIAL CONSULTATION

Provide consultation to the American Home Appliance Manufacturers on the development of a standard for testing portable air cleaners, AHAM Standard AC-1.

Served as an expert witness and special consultant for the U.S. Federal Trade Commission regarding the performance claims found in advertisements of portable air cleaners and residential furnace filters.

Conducted a forensic investigation for a San Mateo, CA pro se defendant, regarding an alleged homicide where the victim was kidnapped in a steamer trunk. Determined the air exchange rate in the steamer trunk and how long the person could survive.

Conducted *in situ* measurement of human exposure to toluene fumes released during nailpolish application for a plaintiffs attorney pursuing a California Proposition 65 product labeling case. June, 1993.

Conducted a forensic *in situ* investigation for the Butte County, CA Sheriff's Department of the emissions of a portable heater used in the bedroom of two twin one year old girls who suffered simultaneous crib death.

Consult with OSHA on the 1995 proposed new regulation regarding indoor air quality and environmental tobacco smoke.

Consult with EPA on the proposed Building Alliance program and with OSHA on the proposed new OSHA IAQ regulation.

Johnson Controls Audit/Certification Expert Review; Milwaukee, WI. May 28-29, 1997.

Winner of the nationally published 1999 Request for Proposals by the State of Washington to conduct a comprehensive indoor air quality investigation of the Washington State Department of Ecology building in Lacey, WA.

Selected by the State of California Attorney General's Office in August, 2000 to conduct a comprehensive indoor air quality investigation of the Tulare County Court House.

Lawrence Berkeley Laboratory IAQ Experts Workshop: "Cause and Prevention of Sick Building Problems in Offices: The Experience of Indoor Environmental Quality Investigators", Berkeley, California, May 26-27, 2004.

Provide consultation and chemical emission rate testing to the State of California Attorney General's Office in 2013-2015 regarding the chemical emissions from e-cigarettes.

PEER-REVIEWED PUBLICATIONS :

F.J.Offermann, C.D.Hollowell, and G.D.Roseme, "Low-Infiltration Housing in Rochester, New York: A Study of Air Exchange Rates and Indoor Air Quality," *Environment International*, *8*, pp. 435-445, 1982.

W.W.Nazaroff, F.J.Offermann, and A.W.Robb, "Automated System for Measuring Air Exchange Rate and Radon Concentration in Houses," *Health Physics*, *45*, pp. 525-537, 1983.

F.J.Offermann, W.J.Fisk, D.T.Grimsrud, B.Pedersen, and K.L.Revzan, "Ventilation Efficiencies of Wall- or Window-Mounted Residential Air-to-Air Heat Exchangers," *ASHRAE Annual Transactions*, *89-2B*, pp 507-527, 1983.

W.J.Fisk, K.M.Archer, R.E Chant, D. Hekmat, F.J.Offermann, and B.Pedersen, "Onset of Freezing in Residential Air-to-Air Heat Exchangers," *ASHRAE Annual Transactions*, *91-1B*, 1984.

W.J.Fisk, K.M.Archer, R.E Chant, D. Hekmat, F.J.Offermann, and B.Pedersen, "Performance of Residential Air-to-Air Heat Exchangers During Operation with Freezing and Periodic Defrosts," *ASHRAE Annual Transactions*, *91-1B*, 1984.

F.J.Offermann, R.G.Sextro, W.J.Fisk, D.T.Grimsrud, W.W.Nazaroff, A.V.Nero, and K.L.Revzan, "Control of Respirable Particles with Portable Air Cleaners," *Atmospheric Environment*, Vol. 19, pp.1761-1771, 1985.

R.G.Sextro, F.J.Offermann, W.W.Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Evaluation of Indoor Control Devices and Their Effects on Radon Progeny Concentrations," *Atmospheric Environment*, *12*, pp. 429-438, 1986.

W.J. Fisk, R.K.Spencer, F.J.Offermann, R.K.Spencer, B.Pedersen, R.Sextro, "Indoor Air Quality Control Techniques," *Noyes Data Corporation*, Park Ridge, New Jersey, (1987).

F.J.Offermann, "Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," *ASHRAE Transactions* , Volume 94, Part 1, pp 694-704, 1988.

F.J.Offermann and D. Int-Hout "Ventilation Effectiveness Measurements of Three Supply/Return Air Configurations," *Environment International* , Volume 15, pp 585-592 1989.

F.J. Offermann, S.A. Loiselle, M.C. Quinlan, and M.S. Rogers, "A Study of Diesel Fume Entrainment in an Office Building," *IAQ '89*, The Human Equation: Health and Comfort, pp 179-183, ASHRAE, Atlanta, GA, 1989.

R.G.Sextro and F.J.Offermann, "Reduction of Residential Indoor Particle and Radon Progeny Concentrations with Ducted Air Cleaning Systems," submitted to *Indoor Air*, 1990.

S.A.Loiselle, A.T.Hodgson, and F.J.Offermann, "Development of An Indoor Air Sampler for Polycyclic Aromatic Compounds", *Indoor Air* , Vol 2, pp 191-210, 1991.

F.J.Offermann, S.A.Loiselle, A.T.Hodgson, L.A. Gundel, and J.M. Daisey, "A Pilot Study to Measure Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air* , Vol 4, pp 497-512, 1991.

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance Comparisons of Six Different Air Cleaners Installed in a Residential Forced Air Ventilation System," *IAQ'91*, Healthy Buildings, pp 342-350, ASHRAE, Atlanta, GA (1991).

F.J. Offermann, J. Daisey, A. Hodgson, L. Gundell, and S. Loiselle, "Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air,* Vol 4, pp 497-512 (1992).

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance of Air Cleaners Installed in a Residential Forced Air System," *ASHRAE Journal*, pp 51-57, July, 1992.

F.J. Offermann and S. A. Loiselle, "Performance of an Air-Cleaning System in an Archival Book Storage Facility," *IAQ'92*, ASHRAE, Atlanta, GA, 1992.

S.B. Hayward, K.S. Liu, L.E. Alevantis, K. Shah, S. Loiselle, F.J. Offermann, Y.L. Chang, L. Webber, “Effectiveness of Ventilation and Other Controls in Reducing Exposure to ETS in Office Buildings,” Indoor Air ’93, Helsinki, Finland, July 4-8, 1993.

F.J. Offermann, S. A. Loiselle, G. Ander, H. Lau, "Indoor Contaminant Emission Rates Before and After a Building Bake-out," *IAQ'93*, Operating and Maintaining Buildings for Health, Comfort, and Productivity, pp 157-163, ASHRAE, Atlanta, GA, 1993.

L.E. Alevantis, Hayward, S.B., Shah, S.B., Loiselle, S., and Offermann, F.J. "Tracer Gas Techniques for Determination of the Effectiveness of Pollutant Removal From Local Sources," *IAQ '93*, Operating and Maintaining Buildings for Health, Comfort, and Productivity, pp 119-129, ASHRAE, Atlanta, GA, 1993.

L.E. Alevantis, Liu, L.E., Hayward, S.B., Offermann, F.J., Shah, S.B., Leiserson, K. Tsao, E., and Huang, Y., "Effectiveness of Ventilation in 23 Designated Smoking Areas in California Buildings," *IAQ '94*, Engineering Indoor Environments, pp 167-181, ASHRAE, Atlanta, GA, 1994.

L.E. Alevantis, Offermann, F.J., Loiselle, S., and Macher, J.M., "Pressure and Ventilation Requirements of Hospital Isolation Rooms for Tuberculosis (TB) Patients: Existing Guidelines in the United States and a Method for Measuring Room Leakage", Ventilation and Indoor air quality in Hospitals, M. Maroni, editor, Kluwer Academic publishers, Netherlands, 1996.

F.J. Offermann, M. A. Waz, A.T. Hodgson, and H.M. Ammann, "Chemical Emissions from a Hospital Operating Room Air Filter," *IAQ'96*, Paths to Better Building Environments, pp 95-99, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Professional Malpractice and the Sick Building Investigator," *IAQ'96*, Paths to Better Building Environments, pp 132-136, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Standard Method of Measuring Air Change Effectiveness," *Indoor Air,* Vol 1, pp.206-211, 1999.

F. J. Offermann, A. T. Hodgson, and J. P. Robertson, "Contaminant Emission Rates from PVC Backed Carpet Tiles on Damp Concrete", Healthy Buildings 2000, Espoo, Finland, August 2000.

K.S. Liu, L.E. Alevantis, and F.J. Offermann, "A Survey of Environmental Tobacco Smoke Controls in California Office Buildings", *Indoor Air*, Vol 11, pp. 26-34, 2001.

F.J. Offermann, R. Colfer, P. Radzinski, and J. Robertson, "Exposure to Environmental Tobacco Smoke in an Automobile", Indoor Air 2002, Monterey, California, July 2002.

F. J. Offermann, J.P. Robertson, and T. Webster, "The Impact of Tracer Gas Mixing on Airflow Rate Measurements in Large Commercial Fan Systems", Indoor Air 2002, Monterey, California, July 2002.

M. J. Mendell, T. Brennan, L. Hathon, J.D. Odom, F.J.Offermann, B.H. Turk, K.M. Wallingford, R.C. Diamond, W.J. Fisk, "Causes and prevention of Symptom Complaints

in Office Buildings: Distilling the Experience of Indoor Environmental Investigators", submitted to Indoor Air 2005, Beijing, China, September 4-9, 2005.

F.J. Offermann, "Ventilation and IAQ in New Homes With and Without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

F.J. Offermann, "ASHRAE 62.2 Intermittent Residential Ventilation: What's It Good For, Intermittently Poor IAQ", IAQVEC 2010, Syracuse, CA, April 21, 2010.

F.J. Offermann and A.T. Hodgson, "Emission Rates of Volatile Organic Compounds in New Homes", Indoor Air 2011, Austin, TX, June, 2011.

P. Jenkins, R. Johnson, T. Phillips, and F. Offermann, "Chemical Concentrations in New California Homes and Garages", Indoor Air 2011, Austin, TX, June, 2011.

W. J. Mills, B. J. Grigg, F. J. Offermann, B. E. Gustin, and N. E. Spingarm, "Toluene and Methyl Ethyl Ketone Exposure from a Commercially Available Contact Adhesive", Journal of Occupational and Environmental Hygiene, 9:D95-D102 May, 2012.

F. J. Offermann, R. Maddalena, J. C. Offermann, B. C. Singer, and H, Wilhelm, "The Impact of Ventilation on the Emission Rates of Volatile Organic Compounds in Residences", HB 2012, Brisbane, AU, July, 2012.

F. J. Offermann, A. T. Hodgson, P. L. Jenkins, R. D. Johnson, and T. J. Phillips, "Attached Garages as a Source of Volatile Organic Compounds in New Homes", HB 2012, Brisbane, CA, July, 2012.

R. Maddalena, N. Li, F. Offermann, and B. Singer, "Maximizing Information from Residential Measurements of Volatile Organic Compounds", HB 2012, Brisbane, AU, July, 2012.

W. Chen, A. Persily, A. Hodgson, F. Offermann, D. Poppendieck, and K. Kumagai, "Area-Specific Airflow Rates for Evaluating the Impacts of VOC emissions in U.S. Single-Family Homes", Building and Environment, Vol. 71, 204-211, February, 2014.

F. J. Offermann, A. Eagan A. C. Offermann, and L. J. Radonovich, "Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

F. J. Offermann, "Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Building and Environment, Vol. 93, Part 1, 101-105, November, 2015.

F. J. Offermann, "Formaldehyde Emission Rates From Lumber Liquidators Laminate Flooring Manufactured in China", Indoor Air 2016, Belgium, Ghent, July, 2016.

F. J. Offermann, "Formaldehyde and Acetaldehyde Emission Rates for E-Cigarettes", Indoor Air 2016, Belgium, Ghent, July, 2016.

OTHER REPORTS:

W.J.Fisk, P.G.Cleary, and F.J.Offermann, "Energy Saving Ventilation with Residential Heat Exchangers," a Lawrence Berkeley Laboratory brochure distributed by the Bonneville Power Administration, 1981.

F.J.Offermann, J.R.Girman, and C.D.Hollowell, "Midway House Tightening Project: A Study of Indoor Air Quality," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-12777, 1981.

F.J.Offermann, J.B.Dickinson, W.J.Fisk, D.T.Grimsrud, C.D.Hollowell, D.L.Krinkle, and G.D.Roseme, "Residential Air-Leakage and Indoor Air Quality in Rochester, New York," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-13100, 1982.

F.J.Offermann, W.J.Fisk, B.Pedersen, and K.L.Revzan, Residential Air-to-Air Heat Exchangers: A Study of the Ventilation Efficiencies of Wall- or Window- Mounted Units," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-14358, 1982.

F.J.Offermann, W.J.Fisk, W.W.Nazaroff, and R.G.Sextro, "A Review of Portable Air Cleaners for Controlling Indoor Concentrations of Particulates and Radon Progeny," An interim report for the Bonneville Power Administration, 1983.

W.J.Fisk, K.M.Archer, R.E.Chant, D.Hekmat, F.J.Offermann, and B.S. Pedersen, "Freezing in Residential Air-to-Air Heat Exchangers: An Experimental Study," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16783, 1983.

R.G.Sextro, W.W.Nazaroff, F.J.Offermann, and K.L.Revzan, "Measurements of Indoor Aerosol Properties and Their Effect on Radon Progeny," Proceedings of the American Association of Aerosol Research Annual Meeting, April, 1983.

F.J.Offermann, R.G.Sextro, W.J.Fisk, W.W. Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Control of Respirable Particles and Radon Progeny with Portable Air Cleaners," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16659, 1984.

W.J.Fisk, R.K.Spencer, D.T.Grimsrud, F.J.Offermann, B.Pedersen, and R.G.Sextro, "Indoor Air Quality Control Techniques: A Critical Review," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16493, 1984.

F.J.Offermann, J.R.Girman, and R.G.Sextro, "Controlling Indoor Air Pollution from Tobacco Smoke: Models and Measurements,", Indoor Air, Proceedings of the 3rd International Conference on Indoor Air Quality and Climate, Vol 1, pp 257-264, Swedish Council for Building Research, Stockholm (1984), Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-17603, 1984.

R.Otto, J.Girman, F.Offermann, and R.Sextro,"A New Method for the Collection and Comparison of Respirable Particles in the Indoor Environment," Lawrence Berkeley Laboratory, Berkeley, CA, Special Director Fund's Study, 1984.

A.T.Hodgson and F.J.Offermann, "Examination of a Sick Office Building," Lawrence Berkeley Laboratory, Berkeley, CA, an informal field study, 1984.

R.G.Sextro, F.J.Offermann, W.W.Nazaroff, and A.V.Nero, "Effects of Aerosol Concentrations on Radon Progeny," Aerosols, Science, & Technology, and Industrial Applications of Airborne Particles, editors B.Y.H.Liu, D.Y.H.Pui, and H.J.Fissan, p525, Elsevier, 1984.

K.Sexton, S.Hayward, F.Offermann, R.Sextro, and L.Weber, "Characterization of Particulate and Organic Emissions from Major Indoor Sources, Proceedings of the Third International Conference on Indoor Air Quality and Climate, Stockholm, Sweden, August 20-24, 1984.

F.J.Offermann, "Tracer Gas Measurements of Laboratory Fume Entrainment at a Semi-Conductor Manufacturing Plant," an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Tracer Gas Measurements of Ventilation Rates in a Large Office Building," an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Measurements of Volatile Organic Compounds in a New Large Office Building with Adhesive Fastened Carpeting," an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Designing and Operating Healthy Buildings", an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Measurements and Mitigation of Indoor Spray-Applicated Pesticides", an Indoor Environmental Engineering R&D Report, 1988.

F.J.Offermann and S. Loiselle, "Measurements and Mitigation of Indoor Mold Contamination in a Residence", an Indoor Environmental Engineering R&D Report, 1989.

F.J.Offermann and S. Loiselle, "Performance Measurements of an Air Cleaning System in a Large Archival Library Storage Facility", an Indoor Environmental Engineering R&D Report, 1989.

F.J. Offermann, J.M. Daisey, L.A. Gundel, and A.T. Hodgson, S. A. Loiselle, "Sampling, Analysis, and Data Validation of Indoor Concentrations of Polycyclic Aromatic Hydrocarbons", Final Report, Contract No. A732-106, California Air Resources Board, March, 1990.

L.A. Gundel, J.M. Daisey, and F.J. Offermann, "A Sampling and Analytical Method for Gas Phase Polycyclic Aromatic Hydrocarbons", Proceedings of the 5th International Conference on Indoor Air Quality and Climate, Indoor Air '90, July 29-August 1990.

A.T. Hodgson, J.M. Daisey, and F.J. Offermann "Development of an Indoor Sampling and Analytical Method for Particulate Polycyclic Aromatic Hydrocarbons", Proceedings of the 5th International Conference on Indoor Air Quality and Climate, Indoor Air '90, July 29-August, 1990.

F.J. Offermann, J.O. Sateri, "Tracer Gas Measurements in Large Multi-Room Buildings", Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

F.J.Offermann, M. T. O'Flaherty, and M. A. Waz "Validation of ASHRAE 129 - Standard Method of Measuring Air Change Effectiveness", Final Report of ASHRAE Research Project 891, December 8, 1997.

S.E. Guffey, F.J. Offermann et. al., "Proceedings of the Workshop on Ventilation Engineering Controls for Environmental Tobacco smoke in the Hospitality Industry", U.S. Department of Labor Occupational Safety and Health Administration and ACGIH, 1998.

F.J. Offermann, R.J. Fiskum, D. Kosar, and D. Mudaari, "A Practical Guide to Ventilation Practices & Systems for Existing Buildings", *Heating/Piping/Air Conditioning Engineering* supplement to April/May 1999 issue.

F.J. Offermann, P. Pasanen, "Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

F.J. Offermann, Session Summaries: Building Investigations, and Design & Construction, Healthy Buildings 2000, Espoo, Finland, August 2000.

F.J. Offermann, "The IAQ Top 10", Engineered Systems, November, 2008.

L. Kincaid and F.J. Offermann, "Unintended Consequences: Formaldehyde Exposures in Green Homes, AIHA Synergist, February, 2010.

F.J. Offermann, " IAQ in Air Tight Homes", ASHRAE Journal, November, 2010.

F.J. Offermann, "The Hazards of E-Cigarettes", ASHRAE Journal, June, 2014.

PRESENTATIONS :

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"Ventilation Efficiencies of Wall- or Window-Mounted Residential Air-to-Air Heat Exchangers," Presented at the American Society of Heating, Refrigeration, and Air Conditioning Engineers Summer Meeting, Washington, DC, June, 1983.

"Controlling Indoor Air Pollution from Tobacco Smoke: Models and Measurements," Presented at the Third International Conference on Indoor Air Quality and Climate, Stockholm, Sweden, August 20-24, 1984.

"Indoor Air Pollution: An Emerging Environmental Problem", Presented to the Association of Environmental Professionals, Bar Area/Coastal Region 1, Berkeley, CA, May 29, 1986.

"Ventilation Measurement Techniques," Presented at the Workshop on Sampling and Analytical Techniques, Georgia Institute of Technology, Atlanta, Georgia, September 26, 1986 and September 25, 1987.

"Buildings That Make You Sick: Indoor Air Pollution", Presented to the Sacramento Association of Professional Energy Managers, Sacramento, CA, November 18, 1986.

"Ventilation Effectiveness and Indoor Air Quality", Presented to the American Society of Heating, Refrigeration, and Air Conditioning Engineers Northern Nevada Chapter, Reno, NV, February 18, 1987, Golden Gate Chapter, San Francisco, CA, October 1, 1987, and the San Jose Chapter, San Jose, CA, June 9, 1987.

"Tracer Gas Techniques for Studying Ventilation," Presented at the Indoor Air Quality Symposium, Georgia Tech Research Institute, Atlanta, GA, September 22-24, 1987.

"Indoor Air Quality Control: What Works, What Doesn't," Presented to the Sacramento Association of Professional Energy Managers, Sacramento, CA, November 17, 1987.

"Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," Presented at the American Society of Heating, Refrigeration, and Air Conditioning Engineers Winter Meeting, Dallas, Texas, January 31, 1988.

"Indoor Air Quality, Ventilation, and Energy in Commercial Buildings", Presented at the Building Owners &Managers Association of Sacramento, Sacramento, CA, July 21, 1988.

"Controlling Indoor Air Quality: The New ASHRAE Ventilation Standards and How to Evaluate Indoor Air Quality", Presented at a conference "Improving Energy Efficiency and Indoor Air Quality in Commercial Buildings," National Energy Management Institute, Reno, Nevada, November 4, 1988.

"A Study of Diesel Fume Entrainment Into an Office Building," Presented at Indoor Air '89: The Human Equation: Health and Comfort, American Society of Heating, Refrigeration, and Air Conditioning Engineers, San Diego, CA, April 17-20, 1989.

"Indoor Air Quality in Commercial Office Buildings," Presented at the Renewable Energy Technologies Symposium and International Exposition, Santa Clara, CA June 20, 1989.

"Building Ventilation and Indoor Air Quality", Presented to the San Joaquin Chapter of the American Society of Heating, Refrigeration, and Air Conditioning Engineers, September 7, 1989.

"How to Meet New Ventilation Standards: Indoor Air Quality and Energy Efficiency," a workshop presented by the Association of Energy Engineers; Chicago, IL, March 20-21, 1989; Atlanta, GA, May 25-26, 1989; San Francisco, CA, October 19-20, 1989; Orlando, FL, December 11-12, 1989; Houston, TX, January 29-30, 1990; Washington D.C., February 26-27, 1990; Anchorage, Alaska, March 23, 1990; Las Vegas, NV, April 23-24, 1990; Atlantic City, NJ, September 27-28, 1991; Anaheim, CA, November 19-20, 1991; Orlando, FL, February 28 - March 1, 1991; Washington, DC, March 20-21, 1991; Chicago, IL, May 16-17, 1991; Lake Tahoe, NV, August 15-16, 1991; Atlantic City, NJ, November 18-19, 1991; San Jose, CA, March 23-24, 1992.

"Indoor Air Quality," a seminar presented by the Anchorage, Alaska Chapter of the American Society of Heating, Refrigeration, and Air Conditioning Engineers, March 23, 1990.

"Ventilation and Indoor Air Quality", Presented at the 1990 HVAC & Building Systems Congress, Santa, Clara, CA, March 29, 1990.

"Ventilation Standards for Office Buildings", Presented to the South Bay Property Managers Association, Santa Clara, May 9, 1990.

"Indoor Air Quality", Presented at the Responsive Energy Technologies Symposium & International Exposition (RETSIE), Santa Clara, CA, June 20, 1990.

"Indoor Air Quality - Management and Control Strategies", Presented at the Association of Energy Engineers, San Francisco Bay Area Chapter Meeting, Berkeley, CA, September 25, 1990.

"Diagnosing Indoor Air Contaminant and Odor Problems", Presented at the ASHRAE Annual Meeting, New York City, NY, January 23, 1991.

"Diagnosing and Treating the Sick Building Syndrome", Presented at the Energy 2001, Oklahoma, OK, March 19, 1991.

"Diagnosing and Mitigating Indoor Air Quality Problems" a workshop presented by the Association of Energy Engineers, Chicago, IL, October 29-30, 1990; New York, NY, January 24-25, 1991; Anaheim, April 25-26, 1991; Boston, MA, June 10-11, 1991; Atlanta, GA, October 24-25, 1991; Chicago, IL, October 3-4, 1991; Las Vegas, NV, December 16-17, 1991; Anaheim, CA, January 30-31, 1992; Atlanta, GA, March 5-6, 1992; Washington, DC, May 7-8, 1992; Chicago, IL, August 19-20, 1992; Las Vegas,

NV, October 1-2, 1992; New York City, NY, October 26-27, 1992, Las Vegas, NV, March 18-19, 1993; Lake Tahoe, CA, July 14-15, 1994; Las Vegas, NV, April 3-4, 1995; Lake Tahoe, CA, July 11-12, 1996; Miami, Fl, December 9-10, 1996.

"Sick Building Syndrome and the Ventilation Engineer", Presented to the San Jose Engineers Club, May, 21, 1991.

"Duct Cleaning: Who Needs It ? How Is It Done ? What Are The Costs ?" What Are the Risks ?, Moderator of Forum at the ASHRAE Annual Meeting, Indianapolis ID, June 23, 1991.

"Operating Healthy Buildings", Association of Plant Engineers, Oakland, CA, November 14, 1991.

"Duct Cleaning Perspectives", Moderator of Seminar at the ASHRAE Semi-Annual Meeting, Indianapolis, IN, June 24, 1991.

"Duct Cleaning: The Role of the Environmental Hygienist," ASHRAE Annual Meeting, Anaheim, CA, January 29, 1992.

"Emerging IAQ Issues", Fifth National Conference on Indoor Air Pollution, University of Tulsa, Tulsa, OK, April 13-14, 1992.

"International Symposium on Room Air Convection and Ventilation Effectiveness", Member of Scientific Advisory Board, University of Tokyo, July 22-24, 1992.

"Guidelines for Contaminant Control During Construction and Renovation Projects in Office Buildings," Seminar paper at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

"Outside Air Economizers: IAQ Friend or Foe", Moderator of Forum at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

"Orientation to Indoor Air Quality," an EPA two and one half day comprehensive indoor air quality introductory workshop for public officials and building property managers; Sacramento, September 28-30, 1992; San Francisco, February 23-24, 1993; Los Angeles, March 16-18, 1993; Burbank, June 23, 1993; Hawaii, August 24-25, 1993; Las Vegas, August 30, 1993; San Diego, September 13-14, 1993; Phoenix, October 18-19, 1993; Reno, November 14-16, 1995; Fullerton, December 3-4, 1996; Fresno, May 13-14, 1997.

"Building Air Quality: A Guide for Building Owners and Facility Managers," an EPA one half day indoor air quality introductory workshop for building owners and facility managers. Presented throughout Region IX 1993-1995.

“Techniques for Airborne Disease Control”, EPRI Healthcare Initiative Symposium; San Francisco, CA; June 7, 1994.

“Diagnosing and Mitigating Indoor Air Quality Problems”, CIHC Conference; San Francisco, September 29, 1994.

”Indoor Air Quality: Tools for Schools,” an EPA one day air quality management workshop for school officials, teachers, and maintenance personnel; San Francisco, October 18-20, 1994; Cerritos, December 5, 1996; Fresno, February 26, 1997; San Jose, March 27, 1997; Riverside, March 5, 1997; San Diego, March 6, 1997; Fullerton, November 13, 1997; Santa Rosa, February 1998; Cerritos, February 26, 1998; Santa Rosa, March 2, 1998.

ASHRAE 62 Standard “Ventilation for Acceptable IAQ”, ASCR Convention; San Francisco, CA, March 16, 1995.

“New Developments in Indoor Air Quality: Protocol for Diagnosing IAQ Problems”, AIHA-NC; March 25, 1995.

"Experimental Validation of ASHRAE SPC 129, Standard Method of Measuring Air Change Effectiveness", 16th AIVC Conference, Palm Springs, USA, September 19-22, 1995.

“Diagnostic Protocols for Building IAQ Assessment”, American Society of Safety Engineers Seminar: ‘Indoor Air Quality – The Next Door’; San Jose Chapter, September 27, 1995; Oakland Chapter, 9, 1997.

“Diagnostic Protocols for Building IAQ Assessment”, Local 39; Oakland, CA, October 3, 1995.

“Diagnostic Protocols for Solving IAQ Problems”, CSU-PPD Conference; October 24, 1995.

“Demonstrating Compliance with ASHRAE 62-1989 Ventilation Requirements”, AIHA; October 25, 1995.

“IAQ Diagnostics: Hands on Assessment of Building Ventilation and Pollutant Transport”, EPA Region IX; Phoenix, AZ, March 12, 1996; San Francisco, CA, April 9, 1996; Burbank, CA, April 12, 1996.

“Experimental Validation of ASHRAE 129P: Standard Method of Measuring Air Change Effectiveness”, Room Vent ‘96 / International Symposium on Room Air Convection and Ventilation Effectiveness"; Yokohama, Japan, July 16-19, 1996.

“IAQ Diagnostic Methodologies and RFP Development”, CCEHSA 1996 Annual Conference, Humboldt State University, Arcata, CA, August 2, 1996.

“The Practical Side of Indoor Air Quality Assessments”, California Industrial Hygiene Conference ‘96, San Diego, CA, September 2, 1996.

"ASHRAE Standard 62: Improving Indoor Environments", Pacific Gas and Electric Energy Center, San Francisco, CA, October 29, 1996.

"Operating and Maintaining Healthy Buildings", April 3-4, 1996, San Jose, CA; July 30, 1997, Monterey, CA.

"IAQ Primer", Local 39, April 16, 1997; Amdahl Corporation, June 9, 1997; State Compensation Insurance Fund's Safety & Health Services Department, November 21, 1996.

"Tracer Gas Techniques for Measuring Building Air Flow Rates", ASHRAE, Philadelphia, PA, January 26, 1997.

"How to Diagnose and Mitigate Indoor Air Quality Problems"; Women in Waste; March 19, 1997.

"Environmental Engineer: What Is It?", Monte Vista High School Career Day; April 10, 1997.

"Indoor Environment Controls: What's Hot and What's Not", Shaklee Corporation; San Francisco, CA, July 15, 1997.

"Measurement of Ventilation System Performance Parameters in the US EPA BASE Study", Healthy Buildings/IAQ'97, Washington, DC, September 29, 1997.

"Operations and Maintenance for Healthy and Comfortable Indoor Environments", PASMA; October 7, 1997.

"Designing for Healthy and Comfortable Indoor Environments", Construction Specification Institute, Santa Rosa, CA, November 6, 1997.

"Ventilation System Design for Good IAQ", University of Tulsa 10th Annual Conference, San Francisco, CA, February 25, 1998.

"The Building Shell", Tools For Building Green Conference and Trade Show, Alameda County Waste Management Authority and Recycling Board, Oakland, CA, February 28, 1998.

"Identifying Fungal Contamination Problems In Buildings", The City of Oakland Municipal Employees, Oakland, CA, March 26, 1998.

"Managing Indoor Air Quality in Schools: Staying Out of Trouble", CASBO, Sacramento, CA, April 20, 1998.

"Indoor Air Quality", CSOOC Spring Conference, Visalia, CA, April 30, 1998.

"Particulate and Gas Phase Air Filtration", ACGIH/OSHA, Ft. Mitchell, KY, June 1998.

"Building Air Quality Facts and Myths", The City of Oakland / Alameda County Safety Seminar, Oakland, CA, June 12, 1998.

"Building Engineering and Moisture", Building Contamination Workshop, University of California Berkeley, Continuing Education in Engineering and Environmental Management, San Francisco, CA, October 21-22, 1999.

"Identifying and Mitigating Mold Contamination in Buildings", Western Construction Consultants Association, Oakland, CA, March 15, 2000; AIG Construction Defect Seminar, Walnut Creek, CA, May 2, 2001; City of Oakland Public Works Agency, Oakland, CA, July 24, 2001; Executive Council of Homeowners, Alamo, CA, August 3, 2001.

"Using the EPA BASE Study for IAQ Investigation / Communication", Joint Professional Symposium 2000, American Industrial Hygiene Association, Orange County & Southern California Sections, Long Beach, October 19, 2000.

"Ventilation," Indoor Air Quality: Risk Reduction in the 21st Century Symposium, sponsored by the California Environmental Protection Agency/Air Resources Board, Sacramento, CA, May 3-4, 2000.

"Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

"Closing Session Summary: 'Building Investigations' and 'Building Design & Construction', Healthy Buildings 2000, Espoo, Finland, August 2000.

"Managing Building Air Quality and Energy Efficiency, Meeting the Standard of Care", BOMA, MidAtlantic Environmental Hygiene Resource Center, Seattle, WA, May 23rd, 2000; San Antonio, TX, September 26-27, 2000.

"Diagnostics & Mitigation in Sick Buildings: When Good Buildings Go Bad," University of California Berkeley, September 18, 2001.

"Mold Contamination: Recognition and What To Do and Not Do", Redwood Empire Remodelers Association; Santa Rosa, CA, April 16, 2002.

"Investigative Tools of the IAQ Trade", Healthy Indoor Environments 2002; Austin, TX; April 22, 2002.

"Finding Hidden Mold: Case Studies in IAQ Investigations", AIHA Northern California Professionals Symposium; Oakland, CA, May 8, 2002.

"Assessing and Mitigating Fungal Contamination in Buildings", Cal/OSHA Training; Oakland, CA, February 14, 2003 and West Covina, CA, February 20-21, 2003.

"Use of External Containments During Fungal Mitigation", Invited Speaker, ACGIH Mold Remediation Symposium, Orlando, FL, November 3-5, 2003.

Building Operator Certification (BOC), 106-IAQ Training Workshops, Northwest Energy Efficiency Council; Stockton, CA, December 3, 2003; San Francisco, CA, December 9, 2003; Irvine, CA, January 13, 2004; San Diego, January 14, 2004; Irwindale, CA, January 27, 2004; Downey, CA, January 28, 2004; Santa Monica, CA, March 16, 2004; Ontario, CA, March 17, 2004; Ontario, CA, November 9, 2004, San Diego, CA, November 10, 2004; San Francisco, CA, November 17, 2004; San Jose, CA, November 18, 2004; Sacramento, CA, March 15, 2005.

"Mold Remediation: The National QUEST for Uniformity Symposium", Invited Speaker, Orlando, Florida, November 3-5, 2003.

"Mold and Moisture Control", Indoor Air Quality workshop for The Collaborative for High Performance Schools (CHPS), San Francisco, December 11, 2003.

"Advanced Perspectives In Mold Prevention & Control Symposium", Invited Speaker, Las Vegas, Nevada, November 7-9, 2004.

"Building Sciences: Understanding and Controlling Moisture in Buildings", American Industrial Hygiene Association, San Francisco, CA, February 14-16, 2005.

"Indoor Air Quality Diagnostics and Healthy Building Design", University of California Berkeley, Berkeley, CA, March 2, 2005.

"Improving IAQ = Reduced Tenant Complaints", Northern California Facilities Exposition, Santa Clara, CA, September 27, 2007.

"Defining Safe Building Air", Criteria for Safe Air and Water in Buildings, ASHRAE Winter Meeting, Chicago, IL, January 27, 2008.

"Update on USGBC LEED and Air Filtration", Invited Speaker, NAFA 2008 Convention, San Francisco, CA, September 19, 2008.

"Ventilation and Indoor air Quality in New California Homes", National Center of Healthy Housing, October 20, 2008.

"Indoor Air Quality in New Homes", California Energy and Air Quality Conference, October 29, 2008.

"Mechanical Outdoor air Ventilation Systems and IAQ in New Homes", ACI Home Performance Conference, Kansas City, MO, April 29, 2009.

"Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

"Ten Ways to Improve Your Air Quality", Northern California Facilities Exposition, Santa Clara, CA, September 30, 2009.

"New Developments in Ventilation and Indoor Air Quality in Residential Buildings", Westcon meeting, Alameda, CA, March 17, 2010.

"Intermittent Residential Mechanical Outdoor Air Ventilation Systems and IAQ", ASHRAE SSPC 62.2 Meeting, Austin, TX, April 19, 2010.

"Measured IAQ in Homes", ACI Home Performance Conference, Austin, TX, April 21, 2010.

"Respiration: IEQ and Ventilation", AIHce 2010, How IH Can LEED in Green buildings, Denver, CO, May 23, 2010.

"IAQ Considerations for Net Zero Energy Buildings (NZEB)", Northern California Facilities Exposition, Santa Clara, CA, September 22, 2010.

"Energy Conservation and Health in Buildings", Berkeley High SchoolGreen Career Week, Berkeley, CA, April 12, 2011.

"What Pollutants are Really There ?", ACI Home Performance Conference, San Francisco, CA, March 30, 2011.

"Energy Conservation and Health in Residences Workshop", Indoor Air 2011, Austin, TX, June 6, 2011.

"Assessing IAQ and Improving Health in Residences", US EPA Weatherization Plus Health, September 7, 2011.

"Ventilation: What a Long Strange Trip It's Been", Westcon, May 21, 2014.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Indoor Air 2014, Hong Kong, July, 2014.

"Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

"Chemical Emissions from E-Cigarettes", IMF Health and Welfare Fair, Washington, DC, February 18, 2015.

"Chemical Emissions and Health Hazards Associated with E-Cigarettes", Roswell Park Cancer Institute, Buffalo, NY, August 15, 2014.

"Formaldehyde Indoor Concentrations, Material Emission Rates, and the CARB ATCM", Harris Martin's Lumber Liquidators Flooring Litigation Conference, WQ Minneapolis Hotel, May 27, 2015.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposure", FDA Public Workshop: Electronic Cigarettes and the Public Health, Hyattsville, MD June 2, 2015.

"Creating Healthy Homes, Schools, and Workplaces", Chautauqua Institution, Athenaeum Hotel, August 24, 2015.

"Diagnosing IAQ Problems and Designing Healthy Buildings", University of California Berkeley, Berkeley, CA, October 6, 2015.

"Diagnosing Ventilation and IAQ Problems in Commercial Buildings", BEST Center Annual Institute, Lawrence Berkeley National Laboratory, January 6, 2016.

"A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates From Composite Wood Products", AIHce2016, May, 21-26, 2016.

"Admissibility of Scientific Testimony", Science in the Court, Proposition 65 Clearinghouse Annual Conference, Oakland, CA, September 15, 2016.

"Indoor Air Quality and Ventilation", ASHRAE Redwood Empire, Napa, CA, December 1, 2016.

Attachment D

Trails at Lyons Canyon Project Response to SAFER Letter

STATE CLEARINGHOUSE NO. 2022060346

SEPTEMBER 2025

Submitted to:

LOS ANGELES COUNTY BOARD OF SUPERVISORS

500 West Temple Street, Room 383
Los Angeles, California 90012

Prepared by:

DUDEK

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1 Introduction

The Los Angeles County Department of Regional Planning (County) received an appeal of the decision of the Regional Planning Commission regarding the Trails at Lyons Canyon Project (Project) from the Supporters Alliance for Environmental Responsibility (SAFER). SAFER submitted an appeal to the Project approval on the deadline for appeals, August 11, 2025, but did not cite specific environmental impacts. On September 22, 2025, SAFER provided a follow-up letter (bracketed and included as Attachment A). The following section presents responses to SAFER's letter.

Response to Letter 1

Supporters Alliance for Environmental Responsibility (SAFER)
September 22, 2025

Response to Comment 1

This introductory comment does not state any specific environmental concerns related to the environmental analysis contained in the EIR.

Response to Comment 2

This comment summarizes the Project Description and does not state any specific environmental concerns related to the environmental analysis contained in the EIR.

Response to Comment 3

This comment summarizes various sections of the California Environmental Quality Act (CEQA) as well as pertinent case law and does not state any specific environmental concerns related to the environmental analysis contained in the EIR.

Response to Comment 4

Regarding methodology employed to evaluate impacts to biological resources, refer to Section 3, Methods of the Biota Report included as Appendix C to the Draft EIR. The commenter only conducted surveys for a few hours over a two day period; however, Dudek and/or Glenn Lukos Associates (GLA) conducted extensive and comprehensive field surveys spanning three seasons and three years, as itemized in Table 2, Summary of Biological Surveys for the Project Site, in Appendix C, Biota Report of the Draft EIR. Surveys included vegetation mapping, habitat assessments, protected tree mapping, aquatic resources delineation, and numerous focused special-status species surveys. As stated in Appendix C, Biota Report and Section 4.4, Biological Resources of the Draft EIR, all the surveys conformed to the currently accepted protocols, guidelines, and policies required by the resource agencies (e.g. protocol surveys for burrowing owl, California gnatcatcher, southwestern willow flycatcher, and least Bell's vireo; CNPS Botanical Survey Guidelines {CNPS 2001}; Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Natural Communities {CDFW 2018}; General Rare Plant Survey Guidelines {Cypher 2002}; USACE's 1987 Corps of Engineers Wetlands Delineation Manual {USACE 1987} and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region {Version 2.0} {USACE 2008a}, etc.). Therefore, surveys conducted for the Project provided all appropriate and required surveys to form an accurate baseline analysis under CEQA. All species recorded within the Project site or vicinity during field surveys are included in Appendix C, Plant Compendium, and Appendix D, Wildlife Compendium, to the Biota Report, which is included as Appendix C to the Draft EIR.

In *Save North Petaluma River and Wetlands Society v. City of Petaluma* (2022) 86 Cal.App.5th 207, the court directly addressed the issue of the temporal adequacy of biological surveys used in a CEQA environmental review. Petitioners argued that the lead agency relied on outdated biological resource studies that predated the Notice of Preparation (NOP), rendering the environmental baseline inaccurate. The Court of Appeal rejected this argument, holding that CEQA does not require all baseline data to be collected precisely at the time of the NOP. Instead, the court affirmed that an agency may use surveys conducted before or after the issuance of the NOP, so long as

substantial evidence supports the conclusion that site conditions remained materially unchanged and that the data still reasonably represent existing environmental conditions (Section 15125[a], CEQA Guidelines). Therefore, the site visits and supplemental documentation confirming the accuracy of habitat conditions show that the environmental conditions have remained stable over the course of the surveys conducted, which are appropriate for use in the EIR.

Additionally, as stated in Appendix C, Biota Report of the Draft EIR, after the database searches were conducted, special-status species' potential to occur within the Project site are then evaluated based on known species distribution (i.e. using CDFW California Wildlife Habitat Relationships Life History and Range and other applicable sources), species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. It is understood that CNDDB is a positive-only database. As such, the lack of nearby occurrences was not used as a reason to rule out a species from having potential within the Project site within the Draft EIR. As shown in Table 4.4-3 of the Draft EIR, even when a special-status species was not observed, a potential to occur was given and as shown in Section 4.4-5, Impact Analysis, of the Draft EIR, impacts to the species associated habitats were calculated and at least 3:1 habitat preservation was provide by the provided mitigation measures. Therefore, the comment inaccurately states that CNDDB is used to screen out species from consideration in the environmental setting or impact analysis and the statement that CNDBB was misused is unsubstantiated. For more discussion on impacts related to characterization of the existing setting, see Response to Comments to Exhibit A, below.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment 5

Regarding potential impacts to natural habitat and wildlife species, please refer to the impact analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas (SEA) Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities (including oak woodlands), protected wetlands, and other SEA resources. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established.

In addition, the potential for the Project to result in habitat fragmentation is addressed under Threshold 4.4d and Threshold 4.4f in Section 4.4, Biological Resources, of the Draft EIR. As stated on page 4.4-56 of the Draft EIR, dedication of the On-Site Conservation Area (in accordance with MM-4.4-1, as managed in perpetuity through a conservation easement) will protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east. This would preserve access to and avoid further encroachment on

movement opportunities between regionally conserved habitat blocks. As such, with the implementation of MM-4.4-1, impacts due to habitat fragmentation would be reduced to less than significant.

As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16, which would reduce biological resources impacts to less than significant. For more discussion on impacts related to habitat loss, see Response to Exhibit A Comments, below.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment 6

The Draft EIR details the potential for wildlife connectivity impacts for the Project (Draft EIR, page 4.4-56) and cumulative projects (Draft EIR, pages 4.4-65 through 4.4-67). The Project-level and cumulative impact analyses detail that the Project would result in a potentially significant impact regarding the substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites prior to mitigation, but that implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-4 (Biological Monitoring), MM-4.4-12 (Lighting Plan), and MM-4.4-15 (Roosting Bat Survey) would reduce the Project's impacts to less than significant. Both MM-4.4-1 and MM-4.4-9 have been revised as shown in Chapter 3, Revisions to the Draft EIR of this Final EIR to clarify that funding for the on-site and off-site conservation easements shall be maintained in perpetuity.

Potential Project impacts related to wildfire corridors and movement of wildlife species are addressed under Threshold 4.4d in Section 4.4, Biological Resources of the Draft EIR (Draft EIR, page 4.4-56). As discussed therein, the Project has the potential to impact local wildlife movement by impeding localized movement from undeveloped land in the southern portion of the Project site, privately owned undeveloped lands to the west, and dedicated open space associated with Santa Clarita Woodlands Park and the Rivendale Open Space, to the undeveloped box canyon located within the northwestern portion of the Project site, which extends an additional approximately 0.5 miles to the northwest before terminating at existing single-family development associated with the Stevenson Ranch development. Moreover, the Project is located immediately adjacent to The Old Road and Interstate 5, which has been identified as a substantial barrier to east-west wildlife movement, as stated in Section 4.4.1, Existing Conditions.

Dedication of the On-Site Conservation Area (as required per MM-4.4-1, On-Site Habitat Preservation, which would be managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space. Preserving this connection would contribute to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing,

a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east. Dedication of the On-Site Conservation Area would therefore preserve, and thereby avoid further encroachment on, movement opportunities between regional conserved habitat blocks and reduce potential Project impacts to SEA resources. As such, with the implementation of MM-4.4-1, impacts to the SEA resources and wildlife movement due to habitat fragmentation would be reduced to less than significant. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants on which wildlife species forage. Therefore, the mitigation measures in the Draft EIR are adequate to satisfy the concerns of this comment.

The comment further expresses support for a "more compact" project. The Draft EIR includes an analysis of Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This analysis is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR. This alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams within a FEMA Flood Zone A, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. As stated on page 6-75 of the Draft EIR, Alternative C would be the environmentally superior alternative. Therefore, the comment's support for a revised design will be forwarded to the Board of Supervisors for their review and consideration as part of this Final EIR. For more discussion on impacts related to wildlife corridors, see Response to Comments to Exhibit A, below.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment 7

According to Klem 2014, the most likely avian species to collide with windows are those that are most locally abundant, and windows that pose the most hazard are larger, reflective, and positioned to reflect dense exterior vegetation.[1] While there are pockets of woodland vegetation, the majority of the areas that would be directly adjacent to residential homes on the Project site would be covered by hardscapes or landscape vegetation that would not likely reflect into the windows of the future buildings. Furthermore, there are no commercial, office, or industrial uses proposed where broad expanses of reflective features (such as glass curtain-walls or expanses of contiguous glass panes) would be included. The buildings proposed adjacent to natural open space areas would be two-to-three story townhouses ranging from 26 to 36 feet in height, where reflective materials would primarily be limited to recessed vinyl windows typical of residential development. As supported by Klem 2014, if future bird collisions occur within the Project site, they would likely occur among the common bird species (most of the species observed during biological field surveys were non-special-status species).[2] There is not sufficient justification to consider future bird collisions with residential buildings within the Project a significant impact due to the lack of reflective surfaces adjacent to tall, dense vegetation that would be reflected into the windows of future buildings.

1 Klem, D. 2014. Avian *Mortality at Windows: The Second Largest Human Source of Bird Mortality on Earth.* Proceedings of the Fourth International Partners in flight Conference: Tundra to Tropics. https://www.partnersinflight.org/wp-content/uploads/2017/03/Klem-Jr.-D.-p-244-251.pdf.

2 Ibid.

Exhibit A makes a misleading and speculative argument, including calculations of predicted bird deaths, without making any comparison between the cited cases and the proposed Project. For example, the comment stresses the high number of birds killed in the Johnson and Hudson (1976) study, and states that this was "just for one 3-story, glass-sided walkway between two college campus buildings." But a glass-sided walkway, if it reflected trees and other dense vegetation, would be exactly the sort of structure to have maximum effects on birds from window collisions. The comment also includes several studies of bird deaths in New York City (Gelb and Delacretaz 2009, Klem et al. 2009). The Gelb and Delacretaz 2009 study refers specifically to high-rises, which are not applicable to the proposed Project. Mass deaths from building strikes at night during migration, is a phenomenon in North America largely related to tall buildings, especially in the eastern half of the continent, and has little relevance for the Project site. In general, bird strikes at night are assumed to be related to disorientation from night-time lighting. Loss 2014 states that "for low-rises and high-rises, mortality can be reduced by minimizing light emission at night."[3] The Project addresses this issue by requiring compliance with additional lighting standards, including conformance with the County's Rural Outdoor Lighting District standards, as directed by MM-4.4-12 (Draft EIR page 4.4-91). For example, per MM-4.4-12, outdoor lighting must be fully shielded so that bulbs and lenses are not visible and cause no light trespass into native habitats or skyward. Light fixtures must also be mounted as low as possible to minimize light trespass. For more discussion on impacts related to bird-window collisions, see Response to Comments to Exhibit A, below.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment 8

The comment generally describes possible impacts on wildlife from vehicle collisions and Exhibit A includes photos of wildlife crossing roads and wildlife mortalities on roadways from other locations in California. The comment uses data from a study in northern California (i.e., undeveloped area of Contra Costa County, California) to predict the number of common wildlife and special-status wildlife species collisions from the annual vehicle miles traveled for the Project site. The data used to extrapolate predicted wildlife collisions were taken from a mortality study on a 2.5-mile section of road in a rural, undeveloped area of Contra Costa County, California. The rate of wildlife mortalities from this study cannot meaningfully be compared to the proposed Project, which is located in southern California. The comment provides no evidence that special-status wildlife species have been killed on roadways in settings similar to the Project site. The commenter admittedly states "although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations." It is misleading and speculative to predict the number of common or special-status wildlife fatalities-based data based on the commenter's analysis and use of studies that are within settings not similar enough to the Project site. The comment does not provide credible evidence supporting a fair argument that the Project would result in significant impacts on the viability of a species or species group or significant impacts to special-status species due to roadway mortality.

The Project site would be fully developed with urban land uses and would not be an attraction for wildlife to enter the developed portion of the Project site. As discussed under Threshold 4.4d in Section 4.4 of the Draft EIR, which includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or

[3] Loss, S.R., Will, T., Loss, S.S., Marra, P.P. 2014. *Bird–building collisions in the United States: Estimates of annual mortality and species vulnerability.* The Condor.

migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR), the Project would not substantially interfere with wildlife movement. As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, On-Site Habitat Preservation, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that would be the preferred route for wildlife in the region.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment 9

As detailed in Section 4.4.5, Impact Analysis, of the Draft EIR, the Project would result in impacts to several special-status plant and wildlife species (i.e., species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS), and with MM-4.4-1 through MM-4.4-13, the Project's impacts to special-status plant and wildlife species were determined to be less than significant. As stated on page 4.4-63 of the Draft EIR, the Project's contribution to cumulative impacts to special-status species habitat is primarily addressed through the Project-specific mitigation measures that would preserve on- and off-site habitat, consisting of mostly undisturbed native vegetation that are contiguous with large tracts of conserved open space and would be expected to support numerous plant and wildlife species, including the special-status species found on the Project site. With implementation of the mitigation measures discussed above, the Project's incremental effect on special-status species would be less than significant when viewed in connection with the effects of the Cumulative Projects.

The CEQA Guidelines Section 15130 requires that a project's cumulative impacts be discussed when the incremental effects of the project are cumulatively considerable. According to CEQA Guidelines Section 15065(a)(3), the term cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." The analysis in Section 4.4 of this Draft EIR addresses whether, after adoption of Project-specific mitigation, the residual impacts of the proposed Project would (1) contribute considerably to an existing/anticipated (without the Project) cumulatively significant effect or (2) cause a new cumulatively significant impact. The Draft EIR examines "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (14 CCR 15130[a][3] and 15130[b][5]).

As stated on page 4.4-64 of the Draft EIR, the Project's impacts to special-status plant and wildlife species, including the loss of suitable habitat, would be reduced to less than significant with implementation of MM-4.4-1 through MM-4.4-13. The Project's contribution to cumulative impacts to special-status species habitat is primarily addressed through the Project-specific mitigation measures that would preserve on- and off-site habitat, consisting of mostly undisturbed native vegetation that are contiguous with large tracts of conserved open space and would be expected to support numerous plant and wildlife species, including the special-status species found on the Project site. With implementation of the mitigation measures discussed above, the Project's incremental effect on special-status species would be less than significant when viewed in connection with the effects of the Cumulative Projects. Further, all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on special-status species

would not be cumulatively considerable and cumulative impacts on special-status species would be less than significant with mitigation. For additional discussion on cumulative impacts relating to special-status species, see the Response to Exhibit A Comments, below.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment 10

The comment asserts the mitigation measures included to reduce impacts to biological resources are ineffective. The comment refers to Exhibit A's recommendations for mitigation to be incorporated into the EIR. See Response to Comments to Exhibit A, below.

Response to Comment 11

The comment refers to Exhibit B's recommendations for mitigation to be incorporated into the EIR. See Response to Comments to Exhibit B, below.

The United States Environmental Protection Agency (US EPA) and the California Air Resources Board (CARB) regulate indoor building materials to minimize exposure to toxic substances, ensuring compliance with formaldehyde emission standards, particularly for composite wood products. These regulations apply to all parties involved in the manufacturing, distribution, and retail of building materials, and the project in question would adhere to these federal and state standards. However, under CEQA, the County of Los Angeles and South Coast Air Quality Management District (SCAQMD) not require an analysis of indoor air quality impacts unless they affect the public at large. The potential impact of the Project on indoor air quality is not an impact under CEQA and therefore does not need to be analyzed within the Project's EIR. It is unknown at this time precisely what interior finishing materials would be used for the Project. Interior finishes would be subject to the specifications of future individual tenants and cannot reliably be determined until after the Project is approved and in the far more detailed building permit design phase. CEQA does not require such speculation; instead, the CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). Further, there is nothing unique or unusual about the Project compared to any other residential project built in California, whether discretionary or by-right, in relation to building finishes or indoor materials. The Project's building materials would be compliant with all applicable regulations as discussed within the Draft EIR and in Response to Exhibit B Comments.

Lastly, the commenter's analysis is based on inaccurate and unreasonable assumptions that grossly overestimate cancer risk, as detailed further in Response to Comment B-1, below. The mitigation measures suggested by the commenter are not required, as CEQA only requires mitigation when there is a nexus for the mitigation. As the potential impact to future residents relating to indoor air quality is not a CEQA impact and in fact, the analysis that indicates the Project would exceed thresholds is flawed. As such, no mitigation for this topic is required under CEQA.

Response to Comment 12

This conclusionary comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Exhibit A Comments

Response to Comment A-1

This comment is an introduction and a statement of qualification by author. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-2

This comment is a statement on the importance of CEQA in protecting natural resources and defines the species that meet the author's definition of special-status. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-3

This comment is a describes the methodology of the site visits by the commenter s associate, which totaled 7.15 hours, and includes many photos that are mostly common bird species that were photographed (stated to be taken on the Project site, which is private property), screenshots of Sonogram data depicting bat calls, and dead raccoon located offsite on The Old Road. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-4

This comment is a table of wildlife observed and any special-status given to the species. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-5

This comment is a table of wildlife observed by GLA and Dudek during surveys from 2020 to 2023 and those observed by the commenter's associate during the 7.15 hours and includes any special-status given to the species. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-6

This comment involves using modelling to predict species richness and uses a survey effort that was 721 hours of observations for a wind project. The commenter uses his associates 7.15 hours of surveys in the modelling to come up with a predicted species count for the Project site. The wildlife species identified in the Draft EIR align with those observed during the site survey conducted by the project consultant, GLA, and with species expected to occur in or around the Project site. The commenter does not identify any specific deficiencies in the Draft EIR under CEQA or State CEQA Guidelines. Instead, the commenter relies on a mathematical regression model as an "analytical bridge" to estimate species diversity onsite. This model, however, was developed based on years of surveys conducted in the *41,300-acre Altamont Pass Wind Resource Area*. Applying this model to 7.15 hours of survey is both inappropriate and misleading. As shown in Table 2 of Appendix C, Biota Report, of the Draft EIR, surveys occurred from January to July, with numerous biologists on site conducting censuses of the plants and wildlife that occur. This effort produced a thorough baseline of the existing conditions of the project site and of the sensitive wildlife that are present as residents and migrants. All species recorded within the Project site or vicinity during field surveys

are included in Appendix C, Plant Compendium, and Appendix D, Wildlife Compendium, to the Biota Report, which is included as Appendix C to the Draft EIR.

Response to Comment A-7

CEQA does not require lead agencies to conduct exhaustive biological inventories documenting the species detected per survey. CEQA requires a reasonable description of the environmental baseline that provides sufficient information to evaluate the potential for significant environmental impacts. The CEQA Guidelines expressly state that the baseline "shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project" (CEQA Guidelines section 15125[a]). Courts have affirmed that lead agencies may rely on a combination of credible data sources, including habitat evaluations, expert opinion, and field observations, so long as the information is supported by substantial evidence and reflects a reasonable effort to characterize the site conditions. Appendix C, Plant Compendium, and Appendix D, Wildlife Compendium, to the Biota Report, which is included as Appendix C to the EIR, provide the species observed within the site during all field surveys conducted within the Project in accordance with the CEQA Guidelines. Per CEQA Appendix G, impacts to wildlife are focused on those species that are identified as a candidate, sensitive, or special status species. As shown in Section 3.2 of Appendix C, Biota Report, of the Draft EIR, specific methodology and protocols required by the state and federal resource agencies was used to determine the presence or potential for a species to occur. As shown in Table 4.4-3 of the Draft EIR, even when a special-status species was not observed, a potential to occur was given and as shown in Section 4.4-5, Impact Analysis, of the Draft EIR, impacts to the species associated habitats were calculated and at least 3:1 habitat preservation was provided per the mitigation measures. Therefore, the commenter's request for species detected per survey is unnecessary for evaluating the potential for significant environmental impacts and the Draft EIR provides all the necessary substantial evidence in accordance with standard practices (i.e. all Dudek surveys conformed to the currently accepted protocols, guidelines, and policies required by the resource agencies

Response to Comment A-8

This comment criticizes the rare plant survey methodology. As shown in Table 2 of Appendix C, Biota Report, of the Draft EIR, special-status plant surveys were conducted in February, March, and April over a two-year period, which is sufficient to cover the blooming periods of the species with suitable habitat on the Project site. As shown in Figure 4.4-5, Special-Status Plant Locations, of the Draft EIR, rare plants were found throughout the Project site, indicating that there was sufficient physical coverage.

Response to Comment A-9

This comment criticizes the burrowing owl survey methodology. As shown in Table 4.4-3 of the Draft EIR, burrowing owl habitat consists of grassland, open scrub, and agriculture. As shown in Figure 4.4-3, Vegetation Communities and Land Covers, of the Draft EIR, only marginal habitat is present for the species. As such, the burrowing owl survey methodology was sufficient.

Response to Comment A-10

This comment criticizes the survey methodology for California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. Appendix G, Southwestern Willow Flycatcher and Least Bell's Vireo Surveys, and Appendix H, Results of Protocol Coastal California Gnatcatcher Surveys, both provide descriptions of the habitats that are used by the species. As does, Table 4.4-3 of the Draft EIR. Figure 4.4-3, Vegetation Communities and Land Covers, of the

Draft EIR, provides the vegetation communities that can be used with those habitat use descriptions to determine what areas are suitable habitat.

Response to Comment A-11

This comment criticizes the acoustic bat survey methodology. As stated in Section 4.4.4, Methodology, of the Draft EIR, both passive and active surveys were conducted for the Project. This includes looking for maternal roosts for common bat species that would qualify as nurseries and need to be analyzed under CEQA. As shown in Appendix F, Assessment of Special-Status Wildlife Species Potentially Occurring in the Project Site, of Appendix C, Biota Report, of the Draft EIR, an analysis was made for the special-status bats with potential to occur, with a focus on roosting since that is when individuals are more prone to direct impacts. As stated in Section 4.4-1, Existing Conditions, a canyon bat roost was detected, it was determined that there could be indirect impacts, and mitigation was provided to reduce it to less than significant. As such, the survey effort and impact analysis for bats is sufficient for the Project.

Response to Comment A-12

The comment states that Dudek's review of available wildlife databases was inadequate. The comment's premise that the Draft EIR relied on only the nearest CNDDB quadrangles to determine which special-status wildlife species have a potential to occur in the project area is inaccurate. As is explained in Section 4.4.4, Methodology, of the Draft EIR, the California Native Diversity Database (CNDDB) query, which consisted of a "9-quad" search based on the U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map where the Project site is located, as well as the surrounding eight USGS 7.5-minute quadrangles, was a part of a broader, thorough literature review. Additionally, as shown in the reference section of Appendix F, Assessment of Special-Status Wildlife Species Potentially Occurring in the Project Site, of Appendix C, Biota Report, of the Draft EIR, CDFW's California's Wildlife: Life History and Range Maps and eBird were both used in the determination of the potential to occur.

Furthermore, no component of the literature review, including the CNDDB, was used as the sole basis for "screening out" species from consideration in the Draft EIR. The results of the literature review, inclusive of the CNDDB query results, were used in conjunction with other relevant data and field survey results, such as geographic ranges, the presence/absence of suitable habitat, and other natural history elements, in the assessment of which special-status wildlife species have the potential to occur in the study area. However, the CNDDB does differentiate from other citizen science databases, like eBird, because it typically focuses on critical life functions of a species (i.e., nesting) and not just a transient individual seen in a moment of migration.

Response to Comment A-12

The comment is a table of species that have been observed and documented in eBird or iNaturalist from within 1.5 miles to 30 miles of the site. The table lists many shorebirds and oceanic related bird species because the Pacific Ocean is within 30 miles of Santa Monica Bay. The table also has species that are vagrant individuals that are far from their native range (e.g., zone-tailed hawk and black hawk). As such, the table is greatly overstating the number of special-status species who are either residents to the vicinity of the Project or species that breed in the region but winter elsewhere.

Response to Comment A-12

The comment is a table of species that have been observed and documented in eBird or iNaturalist from within 1.5 miles to 30 miles of the site. The table lists many shorebirds and oceanic related bird species because the Pacific Ocean is within 30 miles of Santa Monica Bay. The table also has species that are vagrant individuals that are far from their native range (e.g., zone-tailed hawk and black hawk). As such, the table is greatly overstating the number of special-status species who are either residents to the vicinity of the Project or species that breed in the region but winter elsewhere.

Response to Comment A-13

This comment provides a statement on how the commenter thinks impact assessment should be done. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-14

This comment provides a statement on how the commenter thinks impact assessment should be done. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-15

This comment states that the Draft EIR is flawed in in its basis for analyzing project impacts on special-status species of wildlife because of the use of acreage as the impact metric. CEQA does not require lead agencies to conduct exhaustive biological inventories documenting every single individual special-status species present since the survey effort alone would be an impact. Using acreage as proxy then allows for a passive approximation of the habitat that could be lost for a species. As shown in Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site, in the Draft EIR, 10 of the 24 species that were analyzed for impacts are species that have not been observed on the Project site. However, presence is being assumed and mitigation is being provided to offset the potential impact to the species habitat at a minimum of 3:1, whether or not the species is ever observed in the impacted areas.

Response to Comment A-16

This comment states that the impact analysis for Cooper's hawk is flawed because the entire Project site can be used by the species. However, the commenter does not provide any justification for that statement. As stated in the CNDDB and in Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site, in the Draft EIR, Cooper's hawk is considered special-status when nesting, so the 13.59 acres of habitat is for just the oak woodlands being impacts, as shown in Table 4.4-13. Impacts to Vegetation Communities on the Project Site and Off-Site, of the Draft EIR.

Response to Comment A-17

This comment states that the impact analysis for southern California rufous-crowned sparrow is flawed because the entire Project site can be used by the species. However, the commenter does not provide any justification for that statement. As stated in Section 4.4-1, Existing Conditions of the Draft EIR, the species breeds in dry upland habitats with grass and shrub components. As such, the species has potential to occur in the following alliances

within the Project site: *Artemisia californica–Salvia leucophylla* shrubland, *Artemisia californica–Salvia leucophylla* shrubland–disturbed, *Avena* spp.–*Bromus* spp. herbaceous semi-natural, *Ericameria palmeri* provisional shrubland, *Eriodictyon crassifolium* provisional shrubland, *Eriogonum davidsonii/Croton setiger* grassland, *Eriogonum fasciculatum* shrubland, *Nassella* (*Stipa*) spp.–*Melica* spp. herbaceous, and *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland.

Response to Comment A-18

This comment states that the impact analysis for hairy woodpecker and yellow warbler is flawed because the entire Project site can be used by the species. However, the commenter does not provide any justification for that statement. Hairy woodpecker are found in coniferous forests and deciduous forests[4], so it has very limited habitat on the Project site. Yellow warblers generally are found in riparian vegetation in close proximity to water along streams[5], so it has very limited habitat on the Project site.

Response to Comment A-19

This comment states that the impact analysis for American badger is flawed because the entire Project site can be used by the species. However, the commenter does not provide any justification for that statement. American badger is most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Much of the Project site is dense chamise chaparral, as shown in Figure 4.4-3, Vegetation Communities and Land Covers, of the Draft EIR. As such, the species would be expected to occur in the coastal scrub habitats.

Response to Comment A-20

This comments that the impact analysis for multiple species are flawed and the species could because the entire Project site can be used by the species. However, the commenter does not provide any justification for that statement. It is expected that if all of the species the commentator has said were habitat generalists, then the loss of suitable habitat would not be significant. However, as shown in Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site, in the Draft EIR, each species has an associated suitable habitat and often times has very particular micro-habitats too.

Response to Comment A-21

This comment again criticizes the survey methodology for California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. Appendix G, Southwestern Willow Flycatcher and Least Bell's Vireo Surveys, and Appendix H, Results of Protocol Coastal California Gnatcatcher Surveys, both provide descriptions of the habitats that are used by the species. As does, Table 4.4-3 of the Draft EIR. Figure 4.4-3, Vegetation Communities and Land Covers, of the Draft EIR, provides the vegetation communities that can be used with those habitat use descriptions to determine what areas are suitable habitat.

[4] Cornell Lab. 2025. Hairy Woodpecker Life History. All About Birds. Accessed September 2025. https://www.allaboutbirds.org/guide/Hairy_Woodpecker/lifehistory.

[5] Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Response to Comment A-22

Using acreage as proxy then allows for a passive approximation of the habitat that could be lost for a species. As shown in Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site, in the Draft EIR, 10 of the 24 species that were analyzed for impacts are species that have not been observed on the Project site. However, presence is being assumed and mitigation is being provided to offset the potential impact to the species habitat at a minimum of 3:1, whether or not the species is ever observed in the impacted areas. The species could actually be absent from the Project site and impacts are still being mitigated.

Response to Comment A-23

This comment is about the Project reducing productive capacity from habitat loss and uses birds as an example. The comment makes a speculation that a certain number of future nesting attempts would be lost due to the loss of nesting habitat. However, the comment does not consider the vegetation communities that are being impacted by the Project and the potential nesting capacity for each one. As shown in Table 4.4-13. Impacts to Vegetation Communities on the Project Site and Off-Site, of the Draft EIR, the Project will impact 35.61 acres of *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands (upland mustards), which is a non-native, herbaceous community that is not expected to support much nesting. An additional 16.24 acres of upland mustard is proposed to be restored to native communities, including oak woodland, per MM-4.4-2, Habitat Mitigation and Monitoring Plan, of the Draft EIR, which would add additional nesting opportunities. As such, a simplistic equation does not take into account the many variables of the habitat and the Project.

Response to Comment A-24

This comment is about the Project's interference with wildlife movement. As stated in Section 4.4-1, Existing Conditions, the Project site abuts existing development to the east and north (developed areas associated with The Old Road and I-5), it does not serve as a habitat linkage along its eastern margin. However, the southwestern portion of the Project site includes a large canyon (Lyons Canyon is approximately 600 feet wide at its narrowest point within the Project site), with topography and habitat that may provide a viable connection for wildlife populations occurring within adjacent undeveloped lands to the northwest, south, and west of the Project site, which include the Santa Clarita Woodlands Park and Rivendale Open Space. MM-BIO-1, On-Site Conservation Area, preserves the majority of Lyons Canyon and preserves the ability of wildlife to move into the open space to the south and west of the Project site.

Response to Comment A-25

This comment is about certain lots of the Project limiting wildlife movement. Lots 20 and 29 are associated with the water tank and the road leading to it. These lots are not expected to be fenced so the construction of these components of the Project are not expected to interfere substantially with wildlife movement. The comment also has concerns that Lots 5, 15, 19, and 23 will extend the project southward, and would also interfere substantially with east-west wildlife movement. East-west wildlife movement is already severely restricted due to Interstate 5 and construction on those lots would not substantially increase obstruction of movement in those directions.

Response to Comment A-26

According to Klem 2014, the most likely avian species to collide with windows are those that are most locally abundant, and windows that pose the most hazard are larger, reflective, and positioned to reflect dense exterior vegetation.[6] While there are pockets of woodland vegetation, the majority of the areas that would be directly adjacent to residential homes on the Project site would be covered by hardscapes or landscape vegetation that would not likely reflect into the windows of the future buildings. Furthermore, there are no commercial, office, or industrial uses proposed where broad expanses of reflective features (such as glass curtain-walls or expanses of contiguous glass panes) would be included. The buildings proposed adjacent to natural open space areas would be two-to-three story townhouses ranging from 26 to 36 feet in height, where reflective materials would primarily be limited to recessed vinyl windows typical of residential development. As supported by Klem 2014, if future bird collisions occur within the Project site, they would likely occur among the common bird species (most of the species observed during biological field surveys were non-special-status species).[7] The commenter erroneously states that the bast majority of predicted bird deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, but does not provide substantial evidence to support this claim that these bird types would be disproportionally impacted by proposed Project windows on-site. There is not sufficient justification to consider future bird collisions with residential buildings within the Project a significant impact due to the lack of reflective surfaces adjacent to tall, dense vegetation that would be reflected into the windows of future buildings.

This comment makes a misleading and speculative argument, including calculations of predicted bird deaths, without making any comparison between the cited cases and the proposed Project. For example, the comment stresses the high number of birds killed in the Johnson and Hudson (1976) study, and states that this was "just for one 3-story, glass-sided walkway between two college campus buildings." But a glass-sided walkway, if it reflected trees and other dense vegetation, would be exactly the sort of structure to have maximum effects on birds from window collisions.

The comment also includes several studies of bird deaths in New York City (Gelb and Delacretaz 2009, Klem et al. 2009). The Gelb and Delacretaz 2009 study refers specifically to high-rises, which are not applicable to the proposed Project. Mass deaths from building strikes at night during migration, is a phenomenon in North America largely related to tall buildings, especially in the eastern half of the continent, and has little relevance for the Project site. In general, bird strikes at night are assumed to be related to disorientation from night-time lighting. Loss 2014 states that "for low-rises and high-rises, mortality can be reduced by minimizing light emission at night."[8] The Project addresses this issue by requiring compliance with additional lighting standards, including conformance with the County's Rural Outdoor Lighting District standards, as directed by MM-4.4-12 (Draft EIR page 4.4-91). For example, per MM-4.4-12, outdoor lighting must be fully shielded so that bulbs and lenses are not visible and cause no light trespass into native habitats or skyward. Light fixtures must also be mounted as low as possible to minimize light trespass.

The Draft EIR is not required to provide the number and extent of structural glass on the Project's building facades. The commenter states that they calculated the squared meters of the windows. However, it is highly speculative to

6 Klem, D. 2014. Avian *Mortality at Windows: The Second Largest Human Source of Bird Mortality on Earth.* Proceedings of the Fourth International Partners in flight Conference: Tundra to Tropics. https://www.partnersinflight.org/wp-content/uploads/2017/03/Klem-Jr.-D.-p-244-251.pdf.

7 Ibid.

8 Loss, S.R., Will, T., Loss, S.S., Marra, P.P. 2014. *Bird–building collisions in the United States: Estimates of annual mortality and species vulnerability.* The Condor.

calculate window measurements based on conceptual elevation renderings. Thus, the prediction of bird collision deaths is unsubstantiated. Bird strikes are more common for large expanses of glass. Small residential windows, such as those on the proposed dwelling units, do not constitute a large portion of the on-site apartment complex and proposed dwelling units. The opaque façades of the residential and recreational amenity building would deter birds from flying towards the windows.

In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment A-27

The Project's residences would be subject to Section 10.68.010 of the Los Angeles County Code, which prohibits owners from allowing their pets to become a nuisance to others. Pursuant to Section 10.40.065 of the County Code, a nuisance is defined as when an animal damages and/or strays on private or public property, or otherwise interferes with the comfortable enjoyment of life or property. Section 10.20.038(b), Residential Dogs and Cats, of the County Code, requires that cats must be licensed and kept primarily indoors.

As the County has regulations that prohibit outdoor cats from becoming a nuisance or public hazard, including cats that are on other people's properties, it is not expected that the introduction of residents to the Project site would result in a substantial number of cats allowed outdoors. Further, the dense residential development is not the same as rural agricultural land where cats are more likely to be allowed outdoors. As such, the potential for some homeowners to allow cats outdoors, potentially in violation of County Code, would result be substantial enough to result in a significant impact to wildlife. In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment A-28

The comment describes possible impacts on wildlife from vehicle collisions includes photos of wildlife crossing roads and wildlife mortalities on roadways from other locations in California. The Project site would be fully developed with urban land uses and would not be an attraction for wildlife to enter the developed portion of the Project site, which would be densely developed with residential uses. As discussed under Threshold 4.4d in Section 4.4 of the Draft EIR, which includes an analysis of the Project's potential impact to the movement of native resident or migratory fish or wildlife species or migratory wildlife corridors (see page 4.4-56 of the Draft EIR), the Project site does not constitute a wildlife corridor. As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, On-Site Habitat Preservation, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that would be the preferred route for wildlife in the region. Wildlife would preferentially travel through adjacent open spaces rather than through the developed urban residential uses. Vehicular traffic within the Project site would be on residential roads and travel speeds would be minimal (e.g. up to 25 miles per hour), as required by MM-4.4-13, which would allow time to avoid animal collisions. Further, most mammal movement is nocturnal and the majority of vehicular traffic is during daytime (AM and PM) peak travel hours, which is not in the nighttime hours.

The comment uses data from a study in northern California (i.e., undeveloped area of Contra Costa County, California) to predict the number of common wildlife and special-status wildlife species collisions from the annual vehicle miles traveled for the Project site. The data used to extrapolate predicted wildlife collisions were taken from a mortality study on a 2.5-mile section of road in a rural, undeveloped area of Contra Costa County, California. The rate of wildlife mortalities from this study cannot meaningfully be compared to the proposed Project, which is located in southern California. The comment provides no evidence that special-status wildlife species have been killed on roadways in settings similar to the Project site. The commenter admittedly states "although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations." It is misleading and speculative to predict the number of common or special-status wildlife fatalities-based data based on the commenter's analysis and use of studies that are within settings not similar enough to the Project site.

The comment does not provide credible evidence supporting a fair argument that the Project would result in significant impacts on the viability of a species or species group or significant impacts to special-status species due to roadway mortality.

Response to Comment A-29

As described in Response to Comment A-28 above, the methodology presented in this comment is not applicable to the Project site, which is located adjacent to The Old Road and the I-5, which comprise an existing barrier to wildlife. Further, the Project's residential roadways would receive traffic at lower speeds that could help avoid collisions. The comment does not provide credible evidence supporting a fair argument that the Project would result in significant impacts on the viability of a species or species group or significant impacts to special-status species due to roadway mortality.

Response to Comment A-30

The commenter erroneously states that the EIR improperly considers cumulative impacts. The EIR does not rely on an assumption of residual impacts or rely on future permit restrictions or speculation. Per CEQA Guidelines Section 15126.4(B), the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure.

As discussed on page 4.4-65 in Section 4.4, Biological Resources, of the Draft EIR, the Project's contribution to cumulative impacts to jurisdictional aquatic resources, including streams and riparian habitat within the Santa Clara River watershed, is primarily addressed through compensatory mitigation at a ratio of 1:1, or as required by the regulatory agencies, through the preservation, enhancement, and/or restoration of jurisdictional waters and associated riparian vegetation. Implementation of MM 4.4-1, MM-4.4-4 though MM-4.4-7, MM-4.4-9, and MM-4.4-14 would result in adequate compensatory mitigation and would reduce the Project's impacts to jurisdictional aquatic resources to less than significant. The Draft EIR details the potential for wildlife connectivity impacts for the Project (Draft EIR, page 4.4-56) and cumulative projects (Draft EIR, pages 4.4-65 through 4.4-67). The Project-level and cumulative impact analyses state that implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-4 (Biological Monitoring), MM-4.4-12 (Lighting Plan), and MM-4.4-15 (Roosting Bat Survey) would reduce the Project's impacts to less than significant. Therefore, the Project's incremental effect on biological resources would not be cumulatively considerable and cumulative impacts on these resources would be less than significant with

mitigation. The mitigation measures in the EIR have clear performance standards and objective criteria that ensure measurable criteria for success, and no changes are required.

Response to Comment A-31

MM-4.4-1, On-Site Conservation Area, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. The commenter erroneously states that MM-4.4-1 would be located off-site. Specifically, MM-4.4-1 "MM-4.4-1 On-Site Habitat Preservation [...] permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area ("On-Site Conservation Area") [...]" (Draft EIR, page 4.4-69).

Regarding mitigation acreages for categories 1 and 3, MM-4.4-9, Off-Site Conservation Area, preserves the rest of the requirements for categories 1 and 3. Specifically, as stated on pages 4.4-58 and 4.4-59 of the Draft EIR, "In addition, the Project's off-site land/habitat preservation program within the Santa Susana Mountains SEA (the "Off-Site Conservation Area") results in the permanent preservation of an additional 465.39 acres of category 1-4 vegetation communities protected by the SEA ordinance, including 27.47 acres of oak woodland riparian habitat and 54.91 acres of non-riparian oak woodland habitat."

The impacts detailed for Categories 1 through 3, and for the biological resources analysis in general, are adequately analyzed through bench mapping, calculations, and other analyses. Vegetation communities within the Project site were mapped according to the List of Vegetation Alliances and Associations (or Natural Communities List). The list is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009), which is the California expression of the National Vegetation Classification. Such methodology is industry-standard, and the commenter provides no other methodology for calculating vegetation and animal SEA categories. The commenter provides no substantial evidence that mapping protocols for the Projects are insufficient. In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

Response to Comment A-32

MM-4.4-2, Habitat Mitigation and Monitoring Plan, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. The commenter also states their agreement that MM-4.4-2 is adequate as written, and no revisions are required. Regarding the statement of adaptive management, the commenters assertion that an assembly of stakeholder groups is required to agree upon the goals and objectives is not accurate. The performance standards set forth in MM-4.4-2 must be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards shall be considered to have been achieved if during any of 3 years of the 10-year monitoring period, the target acreage or population number is achieved. Further, the Project must obtain a Section 1602 Streambed Alteration Agreement, which must be negotiated to the satisfaction of CDFW, which would thereby ensure adequate consultation is completed to satisfy the Fish and Game Code requirements. MM-4.4-2 is adequate as written and no changes are required.

Response to Comment A-33

MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-3 clearly includes performance standard that would include translocating mariposa lily individuals into the on-site Conservation Area. The on-site Conservation Area (as implemented through MM-4.4-1), has undergone extensive environmental review, detailed through Section 4.4, Biological Resources, of the Draft EIR, and thus, provides performance standards to ensure that the special-status plant seeds and bulbs are surveyed, salvaged, and translocated appropriately. MM-4.4-2 is adequate as written and no changes are required.

Response to Comment A-34

MM-4.4-4, Biological Monitoring, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. The measure provides proscriptive requirements for the timing of focused surveys would be required prior to construction activities and would require coordination with CDFW if owls are found. The Project is required to obtain all required resource agency permits, including a Section 1602 permit in consultation with CDFW, prior to commencement of Project construction activities, and consultation will therefore be completed to the satisfaction of CDFW. The MM-4.4-4 is adequate as written and no changes are required.

Response to Comment A-35

This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-36

This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-37

This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Comment A-38

MM-4.4-8, Crotch's Bumble Bee Habitat Preservation and Minimization Measures, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. As discussed on page 4.4-41 and -42, Crotch's bumble bee habitat is assumed to be present on the property, and mitigation is proposed accordingly. SEA guidelines recommend preservation of suitable habitat at a 5:1 mitigation ratio, for a total of 91.55 acres of recommended preservation of suitable habitat for this species. As required by MM-4.4-1, the Project would preserve 144.43 acres of native coastal scrub, chaparral, oak woodland, herbaceous, and grassland communities on site within the Conservation Area that would provide nesting and foraging opportunities for the species. Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. MM-4.4-8 provides adequate protections under its objective criteria for mitigation, and no changes are required.

Response to Comment A-39

MM-4.4-9, Off-Site Habitat Preservation, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. As discussed in page 4.4-68 in Section 4.4, Biological Resources of the Draft EIR, when considering the Project site (233.49 acres) and off-site conservation area (466.70 acres), totaling 700.19 acres, the Project would preserve 611.13 acres (including 144.43 acres of on-site conservation and 466.70 acres of off-site conservation area), which would result in the preservation of approximately 87 percent of natural open space on the combined properties. This would exceed the requirements of the County's requirement for the preservation of 75 percent of the original undivided parcels as natural open space. As a result, the proposed Project preserves SEA resources at a significantly higher impact-to-preservation ratio than is required by the SEA ordinance and implementing guidelines, and would meet all applicable requirements for habitat preservation, and no changes are required.

Response to Comment A-40

MM-4.4-10, Special Status Wildlife Relocation Plan, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. As discussed in page 4-59 in Section 4.4, Biological Resources of the Draft EIR, considering both the On-Site Conservation Area and Off-Site Conservation Area, the Project results in the preservation of 611.13 acres of natural open space. As stated in MM-4.4-10, the measure requires development of a relocation plan with clear performance standards to relocate to areas of suitable habitat in the Conservation Areas, which would provide adequate lands for relocated species. The potential impacts of translocation would be less than significant with adherence to MM-4.4-10, which requires protective actions to ensure successful translocation, and no changes are required.

Response to Comment A-41

MM-4.4-11, Nesting Bird Avoidance, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. The measure clearly states that vegetation clearing must avoid nesting bird season, but as logic would dictate, not all aspects of subsequent construction activities can avoid the nesting bird season, as construction activities will require approximately 4.5 years to complete. As such, it proscribes objective criteria for pre-construction surveys. MM-4.4-11 is internally consistent and comprehensive, as written, and no changes are required.

Response to Comment A-42

MM-4.4-11, Nesting Bird Avoidance, is complete in accordance with CEQA Guidelines Section 15370 requirements for mitigation. MM-4.4-11 requires that to protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Further, construction within the buffer cannot resume unless the qualified biological monitor determines that the fledglings have left the nest or the nest has failed. As such, MM4.4-11 provides objective criteria and is not predicated on subjective decisions related to the buffer area, and no changes are required.

Response to Comment A-43

Potential Project impacts to biological resources, including impacts to wildlife species due to habitat loss, bird-window collisions, housecats, and road mortality are addressed in Section 4.4, Biological Resources, of the Draft EIR and the mitigation provided is adequate to reduce impacts to less than significant. As shown in the Final EIR, MM-4.4-1 and MM-4.4-9 both require in-perpetuity funding for the applicable conservation easement, which is adequate mitigation for all potential impacts to wildlife species.

Response to Comment A-44

This comment provides references and curriculum vitae for the commenter. This comment does not state any specific environmental concerns related to the environmental analysis contained in the Draft EIR.

Response to Exhibit B Comments

Response to Comment B-1

The analysis presented by the commenter is inaccurate, unreasonable, and unnecessary for reasons further discussed below.

Building Materials are Regulated by Federal and State Agencies

The United States Environmental Protection Agency (US EPA) and California Air Resources Board (CARB) regulate indoor building materials.[9] Building materials are required to reduce exposure to toxic substances through compliance with US EPA and CARB regulations, such as 40 Code of Federal Regulations Part 770, Formaldehyde Emission Standards for Composite Wood Products. These regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used to construct the Project would be required to comply with the applicable federal and state standards.

Not an Impact under CEQA

The County of Los Angeles' guidance, State CEQA Guidelines, and California's air district guidelines, including that of the South Coast Air Quality Management District (SCAQMD), do not require an analysis of indoor air quality which could result in potential impacts to future residents or employees associated with new construction.

The potential impact of the Project on indoor air quality is not an impact under CEQA and therefore does not need to be analyzed within the Project's EIR. An example case found that health risks to project workers and residents from contaminated soils did not constitute "substantial adverse effects on human beings" and did not create a fair argument of an impact to the environment according to CEQA. The court concluded in this case that, "… CEQA does not regulate environmental changes that do not affect the public at large." (See Parker Shattuck Neighbors v. Berkeley City Council (2013) 222 Cal.App.4th 768, 782). As explained in Parker Shattuck Neighbors v. Berkeley City Council (2013) 222 Cal.App.4th 768, 782, where the court concluded that purported health risks to workers and residents from contaminated soils, "CEQA does not regulate environmental changes that do not affect the public at large." Additional caselaw further supports the point that CEQA does not regulate environmental changes that do not affect the public at large: "the question is whether a project [would] affect the environment of persons in general, not whether a project [would] affect particular persons." (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 492; accord Martin v. City and County of San Francisco (2005) 135 Cal.App.4th 392, 404.)

CEQA Does Not Require Speculation

It is unknown at this time precisely what interior finishing materials would be used for the Project. Interior finishes would be subject to the specifications of future individual tenants and cannot reliably be determined until after the Project is approved and in the far more detailed building permit design phase. CEQA does not require such speculation; instead, the CEQA Guidelines state that if a particular impact is too speculative for evaluation, the

[9] https://www.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products, https://www.epa.gov/enforcement/toxic-substances-control-act-tsca-and-federal-facilities, https://ww2.arb.ca.gov/our-work/programs/composite-wood-products-program, https://casetext.com/regulation/california-code-of-regulations/title-17-public-health/division-3-air-resources/chapter-1-air-resources-board/subchapter-75-airborne-toxic-control-measures/airborne-toxic-control-measure-for-diesel-particulate-matter-from-portable-engines-rated-at-50-horsepower-and-greater/section-93120-airborne-toxic-control-measure-to-reduce-formaldehyde-emissions-from-composite-wood-products.

agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). Further, there is nothing unique or unusual about the Project compared to any other residential project built in California, whether discretionary or by-right, in relation to building finishes or indoor materials. The Project's building materials would be compliant with all applicable regulations as discussed above.

Inaccurate and Unreasonable Assumptions

Importantly, the commenter's analysis is based on inaccurate and unreasonable assumptions that grossly overestimate cancer risk.

The commenter's analysis assumed that daily formaldehyde emissions from building materials would remain constant over the exposure period, which was assumed to be 70 years for residential occupants. This is incorrect as over the time of exposure, formaldehyde concentrations drastically reduce. In fact, research supports that after around two years, most formaldehyde is released from products.[10] Assuming a continuous exposure to the same initial concentration of formaldehyde is unreasonable and grossly overestimates risk that does not exist as formaldehyde off-gasses and dissipates markedly after installation and declines substantially over time.

The commenter also overstates the daily and long-term duration that future residents and employees would spend on-site and indoors. The commenter assumed residents would be indoors at home 24 hours per day, 52 weeks per year, for 70 years. The California Office of Environmental Health Hazard Assessment (OEHHA) Air Toxic Hot Spots Program Guidance Manual recommends applying a fraction of time spent at home for cancer risk assessments: from the third trimester to age <2 years, 85% of time is spent at home, from 2 through <16 years, 72% of time is spent at home, and from 16 years and greater, 73% of time is spent at home.[11] OEHHA's guidance, while generally conservative and health protective, acknowledges that people do not spend 100% of the day or life indoors at home. In fact, even at home, people spend time outdoors. The National Human Activity Pattern Survey (NHAPS) was conducted in support by the US EPA to study where people spend their time. The results of the NHAPS showed that on average people spend approximately 87% of their time in enclosed buildings, approximately 6% in enclosed vehicles, and approximately 7% outdoors.[12]

The commenter assumes 70 years for residential exposure when OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans. In summary, the commenter assumes over double (133% higher) the residential exposure period recommended by OEHHA, California's expert agency in administering air toxic guidance and regulations. In addition, in reality, average persons living in the United States move multiple times in their lifetime.[13,14] Of note, CEQA is required to study only a project's reasonably foreseeable consequences, and not an unlikely worst-case scenario (*High Sierra Rural Alliance v. County of Plumas* (2018) 29 Cal.App.5th 102, 125-126).

The commenter also assumes that residential occupants would inhale 20 cubic meters of air per day yet cites no evidence to substantiate these assumptions. According to the American Lung Association, the average person

10 https://pubmed.ncbi.nlm.nih.gov/16507040/, https://www.atsdr.cdc.gov/formaldehyde/home/index.html
11 https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf
12 https://pubmed.ncbi.nlm.nih.gov/11477521/
13 https://www.census.gov/topics/population/migration/guidance/calculating-migration-expectancy.html which estimates that at age 18, a person can expect to move another 9.1 times in their remaining lifetime.
14 https://fivethirtyeight.com/features/how-many-times-the-average-person-moves/ which estimates moving around 11.4 times.

inhales approximately 2,000 gallons of air per day, or roughly 7.57 cubic meters per day.[15] The assumption of air consumed by humans is over double (164%) what is reasonable to assume.

Lead Agency Discretion for CEQA Analyses

Of note, the commenter, Francis J. Offermann, based a portion of his analysis on studies that he authored or co-authored (e.g., "Offermann and Hodgson, 2011", "Offermann, 2009"). Based on preliminary research, expert agencies that establish rules, regulations, and acceptable toxic air contaminant limits including CARB and EPA have not cited Offerman's work. The commenter proposes a methodology to evaluate purported indoor impacts; however, this approach and analysis does not supplant the County of Los Angeles, as lead agency, discretion to choose thresholds and methods for CEQA analysis.

Summary

Based on the considerations presented above, there is overwhelming evidence as to why the commenter's indoor air quality analysis, which is unnecessary, is also inaccurate and unreasonable. The comments are not based on science or fact and do not represent substantial evidence under CEQA.[16] In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.[17]

Response to Comment B-2

In accordance with California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478, it is the Project's impact on the environment and not the environment's impact on the Project that compels the required CEQA evaluation. Thus, the Draft EIR is not required to anticipate the potential impact of off-site transportation noise on the Project. Nevertheless, as detailed on page 4.13-8 of the Draft EIR, the Project is required to adhere to California Code of Regulations for Title 24, which require that acoustical studies be prepared to limit interior noise in habitat rooms to 45 dBA CNEL. This is required after Project approval, and is included as part of building plans. This is also addressed on page 4.13-32 of the Draft EIR. In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

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15 https://www.lung.org/blog/how-your-lungs-work, assuming 1 gallon per day (US) = 0.003785411784 cubic meters per day

16 Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment (https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-5-preliminary-review-of-projects-and-conduct-of-initial-study/section-15064-determining-the-significance-of-the-environmental-effects-caused-by-a-project)

17 The response contained herein parallels other lead agency and CEQA expert responses to similar comments and claims made by SAFER and Mr. Offerman on other land use development projects, including but not limited to: (1) 3rd and Fairfax Mixed Use Project CEQA Appeals CF 22-0603 (City of Los Angeles, Eyestone environmental, June 15, 2022), and (2) Responses to Appellant's Comments on the 9500 Pico Mixed-Use Project Negative Declaration (ENV-2020-5838-ND; CPC-2020-5837-DB-CU-SPR-VHCA) (City of Los Angeles, Parker Environmental Consultants, February 10, 2022).

Response to Comment B-3

The commenter states that, "An air quality analyses should be conducted to determine the concentrations of PM2.5 in the outdoor and indoor air that people inhale each day." Consistent with the SCAQMD guidance, the EIR estimated $PM_{2.5}$ emissions from Project construction and operation and compared estimated emissions to the SCAQMD mass daily thresholds (see Tables 4.3-10 through 4.3-13). In addition, the EIR conducted a localized significance thresholds (LST) analysis consistent with SCAQMD guidance to evaluate potential exposure of sensitive receptors to Project-generated $PM_{2.5}$ concentrations during construction. The LST methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with project-level impacts.

As discussed in Section 4.3, Air Quality, of the Project's Draft EIR, ambient air quality standards (AAQS) define clean air and are established to protect even the most sensitive individuals.[18] An AAQS defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. The EPA and CARB are both authorized to set AAQS.

The Clean Air Act Amendments of 1970 instruct the EPA to set primary National AAQS (NAAQS) to protect public health, and secondary NAAQS to protect plants, forests, crops and materials from damage due to exposure to the following criteria air pollutants: ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), $PM_{2.5}$, and lead.

The federal Clean Air Act requires that the EPA reassess, at least every five years, whether adopted standards are adequate to protect public health based on current scientific evidence. The EPA is required to rely on the advice of an independent scientific panel, the Clean Air Scientific Advisory Committee. Reviewing the NAAQS is a lengthy undertaking and includes the following major phases: planning, integrated science assessment, risk/exposure assessment, policy assessment, and rulemaking.[19] During the integrated science assessment, a comprehensive review, synthesis, and evaluation of the most policy-relevant science is conducted, including key science judgments that are important to inform the development of the risk and exposure assessments.[20] Then, the risk/exposure assessment draws upon information and conclusions presented in the integrated science assessment to develop quantitative characterizations of exposures and associated risks to human health or the environment associated with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration.[21] Scientific review during policy assessment development, and the NAAQS review process in general, is thorough and extensive.

In 1959, California enacted legislation requiring the state Department of Public Health to establish AAQS and necessary controls for motor vehicle emissions.[22] California's AAQS (CAAQS) were adopted in 1971.[23] The CAAQS are established for O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$, as well as hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles.

18 CARB. 2025. "Air Quality Standards". https://ww2.arb.ca.gov/resources/background-air-quality-standards

19 EPA. 2024. "Process of Reviewing the National Ambient Air Quality Standards." https://www.epa.gov/criteria-air-pollutants/process-reviewing-national-ambient-air-quality-standards

20 EPA. 2024. "Process of Reviewing the National Ambient Air Quality Standards." https://www.epa.gov/criteria-air-pollutants/process-reviewing-national-ambient-air-quality-standards

21 EPA. 2024. "Process of Reviewing the National Ambient Air Quality Standards." https://www.epa.gov/criteria-air-pollutants/process-reviewing-national-ambient-air-quality-standards

22 CARB. 2025. "National Ambient Air Quality Standards." https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards

23 CARB. 2025. "National Ambient Air Quality Standards." https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change or for a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board of CARB at a regularly scheduled Board hearing.[24]

Federal law requires that all states attain the NAAQS. Failure of a state to reach attainment of the NAAQS by the target date can trigger penalties, including withholding of federal highway funds. California law similarly continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS.[25]

Of importance, California air districts have based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health. The particular thresholds of relevance to the Project are illustrated in Table 4.3-4, South Coast Air Quality Management District Air Quality Significance Thresholds, of the EIR. Because the SCAQMD CEQA mass daily thresholds are established in relationship to the AAQS and because AAQS are protective of public health, the CEQA analysis does not require the commenter's suggestion of "An air quality analysis to determine the concentrations of PM2.5 in the outdoor and indoor air that people inhale each day."

Of note, bright-line, or absolute numerical, mass emissions thresholds are intended to capture large projects to trigger implementation of mitigation, and their stringency is typically related to the air basin's attainment status. The SCAQMD bright-line thresholds can be treated as screening thresholds and screening thresholds by nature are intentionally low. For primary pollutants, if a project would exceed the SCAQMD thresholds, there is the potential to conduct dispersion modeling to translate the mass emissions to concentrations (plus ambient background levels) and compare to AAQS. However, it is not required per SCAQMD guidance and there are technological and scientific complexities for evaluating $PM_{2.5}$ concentrations because it is a primary and secondary[26] pollutant. As shown in the Draft EIR Tables 4.3-10 and 4.3-12, under *unmitigated* conditions, the Project would not generate $PM_{2.5}$ emissions during construction or operation that would exceed the SCAQMD $PM_{2.5}$ threshold. As such, there is neither a requirement to estimate Project-generated $PM_{2.5}$ concentrations nor would it provide additional meaningful

24 CARB. 2025. "California Ambient Air Quality Standards (CAAQS)." https://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm

25 CARB. 2025. "National Ambient Air Quality Standards." https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards

26 Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants. Secondary PM is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (San Joaquin Valley Air Pollution Control District. 2015. Brief of Amicus Curiae in Support of Defendant And Respondent, County Of Fresno, And Real Party In Interest And Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf). The complexity in how secondary pollutants is formed and dispersed has resulted in ongoing difficulties in measuring and regulating those pollutants.

information for the public or decision makers. The application of the SCAQMD mass daily thresholds is the appropriate approach for the CEQA air quality analysis and no additional analysis is required.

The commenter states that, "It is my experience that based on the projected high traffic noise levels, the annual average concentration of PM2.5 will exceed the California and National PM2.5 annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. at least MERV 13, or possibly MERV 14 or 15 depending on the results of the Project ambient PM2.5 concentrations) in all mechanically supplied outdoor air ventilation systems." As noted in Response to Comment B-1, MERV 13 filtration is included as part of the Project, because the Project would be required to comply with the California 2025 Title 24 Building Energy Efficiency Standards, at a minimum, which mandates MERV 13 filtration (and has since 2019).[27]

Response to Comment B-4

This response is addressed in part within Response to Comment B-2. Additionally, as stated in Section 15370 of the CEQA Guidelines, the term "mitigation" is defined as including "minimizing impacts by limiting the degree or magnitude of the action and its implementation." CEQA only requires mitigation when there is a nexus for the mitigation, meaning that a potential impact was identified. As stated above, the potential impact to future residents relating to indoor air quality is not a CEQA impact and in fact, the analysis that indicates the Project would exceed thresholds is flawed. As such, no mitigation is required under CEQA. In summary, this comment does not change the impact analysis or conclusions in the EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the EIR.

It is also important to note that MERV 13 filtration is included as part of the Project, because the Project would be required to comply with the California 2025 Title 24 Building Energy Efficiency Standards, at a minimum, which mandates MERV 13 filtration (and has since 2019).[28] As such, the Project would already provide for the mechanical supply of outdoor air ventilation suggested by Mr. Offermann (i.e., MERV 13).

Response to Comment B-5

This comment includes references and a resume for the commenter, and as such, does not require a response. Appendix A is addressed in Response to Comment B-1.

27 https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Residential_WhatsNew_ada.pdf
28 https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Residential_WhatsNew_ada.pdf

Attachment A
SAFER Letter

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September 22, 2025

VIA EMAIL &
ONLINE PUBLIC COMMENT PORTAL

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Re: Appeal of Trails at Lyons Canyon Project; September 23, 2025 Board of Supervisors Agenda Item 4

Dear Chair Barger and Honorable Board of Supervisors:

This comment is submitted on behalf of Appellant Supporters Alliance for Environmental Responsibility ("SAFER") and its members living and working in and around Los Angeles County regarding Trails at Lyons Canyon Project and the Final Environmental Impact Report ("EIR" or "FEIR") prepared for the Project, including the development of 37 lots on 233.49 gross acres, including 10 multi-family residential lots with 510 attached and detached dwelling units across 290 buildings on 10 lots (collectively, "Project".) SAFER's Appeal is scheduled to be heard as Agenda Item 4 at the Board of Supervisors September 23, 2025 meeting.

SAFER's review of the EIR was assisted by expert wildlife biologist Dr. Shawn Smallwood, Ph.D., and indoor air quality Francis Offermann, whose written comments and CVs are attached as Exhibits A and B, respectively.

As discussed below, after reviewing the FEIR, we conclude that the FEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Board of Supervisors grant our appeal and request staff to address these shortcomings in a revised environmental impact report ("REIR") and recirculate the REIR prior to considering approvals for the Project.

PROJECT DESCRIPTION

The Trails at Lyons Canyon Project involves a Vesting Tentative Tract Map No. 83301 (RPPL2021003061), Conditional Use Permit No. RPPL2021003113, and Oak Tree Permit (OTP) No. RPPL2021003070. The Project proposes the creation of 37 lots on 233.49 gross acres, including 10 multi-family residential lots with 510 attached and detached dwelling units across 290 buildings on 10 lots (253 detached for-sale dwelling units, 209 attached for-sale dwelling units or townhouses, and 47 senior rental dwelling units in one multi-family building with one manager's unit), 16 open space lots, two lots for the recreation center, seven debris basin lots, one water tank lot, and one lot for the water purveyor, and several street frontage waiver requests.

LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). (*See, e.g.*, Pub. Res. Code ("PRC") § 21100.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Comms. for a Better Env't v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98, 109.)

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. (CEQA Guidelines § 15002(a)(2) & (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." (CEQA Guidelines § 15002(a)(2).) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." (PRC § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).)

The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) CEQA requires that a lead agency analyze all potentially significant environmental impacts of its proposed actions in an EIR. (PRC § 21100(b)(1); CEQA Guidelines § 15126(a); *Berkeley Jets*, 91 Cal.App.4th 1344, 1354.) The EIR must not only identify the impacts, but must also provide "information about how adverse the impacts will be." (*Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 831.) The lead agency may deem a particular impact to be insignificant only if it produces rigorous analysis and concrete substantial evidence justifying the finding. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't*, 103 Cal.App.4th at 109.)

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Jets*, 91 Cal.App.4th at 1355 (quoting*, Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 391 409, fn. 12).) A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946.) As discussed below and in the attached expert comment letters, the EIR for this Project fails to adequately analyze and mitigate the Project's impacts.

DISCUSSION

A. The Project Will Have Significant Adverse Biological Impacts That the EIR Fails to Adequately Analyze and Mitigate.

Shawn Smallwood, Ph.D. reviewed the FEIR's analysis of the Project's biological impacts. Dr. Smallwood's comment letter and CV are attached as Exhibit A and his comments are briefly summarized here.

1. The EIR is inadequate in its characterization of the existing environmental setting as it relates to wildlife.

Dr. Smallwood's associate, Noriko Smallwood, performed a 2.65-hour site visit during the day and a 2-hour nocturnal survey of the site on September 17, 2025, and a 2.5-hour site visit during the day on September 18, 2025. (Ex. A, pp. 2-3.) During these surveys, Noriko Smallwood detected 42 species of vertebrate wildlife at or adjacent to the project site, including 13 species with special status. (*Id.*, pp. 2-15, see Table 1, Ex. A, pp. 14-15.)

Every CEQA document must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. (*Communities for a Better Envt. v. So. Coast Air Qual. Mgmt. Dist*. (2010) 48 Cal. 4th 310, 321.) Dr. Smallwood found that the reconnaissance surveys performed by Glenn Lukos Associates and Dudek for the EIR failed to give methodological details necessary to interpret the survey's results, such as survey start times, survey durations, and when each species was first detected. (Ex. A, p. 23.) Dr. Smallwood therefore found that the EIR's reporting of the survey results was misleading because "the reporting of the consultants' survey methods and survey outcomes does not enable any post-hoc model-fitting or analysis to estimate the numbers of species they missed." (*Id.*, p. 23.)

Dr. Smallwood found that the EIR and Glenn Lukos Associates and Dudek's analysis of special-status species was inadequate for several reasons. Dr. Smallwood found that "[t]he rare plant surveys reported in Dudek (2024) failed to meet the minimum survey standards of CDFW's ... guidelines for rare plant surveys." (Ex. A, p. 23.) Dr. Smallwood found that Dudek's burrowing owl surveys did not meet CDFW 2012 standards, lacked details on habitat and survey locations, omitted key reporting requirements, and were outdated by four years. (*Id.*) Similarly, focused surveys for gnatcatcher, least Bell's vireo, and willow flycatcher failed to specify where "suitable habitat" was surveyed, leaving uncertainty about coverage, and Dudek's four-year-old data may no longer reflect current site use. (*Id.*) Dr. Smallwood also found that bat survey methods were poorly reported, conducted outside peak activity season, omitted key details such as station locations and passive data collection, and detected far too few species compared to Noriko's surveys, rendering results unreliable. (*Id.*, pp. 23-24.) The Project's potential impacts on these special-status plant and vertebrate species therefore must be assessed in a Revised EIR.

A skewed baseline such as the one used by the County here ultimately "mislead(s) the public" by engendering inaccurate analyses of environmental impacts, mitigation measures and cumulative impacts for biological resources. (*See San Joaquin Raptor Rescue Center,* 149 Cal.App.4th 645, 656; *Woodward Park Homeowners,* 150 Cal.App.4th 683, 708-711.)

Glenn Lukos Associates and Dudek reported having reviewed the California Natural Diversity Data Base (CNDDB) to assess occurrence potentials of special-status species onsite. (See, Ex. A, pp. 24-25.) However, Dr. Smallwood found that Glenn Lukos Associates and Dudek improperly screened out species based on their absence from CNDDB, a use for which CNDDB is not intended. (*Id.*) CNDDB is a "positive sighting database" which relies on volunteer reporting, therefore the lack of a report of a species at a certain site does not automatically mean that species does not have the potential to occur. (*Id.*, p. 24.)

Based on Dr. Smallwood's own assessment, he found that "141 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 3)." (Ex. A, pp. 25-31.) Sufficient survey effort should be directed to the site to either confirm these species use the site or to support absence determinations.

2. <u>The EIR fails to analyze the Project's impact on habitat loss.</u>

Dr. Smallwood found that the Project would contribute to a decline in birds in North America, a trend that has been happening over the last approximately 50 years largely due to habitat loss and fragmentation and would be further exacerbated by this project. (See, Ex. A, pp. 35-36.) Based on studies on the subject, Dr. Smallwood estimates that the presence of the Project on the site could prevent the production of 10,408 fledglings per year, which would in turn contribute to the lost capacity of 11,699 birds per year. (*Id.*) The County must address this impact in a revised EIR.

3. The EIR fails to analyze the Project's impact on wildlife movement.

The EIR's assessment of whether the Project would interfere with wildlife movement is flawed. (Ex. A, pp. 36-37.) Dr. Smallwood explains that CEQA requires an analysis of whether a project would interfere with regional wildlife movement. (*Id.*, p. 36.) However, the EIR fails to do so. He notes that "the 106 species that Noriko and the applicant's consultants detected on the project site had at some point moved to the site," showing the site provides stopover opportunities during migration and dispersal. (*Id.*)

Dr. Smallwood explains that even though Glenn Lukos Associates and Dudek acknowledges that a the 144.43-acre onsite mitigation area as "a significant topographical component of a viable wildlife corridor" that "would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space," Dudek "does not similarly recognize the proposed project footprint as part of any wildlife corridor or as important to wildlife movement in the region," although the areas are adjacent and separated only by "an artificial boundary that no animal would recognize or understand." (*Id.*) As such, Dr. Smallwood concludes that "no empirical or logical basis" exists for the EIR's analysis of wildlife movement because "no program of observation was implemented to quantify wildlife movement" and "no serious analysis of wildlife movement exists in the DEIR." (*Id.*, p. 37.)

Dr. Smallwood further points out that lots 20, 29, 5, 15, 19, and 23 would "obviously interfere disproportionately with wildlife movement in the region," yet the EIR ignores these impacts. (*Id.*) To reduce harm, he recommends that the project layout be revised to "be more compact to minimize interference with wildlife movement in the region." (*Id.*) A Revised EIR should be prepared to properly analyze this impact.

4. The EIR fails to account for the increased possibility of bird-window collision mortality that will be caused by the project.

The Project proposes to add glass windows into an essential portion of avian habitat. According to Dr. Smallwood, the Project will most likely have a significant impact on birds as a result of window collisions. (Ex. A, pp. 37-40.) The County has not analyzed or mitigated these potential impacts to special-status birds.

Dr. Smallwood identifies the now widely-recognized impact of bird collisions with windows and other building structures:

> Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

(Ex. A, p. 37.) Noriko's site visit confirmed the presence of many bird species that would travel through the Project site's air space, as did Dr. Smallwood's review of databases. (*Id.*)

In an effort to assess the scope of the Project's impacts on bird species using the area, Dr. Smallwood calculated an estimate of the number of bird fatalities that would result from collisions with the Project. (Ex. A, pp. 39.) Dr. Smallwood used data from recent reviews he conducted of other commercial and residential projects to estimate the extent of glass that would be used as 17,412 m^2. (*Id.*, pp. 39-40.) Based on Dr. Smallwood's own data and review of a number of scientific studies, the mean fatality rate of bird deaths per m^2 of glass per year is 0.073. (*Id.*) He therefore estimates that the project could result in 1,289 bird deaths per year. (*Id*., p. 40) This death rate would continue every year until the structure were either renovated to reduce bird collisions, or was removed. (*Id*.)

Because this impact was not addressed in the EIR and Dr. Smallwood has presented substantial evidence that the Project's windows will significantly impact birds, including special-status species birds, the County must prepare a Revised EIR to analyze and mitigate the impact of window collisions on bird species.

5. <u>The EIR fails to analyze the project's impacts on wildlife from additional traffic generated by the Project.</u>

The EIR estimates that the Project would lead to an annual 13,431,088 VMT, yet it contains no analysis of the impacts on wildlife that will be caused by the traffic on the roadways servicing the Project. (Ex. A, pp. 41-43.) Vehicle collisions with special-status species is not a minor issue, but rather results in the death of millions of species each year. Dr. Smallwood explains: "the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014)." (*Id.*, p. 41.)

Using the Project's VMT estimates and information from a scientific study on road mortality, Dr. Smallwood was able to predict the Project-generated traffic impacts to wildlife. (*Id.*, p. 43.) Dr. Smallwood calculates that the Project would cause 5,713 wildlife fatalities per year. (*Id*.) He therefore states that project-generated traffic would "result in potentially significant adverse biological impacts." (*Id.* at 21.) A revised EIR should be

prepared which includes analysis and mitigation of the result increased traffic from the Project will have on wildlife.

6. The EIR failed to adequately address the cumulative impacts of past, ongoing, and future projects on wildlife.

The EIR failed to prepare an adequate analysis of cumulative effects on wildlife, due to its erroneous conclusion that "all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on special-status species would not be cumulatively considerable and cumulative impacts on special-status species would be less than significant with mitigation." (Ex. A, p. 43.) This characterization of cumulative impacts is not correct under CEQA, and the cumulative impacts analysis is therefore incomplete. (See, CCR tit. 14 § 15355; Ex. A, pp. 43-44.) The EIR must revise its cumulative impacts section to adequately meet CEQA requirements.

7. The EIR's mitigation measures to reduce the Project's significant adverse impacts on wildlife are inadequate.

Dr. Smallwood found that several of the EIR's mitigation measures to reduce impacts to biological resources are ineffective. (See, Ex. A, pp. 44-49.) He recommends several mitigation measures to help reduce impacts to biological resources that should be reviewed and incorporated in a Revised EIR. (See, *id.*, pp. 49-51.)

B. There is Substantial Evidence that the Project May Have a Significant Health Risk Impact from Indoor Air Quality Impacts which the EIR Failed to Analyze.

Certified Industrial Hygienist, Francis Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (September 21, 2025). Mr. Offermann concludes that it is likely that the Project will expose residents of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and curriculum vitae are attached as Exhibit B.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "[t]he primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." (Ex. B, p. 2.)

Formaldehyde is a known human carcinogen. Mr. Offermann states that future residents of the Project would be exposed to a 120 in one million cancer risk, ***even assuming*** all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. (*Id*., p. 3-5.) This potential exposure level exceeds the SCAQMD CEQA significance threshold for airborne cancer risk of 10 per million.

Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the applicant use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins in the buildings' interiors. (*Id*., pp. 11-13.) These significant environmental impacts should be analyzed in a Revised EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure.

CONCLUSION

For the foregoing reasons, SAFER believes that the EIR is wholly inadequate. SAFER urges the Board of Supervisors to grant this appeal and refrain from approving the Project and FEIR until staff address the concerns raised herein. Thank you for considering our comments and please include this letter in the record of proceedings for this project.

Sincerely,

Victoria Yundt
Lozeau | Drury LLP

EXHIBIT A

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21 September 2025

RE: Trails at Lyons Canyon

Dear Ms. Yundt,

I write to comment on potential impacts to biological resources that would result from development of the proposed Trails at Lyons Canyon project. Having reviewed the Draft Environmental Impact Report (DEIR) and the biological technical report (Dudek 2024), I understand the project would construct 510 dwelling units and a four-story apartment building on 89.34 acres located on APNs 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027 and 2826-022-035. These properties total 233.49 acres, 144.43 acres of which would be designated natural open space, consistent with its present condition. My comments that follow address my concerns that the DEIR mischaracterizes the existing environmental setting, and that its impacts analysis is flawed and its mitigation measures are inadequate. A-1

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

THE WILDLIFE COMMUNITY AS A BIOLOGICAL RESOURCE

Most environmental reviews pursuant to the California Environmental Quality Act (CEQA) focus on special-status species because CEQA's Checklist Evaluation of Environmental Impacts specifies that such evaluation includes potential impacts to special-status species. However, an important policy of CEQA is "to prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." Pub. Res. Code § 21001(c). This policy is not A-2

restricted to special-status species, but it also applies to wildlife populations and plant and animal communities. In fact, the CEQA Guidelines Section 21155.1 defines wildlife habitat as "the ecological communities upon which wild animals, birds, plants, fish, amphibians, and invertebrates depend for their conservation and protection." This definition is consistent with the scientific definition of habitat, which is that portion of the environment that is used by members of a species for survival and reproduction (Hall et al. 1997). An essential portion of the environment used by any special-status species is composed of the collection of other species of plants and wildlife, because these species are forage, provisioners of refugia and nest substrates, and ecological mutualists; no special-status species can exist in a vacuum of other wildlife. The CEQA Checklist Evaluation assigns priority to special-status species to balance information and cost, but it does not exclude the need to evaluate environmental impacts to other species, which, after all, are members of the very communities within which special-status species inter-depend for survival and reproduction.

A-2

All wildlife species should be of concern in a CEQA review, but the CEQA prioritizes special-status species. The species I consider to be special-status species are those listed in California's Special Animals List inclusive of threatened and endangered species under the California and federal Endangered Species Acts, candidates for listing under CESA and FESA, California's Fully Protected Species, California species of special concern, and California's Taxa to Watch List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406), continental and region-specific US Fish and Wildlife Service Birds of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf), and naturally rare species such as raptors protected by California's Birds of Prey laws, Fish and Game Code Sections 3503, 3503.5, 3505 and 3513 (see https://wildlife.ca.gov/Conservation/ Birds/Raptors).

What follows is a summary of a site visit to detect as many of the species of wildlife as possible within the short time available. The survey was also intended to detect as many of the special-status species as possible, but with the understanding that most special-status species are less readily detectable due to rarity and crypticity. Nonetheless, the species detected can indicate the ecological integrity of the site and thus the likelihood of occurrence of special-status species not yet detected.

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master of Science Degree from California State University Los Angeles, visited the site of the proposed project for diurnal survey from 16:23 to 19:02 hours, and for nocturnal survey from 19:12 to 21:12 hours on 17 September 2025, and for 2.5 hours of diurnal survey starting at 07:01 hours on 18 September 2025. Noriko walked hiking trails on site where accessible, stopping to scan for wildlife with use of binoculars. At night, Noriko strapped a Pettersson M500 acoustic bat detector to a 10-foot pole, and cabled the detector to her computer, which ran Sonobat Live. Sonobat Live identifies bats to species based on the bats' sonograms that are detected by the M500. Noriko recorded all species of vertebrate wildlife she detected. Animals of uncertain species identity were either recorded to the Genus or higher taxonomic level.

A-3

Conditions were cloudy with 10 MPH south wind and 91-76° F during the 17 September 2025 diurnal survey, and cloudy with 10 MPH south wind and 76-74° F during the nocturnal survey. Conditions on 18 September 2025 were cloudy to rainy with 3 MPH northeast wind and 67-71° F. The site is undisturbed except for access roads and hiking trails. Vegetation communities include oak woodland, shrubland, annual grassland, and riparian (Photos 1 – 3).

Photos 1, 2, and 3. *Views of the project site, 18 September 2025. Photos by Noriko Smallwood.*

A-3

Noriko saw Cooper's hawk (Photo 4), American kestrel and red-tailed hawk (Photos 5 and 6), Anna's hummingbird and Allen's hummingbird (Photos 7 and 8), California scrub-jay (Photo 9), common raven and band-tailed pigeon (Photos 10 and 11), oak titmouse and Nuttall's woodpecker (Photo 12 and 13), bushtit (Photo 14), spotted towhee (Photo 15), western bluebird and wrentit (Photos 16 and 17), mourning dove (Photo 18), lark sparrow and Southern California rufous-crowned sparrow (Photos 19 and 20), California towhee and Wilson's warbler (Photos 21 and 22), mule deer (Photo 23), California ground squirrel and Great Basin fence lizard (Photos 24 and 25), western side-blotched lizard and raccoon (Photos 26 and 29) canyon bat and California myotis (Photos 27 and 28), among the other species listed in Table 1. Noriko detected 42 species of vertebrate wildlife at or adjacent to the project site, including 13 species with special status (Table 1).

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Photo 4. *Cooper's hawk with a California scrub-jay on the project site, 17 September 2025. Photo by Noriko Smallwood.*

Photos 5 and 6. *American kestrel (left), and red-tailed hawk (right) on the project site, 18 and 17 September 2025. Photos by Noriko Smallwood.*

Photos 7 and 8. *Anna's hummingbird (left), and Allen's hummingbird (right) on the project site, 18 and 17 September 2025. Photos by Noriko Smallwood.*

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Photo 9. *California scrub-jay on the project site, 17 September 2025. Photo by Noriko Smallwood.*

Photos 10 and 11. *Common raven on the project site (left), and band-tailed pigeon just off the project site (right), 17 September 2025. Photos by Noriko Smallwood.*

Photos 12 and 13. *Oak titmouse (left), and Nuttall's woodpecker (right) on the project site, 17 September 2025. Photos by Noriko Smallwood.*

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Photo 14. *Bushtit on the project site, 17 September 2025. Photo by Noriko Smallwood.*

Photo 15. *Spotted towhee on the project site, 18 September 2025. Photo by Noriko Smallwood.*

Photos 16 and 17. *Western bluebird (left), and wrentit (right) on the project site, 18 and 17 September 2025. Photos by Noriko Smallwood.*

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Photo 18. *Mourning doves on the project site, 18 September 2025. Photo by Noriko Smallwood.*

Photos 19 and 20. *Lark sparrow (left), and Southern California rufous-crowned sparrow (right) just off the project site, 18 September 2025. Photos by Noriko Smallwood.*

Photos 21 and 22. *California towhee on the project site (left), and Wilson's warbler just off the project site (right), 18 September 2025. Photos by Noriko Smallwood.*

Photo 23. *Mule deer just off the project site, 18 September 2025. Photo by Noriko Smallwood.*

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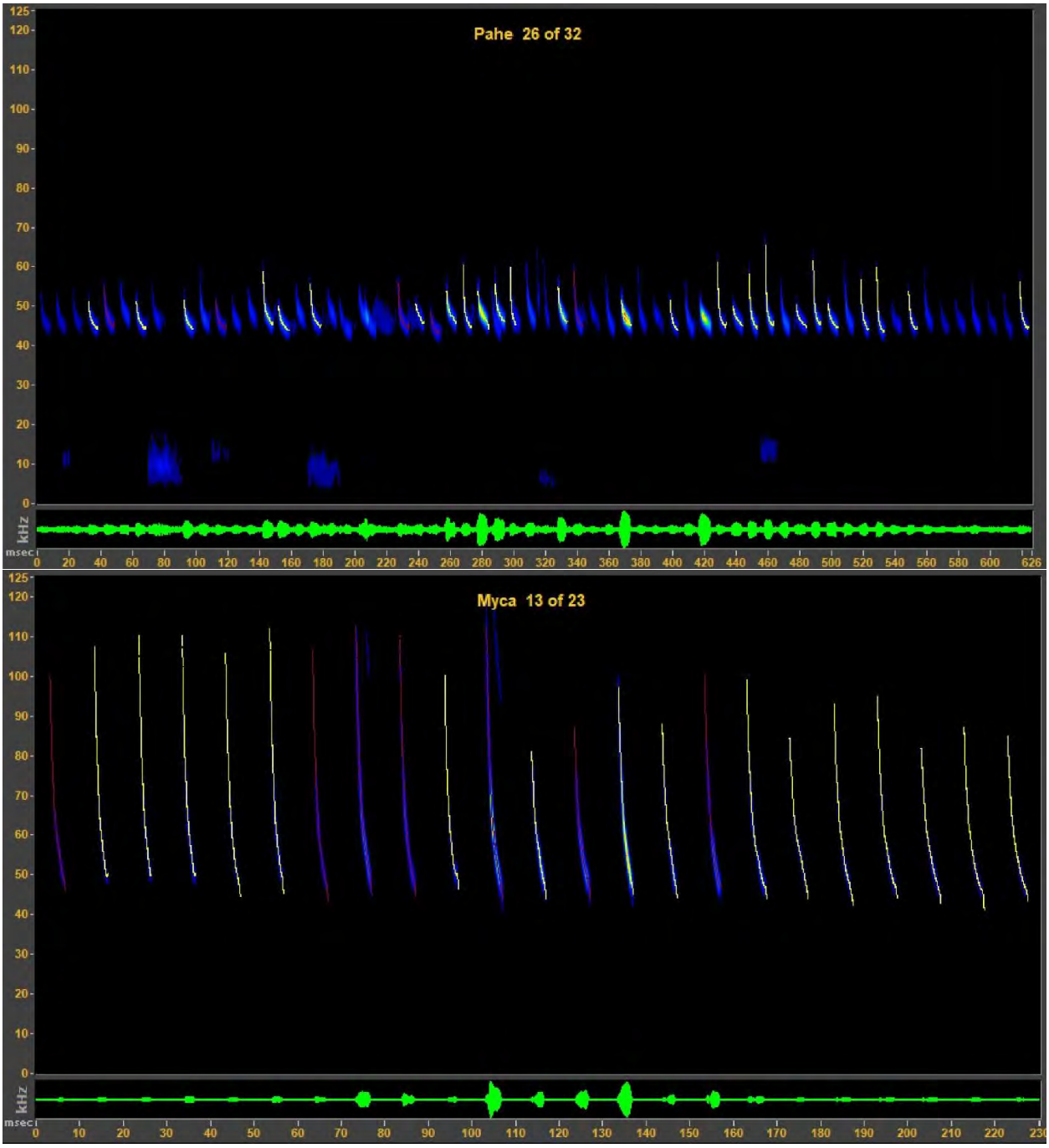
Photo 24, 25, and 26. *California ground squirrel just off of the project site (top left), Great Basin fence lizard on the project site (top right), and western side-blotched lizard just off of the project site (bottom), 17 September 2025. Photos by Noriko Smallwood.*



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Photos 27 and 28. *Sonogram of Mexican free-tailed Canyon bat (top), and California myotis (bottom) detected on site using Sonobat Live and a Pettersson M500, 17 September 2025.*

Photo 29. *Deceased raccoon that likely got hit by a car on The Old Road just east of the project site, 17 September 2025. Photo by Noriko Smallwood.*

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Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood

Altogether, Noriko and the consultant biologists Glenn Lukos Associates and Dudek detected 106 species of vertebrate wildlife on the project site (Table 2). Of these species, 36 (34%) are special-status species. Also found was an invertebrate that is a candidate for listing under the federal Endangered Species Act. Only four of the vertebrate species are non-native. The evidence is overwhelming that the wildlife community is rich, and the ecological integrity of the site is high.

Table 1. *Species of wildlife Noriko observed during 2.65 hours of diurnal survey and 2 hours of nocturnal survey on 17 September 2025, and during 2.5 hours of diurnal survey on 18 September 2025.*

Common name	***Species name***	**Status[1]**	**Notes**
Great Basin fence lizard	*Sceloporus occidentalis longipes*		
Western side-blotched lizard	*Uta stansburiana elegans*		Many
California quail	*Callipepla californica*		Flock
Band-tailed pigeon	*Patagioenas fasciata*		
Mourning dove	*Zenaida macroura*		Many
Anna's hummingbird	*Calypte anna*		
Allen's hummingbird	*Selasphorus sasin*	BCC	
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Caught CASJ
Red-tailed hawk	*Buteo jamaicensis*	BOP	
Great horned owl	*Bubo virginianus*	BOP	Called at night
Western screech owl	*Megascops kennicotti*	BOP	Called at night
Acorn woodpecker	*Melanerpes formicivorus*		
Nuttall's woodpecker	*Picoides nuttallii*	BCC	
Northern flicker	*Colaptes auratus*		
American kestrel	*Falco sparverius*	BOP	
California scrub-jay	*Aphelocoma californica*		Many; 1 eaten by COHA
Common raven	*Corvus corax*		
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW	
Bushtit	*Psaltriparus minimus*		Many
Wrentit	*Chamaea fasciata*	BCC	
Bewick's wren	*Thryomanes bewickii*		
California thrasher	*Toxostoma redivivum*	BCC	
Western bluebird	*Sialia mexicana*		
House finch	*Haemorphous mexicanus*		
Lesser goldfinch	*Spinus psaltria*		
Lark sparrow	*Chondestes grammacus*		
Song sparrow	*Melospiza melodia*		
California towhee	*Melozone crissalis*	LACBW	
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW	
Spotted towhee	*Pipilo maculatus*		
Wilson's warbler	*Cardellina pusilla*	LACSBS	
Yuma myotis	*Myotis yumanensis*	WBWG:LM	Possible detection
Long-eared myotis	*Myotis evotis*	WBWG:M	Possible detection
Long-legged myotis	*Myotis volans*	WBWG:H	Possible detection
California myotis	*Myotis californicus*	WBWG:L	Confirmed
Canyon bat	*Parastrellus hesperus*	WBWG:M	Confirmed
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H	Possible detection
California ground squirrel	*Otospermophilus beecheyi*		Many

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Virginia opossum	*Didelphis virginiana*	Non-native	Observed on site; 1 dead on The Old Road
Raccoon	*Procyon lotor*		Tracks on site; 1 dead on The Old Road
Skunk	*Mephitidae*		Likely striped skunk
Coyote	*Canis latrans*		Tracks and scat
Mule deer	*Odocoileus hemionus*		Multiple observed
Kangaroo rat	*Dipodomys sp.*		Burrows
California vole	*Microtus californicus*		Burrows
Botta's pocket gopher	*Thomomys bottae*		Burrows

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[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

Table 2. *Species of wildlife observed by Glenn Lukos and Associates and Dudek (GLA, Dudek) from 2020 to 2023, and by Noriko on 17 and 18 September 2025 (X) and possibly detected by Sonobat (P).*

Common name	***Species name***	**Status[1]**	**GLA, Dudek**	**NLS 2025**
Western honey bee	*Apis mellfera*	Non-native	X	
Crotch's bumble bee	*Bombus crotchii*	CCE	X	
Carpenter bee	*Xylocopa violacea*		X	
California harvester ant	*Pogonomyrmex californicus*		X	
Velvet ant	*Dasymutilla occidntalis*		X	
Funeral duskywing	*Erynnis funeralis*		X	
Fiery skipper	*Hylephila phyleus*		X	
Purplish copper	*Lycaena helloides*		X	
Common buckeye	*Precis coenia*		X	
Painted lady	*Vanessa cardui*		X	
American lady	*Vanessa virginiensis*		X	
Sara orangetip	*Anthrocharis sara*		X	
Horford's sulphur	*Colias harfordii*		X	
Cabbage white	*Pieris rapae*	Non-native	X	
Checkered white	*Pontia protodice*		X	
Great Basin fence lizard	*Sceloporus occidentalis longipes*		X	X
Western side-blotched lizard	*Uta stansburiana elegans*		X	X
California glossy snake	*Arizona elegans occidentalis*	SSC	X	
Pacific gophersnake	*Pituophis catenifer*		X	

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California quail	*Callipepla californica*		X	X
Band-tailed pigeon	*Patagioenas fasciata*		X	X
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	X	
Mourning dove	*Zenaida macroura*		X	X
White-throated swift	*Aeronautes saxatalis*		X	
Anna's hummingbird	*Calypte anna*		X	X
Costa's hummingbird	*Calypte costae*	BCC	X	
Allen's hummingbird	*Selasphorus sasin*	BCC	X	X
Turkey vulture	*Cathartes aura*	BOP, LACSBS	X	
White-tailed kite	*Elanus leucurus*	CFP, BOP	X	
Cooper's hawk	*Accipiter cooperii*	WL, BOP	X	X
Red-shouldered hawk	*Buteo lineatus*	BOP	X	
Red-tailed hawk	*Buteo jamaicensis*	BOP	X	X
American barn owl	*Tyto furcata*	BOP	X	
Great horned owl	*Bubo virginianus*	BOP	X	X
Western screech owl	*Megascops kennicotti*	BOP		X
Acorn woodpecker	*Melanerpes formicivorus*		X	X
Nuttall's woodpecker	*Picoides nuttallii*	BCC	X	X
White-headed woodpecker	*Dryobates albolarvatus*	BCC	X	
Downy woodpecker	*Picoides pubescens*		X	
Northern flicker	*Colaptes auratus*		X	X
American kestrel	*Falco sparverius*	BOP	X	X
Merlin			X	
Ash-throated flycatcher	*Myiarchus cinerascens*		X	
Cassin's kingbird	*Tyrannus vociferans*		X	
Western kingbird	*Tyrannus verticalis*		X	
Hammond's flycatcher	*Empidonax hammondii*		X	
Western flycatcher	*Empidonax difficilis*		X	
Black phoebe	*Sayornis nigricans*		X	
Say's phoebe	*Sayornis saya*		X	
Warbling vireo	*Vireo gilvus*		X	
California scrub-jay	*Aphelocoma californica*		X	X
American crow	*Corvus brachyrhynchos*		X	
Common raven	*Corvus corax*		X	X
Mountain chickadee	*Poecile gambeli*		X	
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW	X	X
Violet-green swallow	*Tachycineta thalassina*		X	
Northern rough-winged swallow	*Stelgidopteryx serripennis*		X	
Barn swallow	*Hirundo rustica*		X	
Cliff swallow	*Petrochelidon pyrrhonota*		X	
Bushtit	*Psaltriparus minimus*		X	X
Wrentit	*Chamaea fasciata*	BCC	X	X
Ruby-crowned kinglet	*Regulus calendula*	LACBW	X	

Cedar waxwing	*Bombycilla cedrorum*		X	
Phainopepla	*Phainopepla nitens*		X	
White-breasted nuthatch	*Sitta carolinensis*		X	
Blue-gray gnatcatcher	*Polioptila caerulea*		X	
Bewick's wren	*Thryomanes bewickii*		X	X
House wren	*Troglodytes aedon*		X	
California thrasher	*Toxostoma redivivum*	BCC	X	X
Northern mockingbird	*Mimus polyglottos*		X	
European starling	*Sturnus vulgaris*	Non-native	X	
Western bluebird	*Sialia mexicana*		X	X
House finch	*Haemorphous mexicanus*		X	X
Lesser goldfinch	*Spinus psaltria*		X	X
Lawrence's goldfinch	*Spinus lawrencei*	BCC	X	
Lark sparrow	*Chondestes grammacus*		X	X
White-crowned sparrow	*Zonotrichia leucophrys*		X	
Song sparrow	*Melospiza melodia*		X	X
California towhee	*Melozone crissalis*	LACBW	X	X
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW	X	X
Spotted towhee	*Pipilo maculatus*		X	X
Hooded oriole	*Icterus cucullatus*		X	
Bullock's oriole	*Icterus bullockii*	BCC	X	
Brown-headed cowbird	*Molothrus ater*		X	
Orange-crowned warbler	*Oreothlypis celata*		X	
Common yellowthroat	*Geothlypis trichas*		X	
Yellow warbler	*Setophaga petechia*	SSC2	X	
Yellow-rumped warbler	*Setophaga coronata*		X	
Townsend's warbler	*Setophaga townsendi*		X	
Wilson's warbler	*Cardellina pusilla*	LACSBS	X	X
Western tanager	*Piranga ludoviciana*		X	
Black-headed grosbeak	*Pheucticus melanocephalus*	LACBW	X	
Blue grosbeak	*Passerina caerulea*		X	
Yuma myotis	*Myotis yumanensis*	WBWG:LM		P
Long-eared myotis	*Myotis evotis*	WBWG:M		P
Long-legged myotis	*Myotis volans*	WBWG:H		P
California myotis	*Myotis californicus*	WBWG:L		X
Canyon bat	*Parastrellus hesperus*	WBWG:M	X	X
Hoary bat	*Lasiurus cinereus*	WBWG:M	X	
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H		P
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	X	
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	X	

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Desert cottontail	*Sylvilagus audubonii*		X	
California ground squirrel	*Otospermophilus beecheyi*		X	X
Virginia opossum	*Didelphis virginiana*	Non-native		X
Raccoon	*Procyon lotor*			X
Skunk	*Mephitidae*			X
Striped skunk	*Mephitis mephitis*		X	
Bobcat	*Felis rufous*		X	
Mountain lion	*Puma concolor*	SA	X	
Feral dog	*Canis familiaria*	Non-native	X	
Coyote	*Canis latrans*		X	X
Gray fox	*Urocyon cinereoargenteus*		X	
Mule deer	*Odocoileus hemionus*		X	X
San Diego Bryant's woodrat	*Neotoma bryanti (formerly lepida intermedia)*	SSC	X	
Kangaroo rat	*Dipodomys sp.*			X
Deer mouse	*Peromyscus maniculatus*		X	
Western harvest mouse	*Reithrodontomys megalotis*		X	
California vole	*Microtus californicus*			X
Botta's pocket gopher	*Thomomys bottae*			X
American badger	*Taxidea taxus*	SSC	X	

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); and BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

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ANALYSIS OF RECONNAISSANCE SURVEY DATA

Noriko detected 46 species of vertebrate willdife in little more than seven hours of survey. However, the species of wildlife Noriko detected at the project site were not the only species that were present during her surveys, as there are always species that are not detected. To demonstrate this, I fit nonlinear regression models to Noriko's cumulative numbers of vertebrate species detected with time into her daytime surveys to predict the number of species that she would have detected with longer surveys or perhaps with additional biologists available to assist her. The type of model is a logistic growth model, which reaches an asymptote that corresponds with the theoretical maximum number of vertebrate wildlife species that could have been detected during

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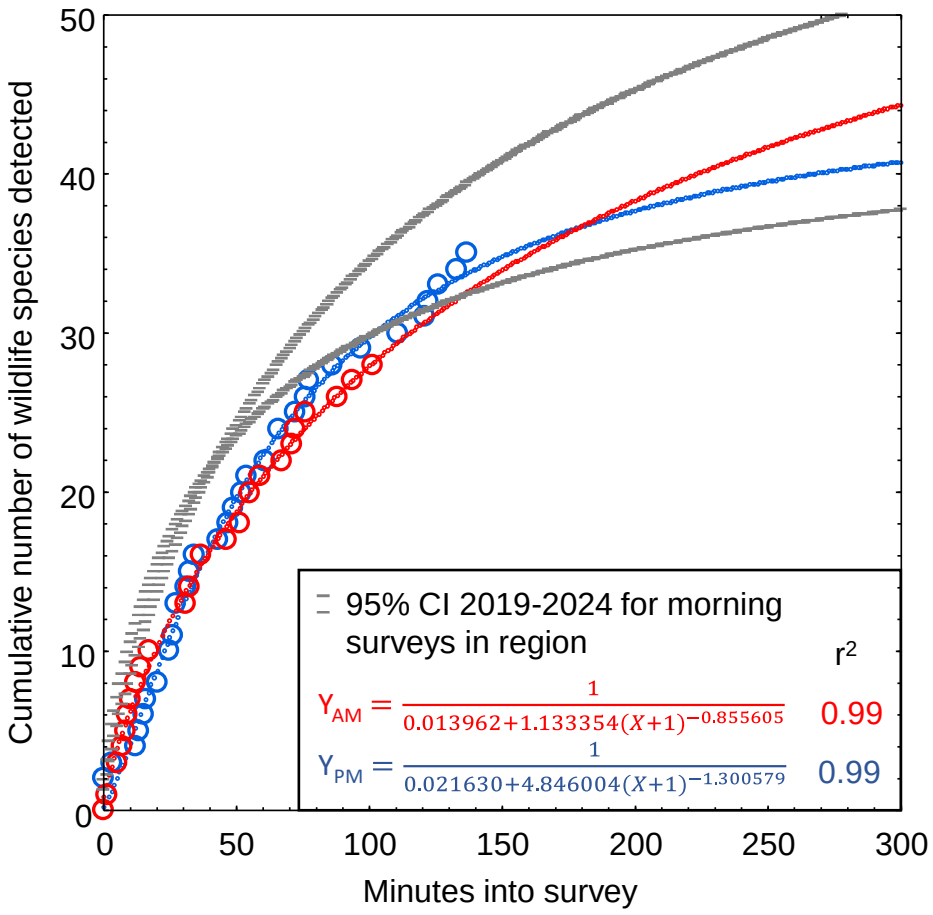
the survey. The model fit to Noriko's survey data from the morning of 18 September, for example, predicts 72 species of vertebrate wildlife were available to be detected, or 40 more species than she detected that morning (Figure 1).

Figure 1. *Actual and predicted relationships between the numbers of vertebrate wildlife species detected and the elapsed survey time based on Noriko's visual-scan surveys on 17 and 18 September 2025.*



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Unknown are the identities of the species Noriko missed, but the species that Noriko did and did not detect on 17 and 18 September 2025 composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence, some require more survey effort because they are highly cryptic, and the members of other species would visit the site only periodically while patrolling large home ranges. A survey on only one or two days cannot possibly detect all of the species of the local wildlife community.

At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's two surveys. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. This analytical bridge draws inference from the pattern of species detections more than it does from the research site, and I note that the pattern, i.e., rate, of species detections is consistent from site to site.

As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 17.6 species over my first 5.15 hours of diurnal surveys at my research site in the Altamont Pass (5.15 hours to match the 5.15 hours Noriko surveyed during daylight hours at the project site), which composed 30.9% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 39 diurnally active species Noriko detected after her 5.15 hours of daylight survey at the project site likely represented 30.9% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, Noriko would likely detect $39/0.309 = 126$ species of diurnally active vertebrate wildlife at the site. Assuming Noriko's ratio of special-status to non-special-status species was to hold through the detections of all 126 predicted species, then continued surveys would eventually detect 32 special-status species of diurnally active vertebrate wildlife.

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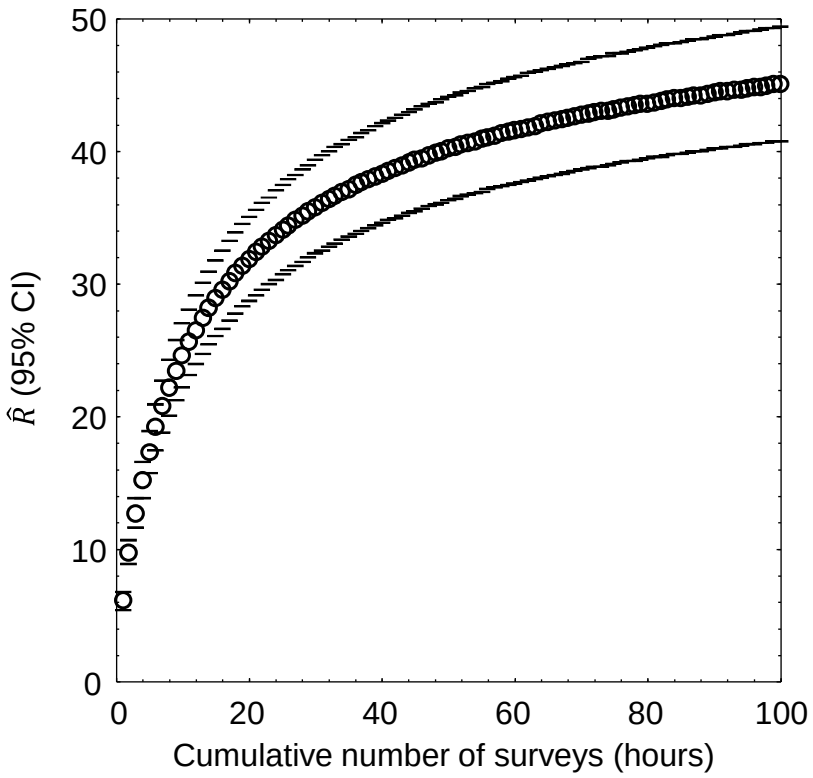
Because my prediction of 126 species of vertebrate wildlife, including 32 special-status species, is derived from daytime visual-scan surveys, and would detect few nocturnal mammals such as bats, the true number of species composing the wildlife community of the site must be larger. Noriko's reconnaissance surveys should serve only as a starting point toward characterization of the site's wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than her two surveys to produce an inventory the project site's wildlife community. Nevertheless, the large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort.

Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.*



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In fact, with the surveys of Glenn Lukos Associates and Dudek, and with the nocturnal surveys, 106 speecies of vertebrate wildlife have been detected, including 36 special-status species. Nine of these species were bats, six of which Noriko detected in only two hours of acoustic survey. And as was the case for diurnally active species, the bat species that Noriko detected represented only some of the bat species that were present that night. The nonlinear model that I fit to her data predicts that had she surveyed all night, she would have detected 13 species of bats (Figure 3). Also noteworthy is that her rate of bat detections followed the upper bound of the 95% confidence intervals of bat detection rates at other sites where we performed bat surveys. The bat community of the project site is exceptional.

Over the course of a year, there are likely 19 species of bats that occur on the project site. The same pattern would be found for small mammals, many of which are not detectable without trapping. Considering the many species of reptiles and amphibians, small mammals and bats that are more difficult to detect than those vertebrate species already detected, the wildlife community of the project site likely numbers about 190 to 210. Only about half the membership of the wildlife community has been detected, leaving half the composition of the wildlife community undescribed. The existing environmental setting of the project site has yet to be accurately characterized.

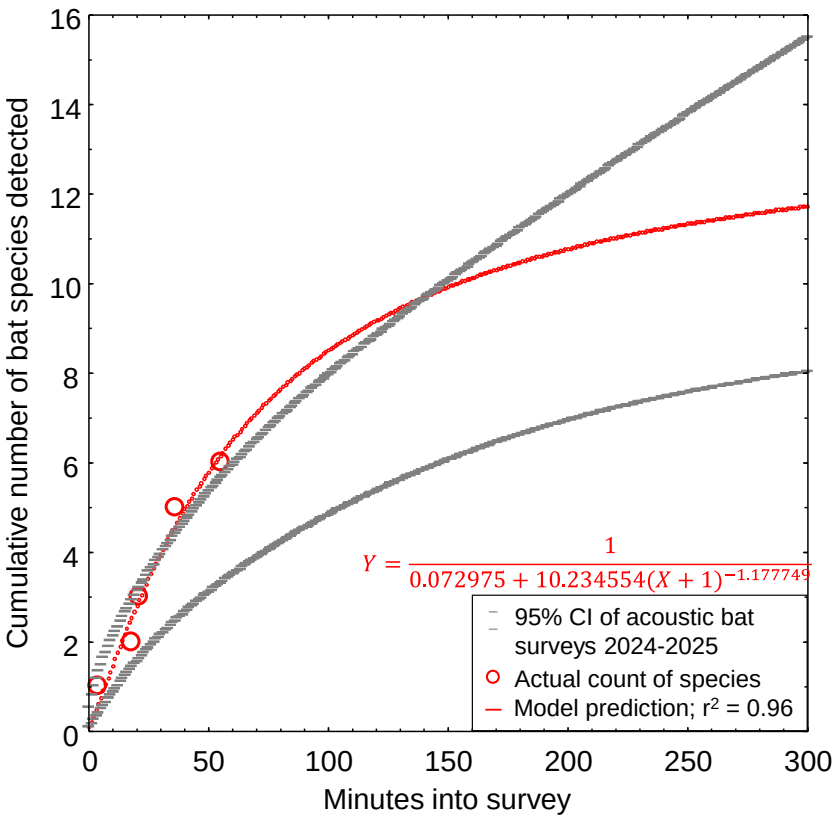

Figure 3. *Actual and predicted relationships between the numbers of bat species detected and the elapsed survey time based on Noriko's visual-scan survey on 17 September 2025.*

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EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the wildlife community and any key ecological relationships and known and ongoing threats to special-status species. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of the CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these required steps remain incomplete and misleading.

Environmental Setting informed by Field Surveys

To the CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources. In the case of this project,

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however, no analysts obtained the information needed to accurately predict impacts to wildlife.

Glenn Lukos Associates and Dudek committed more wildlife survey effort to the project site than I typically see in modern environmental reviews. More could have been done, however, as Noriko's brief survey effort demonstrates. Noriko detected an additional 11 species of vertebrate wildlife, including up to five species of bats. Unlike with Noriko's survey data, the reporting of the consultants' survey methods and survey outcomes does not enable any post-hoc model-fitting or analysis to estimate the numbers of species they missed. This is because Dudek (2024) does not report survey start times or survey durations of the reconnaissance surveys, and because Dudek (2024) does not report when each species was first detected. It would have helped had Dudek (2024) reported the species detected by each survey, rather than listing all detected species in a compendium. It also would have helped had the reporting been more careful such as including in the species compendium all the species that appear in the main body of text of the report. As examples, black phoebe, canyon bat, and hoary bat appear in the text but not the compendium of species detected. Considering this pattern, it is likely that the consultants detected additional species that did not get reported. A-7

The rare plant surveys reported in Dudek (2024) failed to meet the minimum survey standards of CDFW's (2018) guidelines for rare plant surveys. There was no crosswalk of survey dates with blooming periods of potentially occurring special-status species of plants, nor was there any use of reference sites. Dudek (2024) fails to even mention or cite CDFW (2018). A-8

The focused burrowing owl surveys reported by Dudek (2024) failed to meet the minimum standards of the survey guidelines of CDFW (2012). According to Dudek (2024:24), "Surveys were conducted in accordance with survey guidelines described in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012)." Although four breeding-season surveys are reported, and although these surveys were scheduled correctly, the surveys averaged only about three hours per survey indicating only a small portion of the project area was covered. Dudek (2024) reports that the burrowing owl surveys were on suitable habitat, but Dudek (2024) does not describe what it means by suitable habitat, and no map is provided of where the surveys were conducted. Few if any of the reporting standards were met on qualifications of survey personnel, survey preparation, and reporting of findings. Moreover, the surveys were completed four years ago, and are therefore out of date. A-9

Focused surveys were reportedly completed for California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher, and again Dudek (2024) reports that these surveys were in suitable habitat but fails to report where these suitable habitat areas occurred. This failure to report the extents of the surveys is a fundamental flaw in the reporting. The reader cannot determine whether all appropriate portions of the project site were surveyed for these species. Finally, as was the case for burrowing owl surveys, the focused surveys for these other species occurred four years ago, and they therefore might not represent the present use of the project site by these species. A-10

Dudek (2024) reports that acoustic surveys were conducted for bats, but the reporting of methods is confused. Three survey dates are reported between April and July 2021. These dates were earlier than the season of peak bat activity, which might explain the few bat species detected. Unreported, however, were the locations of passive acoustic detection stations that were operated for up to 10 days. The total survey time in Table 8 was 12 hours, assuming the end time of 1045 was intended to read 2245 hours, but these hours do not account for the reported 10 days of passive data collection. On the whole, the reporting of bat survey methods is incomplete and vague, and the number of bat species detected is too small. Noriko detected twice the number of bat species in only two hours using only one detector. A-11

Environmental Setting informed by Desktop Review

The purpose of literature and database reviews and of consulting with local experts is to inform the field survey, and to augment interpretation of its outcome. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and migration flight paths. In the case of this project, the desktop review was incomplete, and the review that was completed was distorted to minimalize the likelihoods of occurrence of special-status species.

Dudek (2024) reports, "pertinent literature on the flora of the region was examined." I assume this reporting inadvertently omitted wildlife, but I cannot be sure about this. In any case, there is no evidence that Dudek made use of eBird (https://eBird.org) or iNaturalist (https://www.inaturalist.org) for documented occurrence records at or near the project site. Instead, Dudek appears relied on queries of the California Natural Diversity Data Base (CNDDB) for documented occurrences of special-status species within USGS Quadrangles inclusive of and immediately surrounding the project site.

By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, Dudek (2024) screens out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." Dudek (2024) and hence the DEIR misuse the CNDDB.

The CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently

assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence. And again, the screening out of a species due to lack of occurrence records in the CNDDB is the same as making an absence determination, and this step is being taken without adequate support of field surveys.

In my assessment based on a database review and site visits, 141 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 3). Of these 141 special-status species, 24 were recorded on the project site, 4 were possibly recorded on the site (combined 20%), and another 31 (22%) species have been documented within 1.5 miles of the site (Very close), another 20 (15%) within 1.5 and 4 miles (Nearby), and another 55 (39%) within 4 to 30 miles (In region). More than half (56%) the species in Table 3 have been reportedly seen within 4 miles of the project site. The site therefore supports at least 24 to 28 special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on the proximities of recorded occurrences.

Counting the 13 special-status species Dudek (2024) reports having been detected on the project site, Dudek (2024) analyzes the occurrence potentials of only 45 (32%) of the special-status species listed in Table 3. Again, Dudek (2024) analyzes the occurrence potential of fewer than a third of the species it should analyze because it inappropriately uses the lack of CNDDB records in its query to determine the other two-thirds of the potentially occurring species as absent. Of the 45 special-status species that Dudek analyzes for occurrence potential, Dudek determines 20 are not expected, and the occurrence likelihoods of 5 are low, 4 are moderate, and only 3 are high. However, these determinations comport poorly with the occurrence records in eBird and iNaturalist. For example, of the 25 species Dudek determines are not expected or of only low occurrence likelihood, 5 (20%) have been documented within 1.5 miles of the site, and another 6 (24%) have been documented between 1.5 and 4 miles of the site.

Noriko's surveys detected between 11 and 15 special-status species that Dudek (2024) does not even analyze for occurrence potential because Dudek failed to find CNDDB records for these species. This discrepancy again goes to the inappropriateness of Dudek's use of the CNDDB. Of the 96 special-status species not analyzed by Dudek for their occurrence potentials, eBird and iNaturalist records exist for another 22 species within 1.5 miles of the site, and for another 12 species between 1.5 and 4 miles of the site, and for another 41 species between 4 and 30 miles of the site.

Table 3. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species detected by Noriko Smallwood during her site visit.*

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	Not expected	In region
Riverside fairy shrimp	*Streptocephalus woottoni*	FE		In range
Monarch	*Danaus plexippus*	FC	Moderate	Very close
Crotch's bumble bee	*Bombus crotchii*	CCE	Present	Very close
Coast Range newt	*Taricha torosa*	SSC	Not expected	In region
Western spadefoot	*Spea hammondii*	FC, SSC	Not expected	In region
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Not expected	In region
California red-legged frog	*Rana draytonii*	FT, SSC	Not expected	In region
Southwestern pond turtle	*Actinemys pallida*	FC, SSC	Not expected	Nearby
Coast horned lizard	*Phrynosoma blainvillii*	SSC	High	In region
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	High	Very close
San Diegan legless lizard	*Anniella stebbinsi*	SSC	High	Very close
California glossy snake	*Arizona elegans occidentalis*	SSC	Present	In region
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC	Not expected	In region
South coast gartersnake	*Thamnophis sirtalis pop. 1*	SSC		In region
Brant	*Branta bernicla*	SSC2		In region
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL		In region
Redhead	*Aythya americana*	SSC2		In region
Western grebe	*Aechmophorus occidentalis*	BCC		Nearby
Clark's grebe	*Aechmophorus clarkii*	BCC		In region
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	Not expected	In region
Black swift	*Cypseloides niger*	SSC3, BCC		Nearby
Vaux's swift	*Chaetura vauxi*	SSC2		Very close

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
Calliope hummingbird	*Selasphorus calliope*	BCC		In region
Rufous hummingbird	*Selasphorus rufus*	BCC		Very close
Allen's hummingbird	*Selasphorus sasin*	BCC		Very close/**On site**
Light-footed Ridgway's rail	*Rallus obsoletus levipes*	FE, CE, CFP		In range
Mountain plover	*Charadrius montanus*	SSC2, BCC		In region
Snowy plover	*Charadrius nivosus*	BCC		In region
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC		In range
Long-billed curlew	*Numenius americanus*	WL, LACSBS		Nearby
Marbled godwit	*Limosa fedoa*	BCC		In region
Red knot (Pacific)	*Calidris canutus*	BCC		In region
Pectoral sandpiper	*Calidris melanotos*	BCC		In region
Short-billed dowitcher	*Limnodromus griseus*	BCC		In region
Lesser yellowlegs	*Tringa flavipes*	BCC		In region
Willet	*Tringa semipalmata*	BCC		Nearby
Laughing gull	*Leucophaeus atricilla*	WL		In region
Franklin's gull	*Leucophaeus pipixcan*	BCC		In region
Heermann's gull	*Larus heermanni*	BCC		In region
Western gull	*Larus occidentalis*	BCC		Nearby
California gull	*Larus californicus*	BCC, WL		Very close
California least tern	*Sternula antillarum browni*	FE, CE, CFP		In region
Black tern	*Chlidonias niger*	SSC2, BCC		In region
Elegant tern	*Thalasseus elegans*	BCC, WL, LACSBS		In region
Black skimmer	*Rynchops niger*	BCC, SSC3		In region
Common loon	*Gavia immer*	SSC		In region
Double-crested cormorant	*Phalacrocorax auritus*	WL		Very close
American white pelican	*Pelacanus erythrorhynchos*	SSC1		Very close
Least bittern	*Ixobrychus exilis*	SSC2		In region
Reddish egret	*Egretta rufescens*	BCC		In region
White-faced ibis	*Plegadis chihi*	WL, LACSBS		Nearby

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
California condor	*Gymnogyps californianus*	FE, CE, CFP	Low	Very close
Turkey vulture	*Cathartes aura*	BOP, LACSBS	Present	Very close
Osprey	*Pandion haliaetus*	WL, BOP		Very close
White-tailed kite	*Elanus luecurus*	CFP, BOP	Present	Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	Not expected	Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP, LACBW		Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Present	On site/**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP		Nearby
Red-shouldered hawk	*Buteo lineatus*	BOP		Very close
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Not expected	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP		On site/**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP, LACSBS		Very close
Zone-tailed hawk	*Buteo albonotatus*	BOP		In region
Harris' hawk	*Parabuteo unicinctus*	WL, BOP		In region
Rough-legged hawk	*Buteo lagopus*	BOP		In region
American barn owl	*Tyto furcata*	BOP		Very close
Western screech-owl	*Megascops kennicotti*	BOP		Very close/**On site**
Great horned owl	*Bubo virginianus*	BOP		Very close/**On site**
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP, CCE	Moderate/Low	Nearby
Long-eared owl	*Asio otus*	BCC, SSC3, BOP, LACSBS		In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP, LACSBS		In region
Northern saw-whet owl	*Aegolius acadicus*	BOP		In region
Northern pygmy-owl	*Glaucidium gnoma*	BOP, LACBW		In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		Very close
Nuttall's woodpecker	*Picoides nuttallii*	BCC		Very close/**On site**
White-headed woodpecker	*Dryobates albolarvatus*	BCC		In region

Common name	*Species name*	Status[1]	Occurrence potential	
			Dudek	**Database records, Site visits**
American kestrel	*Falco sparverius*	BOP		Very close/**On site**
Merlin	*Falco columbarius*	WL, BOP		Very close
Peregrine falcon	*Falco peregrinus*	BOP		Very close
Prairie falcon	*Falco mexicanus*	WL, BOP, LACSBS	Not expected	Nearby
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		Very close
Willow flycatcher	*Empidonax trailii*	CE		Very close
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE		In region
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Very close
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	Not expected	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2, LACSBS	Low	Very close
Oak titmouse	*Baeolophus inornatus*	BCC, LACBW		On site/**On site**
California horned lark	*Eremophila alpestris actia*	WL, LACSBS	Low	Nearby
Bank swallow	*Riparia riparia*	CT	Not expected	Nearby
Purple martin	*Progne subis*	SSC2		Nearby
Wrentit	*Chamaea fasciata*	BCC		Very close/**On site**
California gnatcatcher	*Polioptila c. californica*	FT, SSC2	Not expected	In region
California thrasher	*Toxostoma redivivum*	BCC		Very close/**On site**
Cassin's finch	*Haemorhous cassinii*	BCC		Nearby
Lawrence's goldfinch	*Spinus lawrencei*	BCC		Very close
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	Not expected	Nearby
Black-chinned sparrow	*Spizella atrogularis*	BCC, LACBW		Nearby
Gray-headed junco	*Junco hyemalis caniceps*	WL		Nearby
Bell's sparrow	*Amphispiza b. belli*	WL, LACBW	Moderate	Nearby
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, LACSBS		In range
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, LACBW	Present	Very close/**On site**
Yellow-breasted chat	*Icteria virens*	SSC3	Not expected	Very close
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3		Very close

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			Dudek	**Database records, Site visits**
Bullock's oriole	*Icterus bullockii*	BCC		Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Not expected	Nearby
Lucy's warbler	*Leiothlypis luciae*	SSC3		In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC		In region
Prothonotary warbler	*Protonotaria citrea*	BCC		In region
Prairie warbler	*Setophaga discolor*	BCC		In region
Yellow warbler	*Setophaga petechia*	SSC2	Present	Very close
Summer tanager	*Piranga rubra*	SSC1		Very close
Little brown bat	*Myotis lucifugus*	WBWG:M		In region
Yuma myotis	*Myotis yumanensis*	WBWG:LM		In region/**Possibly on site**
Long-eared myotis	*Myotis evotis*	WBWG:M		In region/**Possibly on site**
Fringed myotis	*Myotis thysanodes*	WBWG:H		In range
Long-legged myotis	*Myotis volans*	WBWG:H		In range/**Possibly on site**
California myotis	*Myotis californicus*	WBWG:L		Very close/**On site**
Small-footed myotis	*Myotis ciliolabrum*	WBWG:M		In region
Canyon bat	*Parastrellus hesperus*	WBWG:M		Very close/**On site**
Big brown bat	*Episticus fuscus*	WBWG:L		Very close
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M	Not expected	In region
Hoary bat	*Lasiurus cinereus*	WBWG:M	Present	In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H		In region/**Possibly on site**
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H		In range
Spotted bat	*Euderma maculatum*	SSC, WBWG:H	Not expected	In range

Common name	*Species name*	Status[1]	Occurrence potential	
			Dudek	**Database records, Site visits**
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H	Low	In range
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	Present	In region
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L		Nearby
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG:MH		In region
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	Present	In region
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC	Moderate	In range
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC	Not expected	In region
San Diego Bryant's woodrat	*Neotoma bryanti (formerly lepida intermedia)*	SSC	Present	In region
Ringtail	*Bassariscus astutus*	CFP		In region
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC	Low	In range
American badger	*Taxidea taxus*	SSC	Present	Nearby
Mountain lion	*Puma concolor*	SA	Present	Very close

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); and BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors), LACSBS = Los Angeles County Sensitive Bird Species, LACBW = Los Angeles County Bird Watchlist.

BIOLOGICAL IMPACTS ASSESSMENT

An impacts analysis involves prediction. Predictions are necessary because measuring the impacts directly could not happen until after the impacts occur, and this type of measurement would prevent the formulations of avoidance and minimization mitigation strategies that are prioritized by the CEQA. Impact predictions are needed in the environmental review. The accuracy of the predictions of impacts and their significance ultimately relies on the degree of accuracy in the characterization of the existing environmental setting (Figure 4).

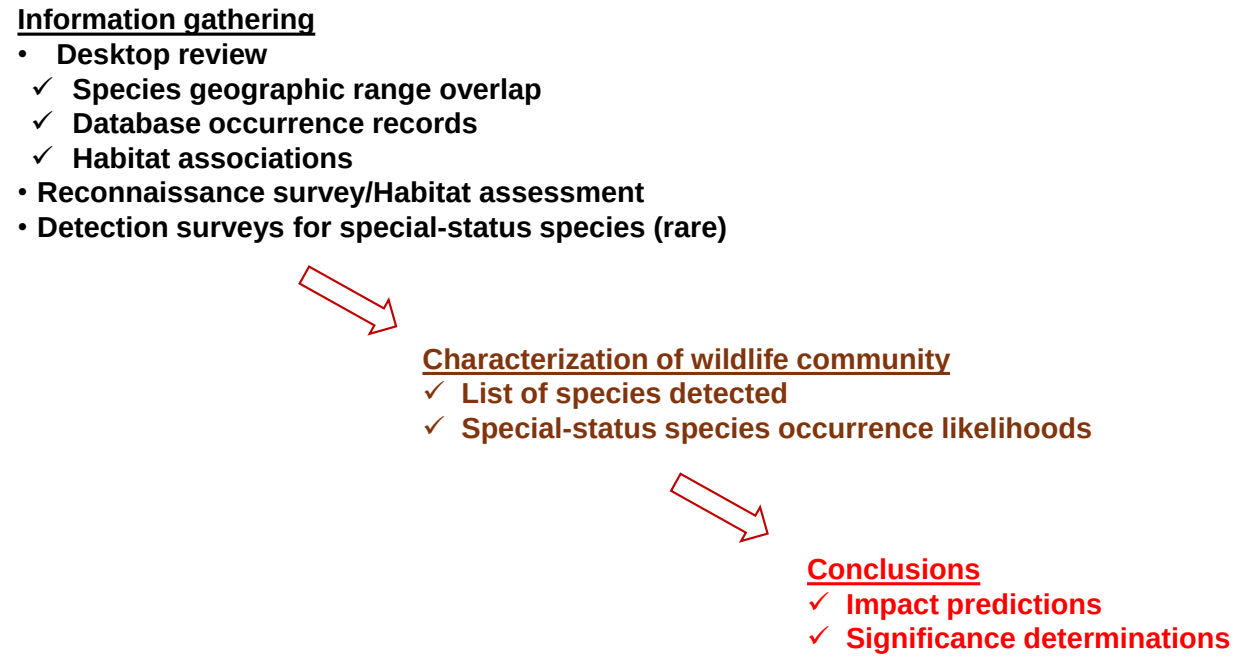

Figure 4. *General flow of information from the gathering stage through the characterization of the existing environment to predictions of impacts and their significance.*

Impact predictions can derive from speculation or from some level of experience (Figure 5). Speculation is repeatedly discouraged in the CEQA Guidelines, and for good reason because prediction accuracy improves with experience. But there are also different types of experience that can be brought to bear on impact predictions, ranging from anecdotes to careful use of scientific inference. Any type of experience is usually better than relying on speculation, but careful scientific inference, especially inference drawn from mensurative (unmanipulated observations of naturally replicated and interspersed treatments) or manipulative experiments, have proven most effective. An analogy would be predicting the boiling temperature of water at a certain place with a known atmospheric pressure after having measured it hundreds of times at other places under various atmospheric pressures. The experience of measuring the boiling temperature at all these other places would certainly result in a more accurate prediction at the certain place as compared to a speculative prediction. We know that use of inference in this example is certainly more predictive, and not potentially more predictive, because we

have a long successful history with the application of this type of experimentation to draw predictive inference.

It was scientific inference that allowed me to accurately predict the numbers of additional wildlife species Noriko would detect in her survey of the project site. And my predictions were accurate based on inference drawn from both the research site I cited. If the pattern of species detections is repeatable, then it is predictive. The same should apply to impact predictions.

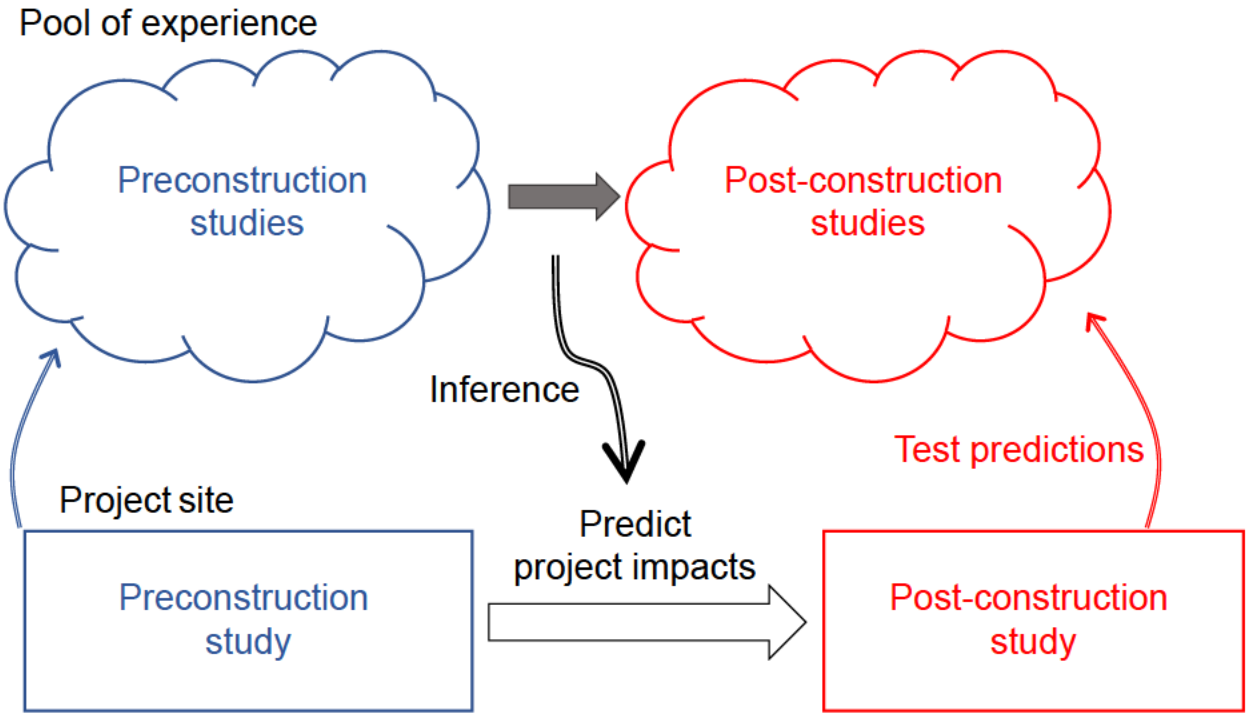

Figure 5. *The ideal framework for arriving at predicted project impacts based on experience with other project sites. Ideally, there is a pool of similar projects in similar circumstances where predicted impacts were compared to realized impacts, and into which the proposed project can also contribute to experience. In the reality of review under CEQA, impact predictions are rarely if ever tested, and they rarely if ever contribute to impact predictions for the proposed project.*

THE DEIR'S IMPACT ASSESSMENT METRIC

The DEIR is flawed in in its basis for analyzing project impacts on special-status species of wildlife. The metric used to analyze impacts is acres of habitat, but acres are not animals, and an acre of habitat does not carry the same abundance or demographic meanings among species that vary in trophic levels, seasonal movement patterns, and body mass. An acre of habitat of a given species could be at carrying capacity or it could be vacant depending on the status of the population relative to its multi-annual population cycle, where the centers of activity might have naturally shifted from one generation to the next (Taylor and Taylor 1979), or multiple other factors. Unless a

relationship is established between a species' average abundance and habitat acreage, the use of acreage as a surrogate for numerical abundance is meaningless and potentially misleading.

The use of acreage as the impact metric is also incomparable per the framework expected in Figure 5, and in fact neither Dudek (2024) nor the DEIR attempts to compare values of its impact metric between the project site and any other site, or between the existing setting to any other moment in time. There is some comparison of habitat acres between the project footprint and the "onsite" mitigation area, but these acreages are not linked to abundance or any demographic unit of the species at issue (see below). Certainly, there are no predictions of impacts in terms of numbers of animals or numbers of nests, and there are no comparisons of these numbers to those that might occur on the onsite mitigation area or anywhere else. On their own and without any means to interpret them, acres of impact are meaningless.

A major shortcoming of the DEIR's habitat assessment approach is the pigeon-holing of species into unrealistically narrow portions of the environment. An example applies to Cooper's hawk, which Dudek's Table 17 claims to have only 13.09 acres of habitat available to it on the project site. As Dudek (2024) reports, Cooper's hawks are not confined to riparian forests. In fact, there is no portion of the project site that would be unusable by Cooper's hawk. The Cooper's hawk found and photographed by Noriko was near a riparian area, but in fact it was in oak woodland. Based on our experience with many Cooper's hawk detections throughout California, the appropriate habitat area available to Cooper's hawk is the entirety of the project site.

Another example applies to Southern California rufous-crowned sparrow. Dudek (2024) claims there are only 33.16 acres of shrubland habitat available to Southern California rufous-crowned sparrow. However, Noriko found Southern California rufous-crowned sparrow in both shrubland and oak woodland. And in our broader experience, we have found Southern California rufous-crowned sparrows in various vegetation communities. The appropriate habitat area available to Southern California rufous-crowned sparrow is the entirety of the project site.

Dudek (2024) claims that both hairy woodpecker and yellow warbler are limited to 0.75 acres on the project site. These claims are absurd. The entirety of the project site is habitat to both of these species, both of which I have detected in a variety of vegetation complexes.

The same absurd level of pigeon-holing applies to American badger, which Dudek (2024) claims is constrained to 18.49 acres. Based on my experience with American badger, there is no part of the project site that should be considered anything other than American badger habitat.

The same applies to greater roadrunner, which Dudek (2024) claims to be constrained to 33.16 acres. And the same applies to San Diego black-tailed jackrabbit, which could be found anywhere on the project site, but which Dudek claims is constrained to a mere 6.15 acres. And the same applies to Blainville's horned lizard, which could be found

anywhere on the project site, but which Dudek claims is constrained to a mere 5.11 acres. None of these examples of pigeon-holing are based on surveys, and none are even close to realistic.

The foregoing examples of pigeon-holing of species into unrealistically narrow portions of the environment bear on my earlier concerns about the spatial extents of forcused surveys for burrowing owl, California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. The surveys were reportedly performed in "suitable habitat," but Dudek (2024) fails to report maps of what it regarded as suitable habitat. If the suitable habitat of each of these species was just as severely pigeon-holed as it was in the foregoing examples, then the focused surveys should be disregarded.

Another problem arising from the foregoing examples of pigeon-holing is that the resulting acreages are used as the bases for calculating mitigation. Because the habitat bases are flawed, the calculated mitigation requirements are also flawed, and they are inadequate.

In the following, I analyze several types of impacts likely to result from the project, but which are not analyzed in the DEIR.

REDUCED PRODUCTIVE CAPACITY FROM HABITAT LOSS

Habitat loss results in a reduced productive capacity of affected wildlife species, and habitat fragmentation multiples the effects of habitat loss by leaving isolated, insufficiently sized patches of open space that looks like habitat but no longer functions as habitat (Smallwood 2015). The project site is proven to serve as habitat to at least 106 species of vertebrate wildlife which Noriko and the applicant's consultants observed on the site, and the basis exists for my estimate that about 200 species of vertebrate wildlife rely on the site for its habitat. Many of these species are birds, but the number of avian nest sites remains unknown. Because none of the surveys were suitable for detecting all bird nests on the project site, estimating total nest density of birds was not possible. The alternative method would be to infer productive capacity from estimates of total nest density measured or estimated elsewhere.

Two study sites in grassland/wetland/woodland complexes had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. To acquire a total nest density closer to conditions in California, I surveyed a 12.74-acre site in Rancho Cordova 30 times from March through August 2023. Total nest density of birds was 18.05 nests per acre. The average of the above three estimates is 28.9 nests/acre. This density applied to the 89.34 acres of the project site would predict 2,582 nest sites. Assuming 1.39 broods per nest site based on a review of 322 North American bird species, which averaged 1.39 broods per year, then I estimate 3,589 nest attempts per year on the project site. Assuming Young's (1948) study site typifies bird productivity of 2.9 fledged birds per nest attempt, then I predict 10,408 fledglings/year at the project site.

The loss of 2,582 nest sites and 3,589 nest attempts per year would qualify as significant impacts that have not been analyzed by the City of Fontana. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The project would prevent the production of 10,408 fledglings per year. Assuming an average bird generation time of 4 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 11,699 birds per year denied to California.

The loss of 11,699 birds per year would be a loss of significant habitat value that is currently provided by the project site. Most if not all these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which are intended to most strongly protect breeding migratory birds. The loss of this many birds would easily qualify as an unmitigated significant impact.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. The 106 species that Noriko and the applicant's consultants detected on the project site had at some point moved to the site, and in fact members of some of these species were in flight when Noriko detected them. At minimum, the project site provides wildlife with stopover opportunities during migration or dispersal of young. There is doubt that the project site is important to wildlife movement in the region.

Dudek (2024:93) recognizes the 144.43-acre onsite mitigation area as important to wildlife movement in the region: "the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement and genetic health of the species by allowing for breeding, foraging, and dispersal opportunities between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains." And on page 100, Dudek (2024) writes, "Dedication of the on-site Conservation Area (MM-BIO-1) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east, as shown in Figure 3; therefore, preserving, and thereby avoiding further encroachment on, movement opportunities between regional conserved habitat blocks, and reducing potential Project impacts to SEA Resources." Inexplicably, Dudek (2024) does not similarly recognize the proposed project footprint as part of any wildlife corridor or as important to wildlife movement in the region. Both areas are adjacent to each other, separated only by an artificial boundary that no animal would recognize or understand, but yet one area is considered important to wildlife movement in the region and the other is not.

There is no empirical or logical basis for the DEIR's analysis of whether the project would interfere with wildlife movement in the region. No program of observation was implemented to quantify wildlife movement. No effort was made to examine topographic features for their potential roles in channeling wildlife movement. No serous analysis of wildlife movement exists in the DEIR.

There is also no consideration in the DEIR for how lots 20 and 29 would disproportionately interfere with wildlife movement in the region. Many animals encountering lots 20 and 29 while heading southeast would find themselves at a dead-end, and if these animals attempt to cross lots 20 and 29, they might be killed or injured by human activities or by human pets such as house cats. Lots 5, 15, 19, and 23 extend the project southward, and would also interfere substantially with east-west wildlife movement. The shape and extent of the project resulting from these lots would obviously interfere disproportionately with wildlife movement in the region, but the DEIR does not analyze this. Should the project go forward, the project layout should be revised so that it is more compact to minimize interference with wildlife movement in the region.

BIRD-WINDOW COLLISION MORTALITY

The project would introduce glass windows into an essential portion of avian habitat – that portion of the gaseous atmosphere that is referred to as the aerosphere (Davy et al. 2017, Diehl et al. 2017). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate. Birds are some of the many types of animals that evolved wings as a morphological adaptation to thrive by moving through the medium of the aerosphere. The aerosphere is habitat, to which an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008).

Many special-status species of birds have been recorded at or near the aerosphere of the project site. My database review and the surveys that have been done on site indicate there are 99 special-status species of birds with potential to use the site's aerosphere (Table 3). All the birds represented in Table 3 can quickly fly from wherever they have been documented to the project site, so they would all be within brief flights to the proposed project's windows.

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but they are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At

Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only two of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend

to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The DEIR does not report the number and extent of structural glass on the project's building façades. The rendering of the senior citizen housing complex shows about 220 m2 of windows. Based on other residential projects I have reviewed, and assuming 2,000 sf per home and 0.0170706 m^2/sf, I predict 17,412 m^2 of windows among the 510 homes. This window area added to the senior citizen housing complex would be 17,632 m^2. This window area multiplied by my estimated average bird collision deaths per m^2 of glass per year predicts 1,289 (95% CI: 765–1,813) bird collision fatalities per year.

The vast majority of these predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds and other sensitive species. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the project's airspace into a lethal collision trap to birds.

WILDLIFE DEPREDATION BY HOUSE CATS

Considering national trends, it is safe to assume that house cats would be introduced to the project area by residents of the proposed residential units. This is significant because house cats serve as one of the largest sources of avian mortality in North America (Dauphiné and Cooper 2009, Blancher 2013, Loss et al. 2013, Loyd et al. 2017). Loss et al. (2013) estimated 139 million cats in the USA in 2013 (range 114 to 164 million), which killed an estimated 16.95 billion vertebrate wildlife annually (range 7.6 to 26.3 billion). In 2012 there were 0.44 house cats per human in the USA, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. The DEIR predicts there would be 1,785 new residents. This number of residents applied to Loss et al.'s (2013) house cats/resident predicts 785 new cats, which based on the findings of Loss et al. (2013) would kill 95,770 vertebrate wildlife per year.

House cats also contribute to downstream loading of *Toxoplasma gondii*. According to a UC Davis wildlife health research program, "*Toxoplasma gondii is a parasite that can infect virtually all warm-blooded animals, but the only known definitive hosts are cats – domesticated and feral house cats included. Cats catch the parasite through hunting rodents and birds and they offload it into the environment through their feces… and …rain that falls on cement creates more runoff than rain that falls on natural earth, which contributes to increased runoff that can carry fecal pathogens to the sea*" (Thje original link is no longer active, but the quote came from the program described at: https://whc.vetmed.ucdavis.edu/programs-projects/ca-conservation/sea-otter).

Impacts to wildlife from the introduction of house cats into the environment would be highly significant, and yet these impacts are not considered in the DEIR. An obvious mitigation measure would be to constrain house cat ownership such as requiring cats to remain indoors. However, the proposed mitigation measures would require no restrictions on house cat ownership or house cat management.

TRAFFIC IMPACTS TO WILDLIFE

The DEIR neglects to address one of the project's most obvious, substantial impacts to wildlife, and that is wildlife mortality and injuries caused by project-generated traffic. Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic (Photos 29 and 30—32), including along roads far from the project footprint but which would nevertheless by traversed by automobiles head to or from the project's building. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

Photo 30. *A white-tailed antelope squirrel runs across the road just in the Coachella Valley, 26 May 2022. Such road crossings are usually successful, but too often prove fatal to the animal.*

Photo 31. *A coyote uses the crosswalk to cross a road on 2 February 2023. Not all drivers stop, nor do all animals use the crosswalk. Too often, animals are injured or killed when they attempt to cross roads.*

Photo 32. *Mourning dove killed by vehicle on a California road (photo by Noriko Smallwood, 21 June 2020.*)

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 9,462 animals killed by traffic on the road. This fatality number projected over 1.25 years and 2.5 miles of road translates to 3,028 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 188,191 animals killed per 100 km of road per year, or 22 times that of Loss et al.'s (2014) upper bound estimate and 53 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data

resulted in an estimated 3,028 animals killed per mile along a county road in Contra Costa County. The estimated numbers of fatalities were 1.75% birds, 26.4% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 67.4% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 4.4% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts to wildlife

The DEIR predicts 13,431,088 annual VMT would be generated by the project. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road in Contra Costa County daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 9,462 wildlife fatalities, or 2,351 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 5,713 vertebrate wildlife fatalities per year due to project-generated traffic.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The DEIR does not address this potential impact, let alone propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, and that, as the DEIR is currently written, these impacts would be unmitigated.

CUMULATIVE IMPACTS

The cumulative impacts analysis is fundamentally flawed. According to the DEIR, the implementation of MM-BIO-1 through MMBIO-13 would reduce all impacts on plant and wildlife species to less than significant levels. The DEIR concludes (p. 4.4-64), “all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project’s incremental effect on special-status species would not be cumulatively considerable and cumulative impacts on special-status species would be less than significant with mitigation.” The DEIR’s conclusion follows from two false standards for determining whether a project would contribute to cumulative impacts and whether those contributions would be significant.

The first false standard is that a given project impact is cumulatively considerable only when it has not been fully mitigated at the project level. The DEIR implies that cumulative impacts are really just residual impacts that were not fully mitigated. This

notion of residual impacts being the source of cumulative impacts is inconsistent with the CEQA's definition of cumulative effects. Individually mitigated projects do not negate the significance of cumulative impacts. If they did, then CEQA would not require a cumulative effects analysis.

The second false standard is that future permit restrictions or regulations applied to other future projects would themselves prevent cumulative impacts. Not only does this standard rely on speculation, but it is inconsistent with the CEQA Guidelines §15064(h)(3): "When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable." The City does not even know what permit restrictions or regulations would be in place, so there is none of the explanation required by the CEQA.

Because I had seen these same fallacious arguments made in CEQA reviews prepared by other lead agencies, I decided to test them (Smallwood and Smallwood 2023). To measure the impacts of habitat loss to wildlife caused by development projects, and to measure cumulative impacts of development, Noriko Smallwood and I revisited 80 sites of proposed projects that we had originally surveyed in support of comments on CEQA review documents. We revisited the sites to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration in order to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. All the developed sites had included mitigation measures to avoid, minimize or compensate for impacts to wildlife. Nevertheless, we found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. We reported that "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds (-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite all the mitigation measures and existing policies and regulations.

The DEIR's cumulative impacts analysis is flawed. The DEIR needs to be removed from public circulation so that an appropriate cumulative impacts analysis can be prepared.

MITIGATION MEASURES

MM-4.4-1 On-Site Habitat Preservation *Establish Conservation Easement that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area ("On-Site Conservation Area"). A Table shows that the on-site acreage would conserve <3% of what is needed of SEA Resource Category 1 vegetation communities, and 24.3% of SEA*

Resource Category 3 vegetation communities. A Conservation Management Plan would be prepared, and it would include a list of rules to prevent wildfires and impacts caused by human and pet intrusions and wildlife mortality from use of rodenticides. Enforcement would be the responsibility of the holder of the conservation easement, to be overseen by CDFW or perhaps the Homeowners' Association.

This mitigation strategy is misleading by claiming to be "on-site" when it is truly on an adjacent property held by the applicant. Relative to the project footprint, MM-4.4-1 would be off-site.

The 144.43 acres at issue in MM-4.4-1 does not include sufficient acreages of SEA Resource Categories 1 and 3 vegetation complexes to achieve the minimum mitigation of the SEA.

A larger issue, however, is the acreage calculations of SEA Resource Categories. The acreages are calculated from mapped GIS polygons, the boundaries of which are assumed to be hard and accurate. The assumed hardness of the boundaries is unrealistic, and for many species of plants and animals there are no boundaries at all. As for the accuracy of the boundaries, I do not see evidence in the DEIR that much of an effort was made to ground-truth the mapped polygons for accuracy in categorization and delineation.

Moreover, and as commented on earlier, the habitat acreages from which mitigation calculations are based have been biased low by pigeon-holding species into unrealistically small portions of the project area.

MM-4.4-2 Habitat Mitigation and Monitoring Plan *After implementation of MM-4.4-9, if the Los Angeles County Department of Regional Planning (Planning) determines that sufficient habitat is not preserved off site, per MM-4.4-9, then on-site establishment and restoration shall be conducted in the On-Site Conservation Area (MM-4.4-1). Prior to the issuance of a grading permit, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for … on-site establishment … of 16.24 acres of Brassica nigra–Centaurea melitensis herbaceous semi-natural stands. A list of best management practices and stress-relieving actions are included, and so is the requirement for 10 years of performance monitoring along with reporting. Adaptive management is identified as the process by which the restoration would proceed*.

Should the project go forward, and should habitat restoration go forward to achieve the minimum mitigation acreage of the SEA Resource Category at issue, then I concur with implementation of MM-4.4-2 as written. However, the DEIR does not make the case that the identified 16.24 acres is in need of restoration, nor does it make the case that restoring these 16.24 acres would avoid additional significant impacts to plants and wildlife. With this restoration in mind, the environmental review needs directed focus to the 16,24 acres at issue. Focused surveys are needed on these 16.24 acres to determine which species of plants and wildlife occur there.

The planning and implementation details of MM-4.4-2 would have been better directed to greater rigor in the environmental review. MM-4.4-2 gives the impression that greater rigor is promised at a later date -- much of it post-construction -- than was committed to the DEIR. Per MM-4.4-2, much of the rigor in the environmental review is deferred to later dates, thereby effectively excluding the public from meaningful participation with it.

MM-4.4-2 requires adaptive management, but it mischaracterizes adaptive management. Adaptive management is a structured scientific process (Holling 1978, Walters 1986, Lancia et al. 1996, McClain and Lee 1986). MM-4.4-2 accurately identifies monitoring and performance standards and remedial contingency measures, but it fails to identify the other steps that are essential to adaptive management. To be true adaptive management, the measures would need to be formulated ahead of time, along with thresholds of success and alternative prescriptions. Adaptive management begins with the full participation of all stakeholder groups to identify goals and objectives and then to formulate the plan. Furthermore, the plan needs to be informed by adequate, directed pre-construction surveys to establish baseline characterizations of the abundance and spatial distribution of each species at issue.

There has yet to be any assembly of stake-holder groups nor the identification of agreed-upon goals and objectives, so there remains no foundation for adaptive management. Furthermore, the currently available surveys are not adequate for informing adaptive management, as they do not even establish the presence or absence of many of the special-status species.

MM-4.4-3 Special-status Plants Seed and Bulb Survey, Salvage, and Translocation *Requires the preparation of a plan for preconstruction survey to locate specific special-status species of plants for collection of material for translocation. Also requires 5 years of performance monitoring.*

Again, no environmental review has been directed to the receiving sites of translocated seeds and bulbs. Translocations to unsuitable sites or to sites in no need of restoration could result in additional significant project impacts.

MM-4.4-4 Biological Monitoring *Requires County Planning-approved Biological Monitor(s) during Project construction to monitor construction activities and to ensure compliance with all mitigation measures. … Requires focused pre-construction surveys for burrowing owl shall be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused pre-construction surveys, … California Department of Fish and Wildlife (CDFW) shall be notified. … The Biological Monitor shall also monitor any colonial roosts located within 500 feet from the Project limits to determine if Project activities are having a detrimental effect on the roost. If bats are exhibiting distress due to noise generated by Project activities, the Biological Monitor shall work with the construction contractor on ways to reduce activities in the proximity of the roost (e.g., limiting the number of tractors in the area). …The*

Biological Monitor shall regularly inspect the Project site as needed after the completion of all grading activities. …

Should the project go forward, I concur with the measure but I point out that the conservation benefits of this measure would be *de minimis* in comparison to the project's impacts on biological resources. Also, the preconstruction surveys for burrowing owl need to be preceded by breeding-season detection surveys, and before this step is initiated, the applicant needs to consult with CDFW. The burrowing owl is a candidate for listing under the California Endangered Species Act, and the on-site surveys for burrowing owl are outdated at having been completed four years ago.

MM-4.4-5 Demarcation of Disturbance Limits *Prior to commencement of earthwork for each phase of Project construction, the construction limits shall be clearly demarcated …*

This measure should be implemented, but the conservation benefits of this measure would be *de minimis* in comparison to the project's impacts on biological resources.

MM-4.4-6 Invasive Species Prevention

This measure should be implemented, but the conservation benefits of this measure would be *de minimis* in comparison to the project's impacts on biological resources.

MM-4.4-7 Landscaping Plan *Prior to the issuance of the first grading permit, the Applicant shall prepare a Landscaping Plan for the areas maintained by the Homeowners' Association (HOA) …*

Should the project go forward, I concur with this measure.

MM-4.4-8 Crotch's Bumble Bee Habitat Preservation and Minimization Measures *Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee.*

This consultation with CDFW should have happened already, prior to the public circulation of the DEIR. The Crotch's bumble bee is known to be present, so the consultation should have already begun.

MM-4.4-9 Off-Site Habitat Preservation *Applicant shall demonstrate recordation of a conservation easement … that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). … One or more of the following options shall be used to provide adequate preservation for Project-related impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with*

other natural open space areas. To determine that these conditions are present, the Applicant shall fund a biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation…

The analysis of required habitat areas needed for compensatory mitigation needs to be revised by assuming much larger impacts in terms of habitat acreages. The current bases of habitat areas of special-status species resulted from pigeon-holing species into unrealistically small portions of the environment on the project site.

MM-4.4-10 Special-Status Wildlife Relocation Plan *Prior to commencement of any earthmoving activities …, the Project Applicant shall contract with a biologist approved by the County of Los Angeles (County) to develop a Pre-construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (Taricha torosa), two-striped gartersnake (Thamnophis hammondii), Southern California legless lizard (Anniella stebbinsi), and coastal whiptail* (*Aspidoscelis tigris stejnegeri*).

Newts are not reptiles.

Translocation risks additional significant project impacts to populations of animals in the receiving areas. The receiving areas should be assumed to be at carrying capacity for each species at issue. Adding individuals to areas already at carrying capacity would generate competition for limited resources, and they could result in deaths or injuries to residents of the receiving areas. The DEIR needs to be revised to include analysis of these potential translocation impacts.

MM-4.4-11 Nesting Bird Avoidance *…Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors. For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors*).

This measure is internally inconsistent by stating construction shall avoid the avian breeding season, and then stating remaining project activities shall be preceded by preconstruction nest surveys. This internal inconsistency indicates the applicant is not serious about avoiding the breeding season to minimize impacts to breeding birds.

MM-4.4-11 Nesting Bird Avoidance *If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. … Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines*

that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.

Should the project go forward, preconstruction surveys should be implemented for nesting birds. However, it should be understood that the task would be overwhelming. Based on available estimates of total avian nest densities, I predict 2,582 nest sites on the project site. Finding these nest sites would require the simultaneous efforts of many qualified biologists. Preconstruction, take-avoidance surveys consist of two steps, both of which are very difficult. First, the biologist(s) performing the survey must identify birds that are breeding. Second, the biologist(s) must locate the breeding birds' nests. The first step is typically completed by observing bird behaviors such as food deliveries and nest territory defense. To be successful these types of observations typically require many surveys on many dates spread throughout the breeding season even for a single species. To identify and locate the birds of all species nesting on a site requires a much greater survey effort. Even assuming all the predicted 2,582 nest sites could be found (not likely), the mitigation measure would apply only to the breeding season of the survey. After the breeding season of the preconstruction survey, California would be denied the production of birds from the project site during every subsequent year. The impacts of the project on birds would be permanent and of large magnitude (see my prediction, above, of the lost productive capacity of breeding birds).

Lastly, the mitigation language allows a single individual to make a subjective decision, outside the public's view, to determine the buffer area for any given species. This measure lacks objective criteria, and it is unenforceable.

NEEDED MITIGATION MEASURES

Habitat loss: Should the project go forward, the project's layout should be modified for increased compactness, and compensatory mitigation is needed for the loss of habitat. A habitat three times the area of the project's footprint should be protected as close to the project site as feasible.

Bird-Window Collision Mortality: If the project goes forward, it should at a minimum adhere to available Bird-Safe Guidelines, such as those prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For

example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced.

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Van Doren et al. (2021) found that nocturnal migrants contributed most of the collision fatalities in their study, and the largest predictors of fatalities were peak migration and lit windows. Van Doren et al. (2021) predicted that a light-out mitigation measure could reduce bird-window collision mortality by 60%.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

House Cats: If the project goes forward, homeowners should not be allowed to let their cats range free. A fund should be established for long-term management of house cats in the project. Management could include public education about the environmental effects of outdoor and free-ranging cats. It could also include a program to spade and neuter cats, especially free-ranging cats. It could also involve some removals of feral cats.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by the project-generated road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by house cats and by collisions with building windows and with automobiles traveling to and from the project's homes.
Thank you for your consideration,

Shawn Smallwood, Ph.D.

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Photo 33. *Mule deer next to the project site. Photo by Noriko Smallwood.*

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Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 762 professional reports, including:
- 90 peer reviewed publications
- 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. Journal of Wildlife Management: e22216. https://doi.org/10.1002/jwmg.22216

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. Diversity 13, 540. https://doi.org/10.3390/d13110540.

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. Diversity 12(98); https://doi.org/10.3390/d12030098

Smallwood, K. S., D. A. Bell, and S. Standish. 2020. Dogs detect larger wind energy impacts on bats and birds. Journal of Wildlife Management 84:852-864. DOI: 10.1002/jwmg.21863.

Smallwood, K. S., and D. A. Bell. 2020. Relating bat passage rates to wind turbine fatalities.

Diversity 12(84); doi:10.3390/d12020084.

Smallwood, K. S., and D. A. Bell. 2020. Effects of wind turbine curtailment on bird and bat fatalities. Journal of Wildlife Management 84:684-696. DOI: 10.1002/jwmg.21844

Kitano, M., M. Ino, K. S. Smallwood, and S. Shiraki. 2020. Seasonal difference in carcass persistence rates at wind farms with snow, Hokkaido, Japan. Ornithological Science 19: 63 – 71.

Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

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Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Turbine siting for raptors: an example from Repowering of the Altamont Pass Wind Resource Area. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel Micnemidocoptes mite in a Golden Eagle (*Aquila chrysaetos*). Journal of Avian Medicine and Surgery 29(3):231-237.

Smallwood, K. S. 2015. Habitat fragmentation and corridors. Pages 84-101 in M. L. Morrison and H. A. Mathewson, Eds., Wildlife habitat conservation: concepts, challenges, and solutions. John Hopkins University Press, Baltimore, Maryland, USA.

EXHIBIT B

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Date: September 21, 2025

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From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: Trails at Lyons Canyon Project, Los Angeles, CA.
(IEE File Reference: P-4899)

Pages: 18

Indoor Air Quality Impacts

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,

2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m^3. The median indoor formaldehyde concentration was 36 µg/m^3, and ranged from 4.8 to 136 µg/m^3, which corresponds to a median exceedance of the 2 µg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the San Diego County Air Pollution Control District (SDAPCD, 2021).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m^3 to 28% for the Acute REL of 55 µg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019) and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 $\mu g/m^3$ (18.2 ppb) as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 $\mu g/m^3$, which is 33% lower than the 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the Trails at Lyons Canyon Project, Los Angeles, CA, the buildings consist of residential spaces.

The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks

resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 µg/day for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

In addition, we note that the average outdoor air concentration of formaldehyde in California is 3 ppb, or 3.7 $\mu g/m^3$, (California Air Resources Board, 2004), and thus represents an average pre-existing background airborne cancer risk of 1.85 per million. Thus, the indoor air formaldehyde exposures describe above exacerbate this pre-existing risk resulting from outdoor air formaldehyde exposures.

Additionally, the SCAQMD's Multiple Air Toxics Exposure Study ("MATES V") identifies an existing cancer risk at the Project site of 306 per million due to the site's elevated ambient air contaminant concentrations, which are due to the area's high levels of vehicle traffic. These impacts would further exacerbate the pre-existing cancer risk to the building occupants, which result from exposure to formaldehyde in both indoor and outdoor air.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from

composite wood products.

Even composite wood products manufactured with CARB certified ultra-low emitting formaldehyde (ULEF) resins do not ensure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can ensure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m^2-h) and the area (m^2) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., $\mu g/m^2$-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 $\mu g/m^2$-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 $\mu g/m^2$-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the

total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m^3) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m^3/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m^3)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m^3/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section 3.10.2 "Calculation of Estimated Building Concentrations" of the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test

Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The Trails at Lyons Canyon Project, Los Angeles, CA is close to roads with moderate to high traffic (e.g., I-5, The Old Road, Pico Canyon Road, Calgrove Road, etc.). Thus, the Project is located in a sound impacted area.

The Draft Environmental Impact Report - Trails at Lyons Canyon Project, Los Angeles, CA (Dudek, 2024) states in Table 4.13-19 that the modeled existing with Project traffic noise levels will range from 68.6 to 73.2 dBA CNEL and the future 2029 with Project traffic noise levels will range from 68.7 to 73.7 dBA CNEL.

In order to design the building for this Project such that interior noise levels are acceptable, an acoustic study with actual on-site measurements of the existing ambient noise levels and modeled future ambient noise levels needs to be conducted. The acoustic study of the existing ambient noise levels should be conducted over a minimum of a one-week period and report the dBA CNEL or Ldn. This study will allow for the selection of a building envelope and windows with a sufficient STC such that the indoor noise levels are acceptable. A mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors will also be required. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Draft Environmental Impact Report - Trails at Lyons Canyon Project, Los Angeles, CA

(Dudek, 2024), the Project is located in the South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

Additionally, the SCAQMD's MATES V study cites an existing cancer risk of 306 per million at the Project site due to the site's high concentration of ambient air contaminants resulting from the area's high levels of motor vehicle traffic.

An air quality analyses should be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. at least MERV 13, or possibly MERV 14 or 15 depending on the results of the Project ambient $PM_{2.5}$ concentrations) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB,

2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not ensure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can ensure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California".* In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality"* when CARB Phase 2 products are utilized. As shown in the Singer et. al., 2020 study of new California homes, the median indoor formaldehyde concentration was of 22.3 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California Department of Public Health,

Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates, I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA

cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra-low emitting formaldehyde (ULEF) resins do not ensure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can ensure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to ensure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

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Education

M.S. Mechanical Engineering (1985)
Stanford University, Stanford, CA.

Graduate Studies in Air Pollution Monitoring and Control (1980)
University of California, Berkeley, CA.

B.S. in Mechanical Engineering (1976)
Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Experience

President: Indoor Environmental Engineering, San Francisco, CA. December, 1981 - present.

Direct team of environmental scientists, chemists, and mechanical engineers in conducting State and Federal research regarding indoor air quality instrumentation development, building air quality field studies, ventilation and air cleaning performance measurements, and chemical emission rate testing.

Provide design side input to architects regarding selection of building materials and ventilation system components to ensure a high quality indoor environment.

Direct Indoor Air Quality Consulting Team for the winning design proposal for the new State of Washington Ecology Department building.

Develop a full-scale ventilation test facility for measuring the performance of air diffusers; ASHRAE 129, Air Change Effectiveness, and ASHRAE 113, Air Diffusion Performance Index.

Develop a chemical emission rate testing laboratory for measuring the chemical emissions from building materials, furnishings, and equipment.

Principle Investigator of the California New Homes Study (2005-2007). Measured ventilation and indoor air quality in 108 new single family detached homes in northern and southern California.

Develop and teach IAQ professional development workshops to building owners, managers, hygienists, and engineers.

Air Pollution Engineer: Earth Metrics Inc., Burlingame, CA, October, 1985 to March, 1987.

Responsible for development of an air pollution laboratory including installation a forced choice olfactometer, tracer gas electron capture chromatograph, and associated calibration facilities. Field team leader for studies of fugitive odor emissions from sewage treatment plants, entrainment of fume hood exhausts into computer chip fabrication rooms, and indoor air quality investigations.

Staff Scientist: Building Ventilation and Indoor Air Quality Program, Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA. January, 1980 to August, 1984.

Deputy project leader for the Control Techniques group; responsible for laboratory and field studies aimed at evaluating the performance of indoor air pollutant control strategies (i.e. ventilation, filtration, precipitation, absorption, adsorption, and source control).

Coordinated field and laboratory studies of air-to-air heat exchangers including evaluation of thermal performance, ventilation efficiency, cross-stream contaminant transfer, and the effects of freezing/defrosting.

Developed an *in situ* test protocol for evaluating the performance of air cleaning systems and introduced the concept of effective cleaning rate (ECR) also known as the Clean Air Delivery Rate (CADR).

Coordinated laboratory studies of portable and ducted air cleaning systems and their effect on indoor concentrations of respirable particles and radon progeny.

Co-designed an automated instrument system for measuring residential ventilation rates and radon concentrations.

Designed hardware and software for a multi-channel automated data acquisition system used to evaluate the performance of air-to-air heat transfer equipment.

Assistant Chief Engineer: Alta Bates Hospital, Berkeley, CA, October, 1979 to January, 1980.

Responsible for energy management projects involving installation of power factor correction capacitors on large inductive electrical devices and installation of steam meters on physical plant steam lines. Member of Local 39, International Union of Operating Engineers.

Manufacturing Engineer: American Precision Industries, Buffalo, NY, October, 1977 to October, 1979.

Responsible for reorganizing the manufacturing procedures regarding production of shell and tube heat exchangers. Designed customized automatic assembly, welding, and testing equipment. Designed a large paint spray booth. Prepared economic studies justifying new equipment purchases. Safety Director.

Project Engineer: Arcata Graphics, Buffalo, N.Y. June, 1976 to October, 1977.

Responsible for the design and installation of a bulk ink storage and distribution system and high speed automatic counting and marking equipment. Also coordinated material handling studies which led to the purchase and installation of new equipment.

PROFESSIONAL ORGANIZATION MEMBERSHIP

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Chairman of SPC-145P, Standards Project Committee - Test Method for Assessing the Performance of Gas Phase Air Cleaning Equipment (1991-1992)
- Member SPC-129P, Standards Project Committee - Test Method for Ventilation Effectiveness (1986-97)
  - Member of Drafting Committee
- Member Environmental Health Committee (1992-1994, 1997-2001, 2007-2010)
  - Chairman of EHC Research Subcommittee
  - Member of Man Made Mineral Fiber Position Paper Subcommittee
  - Member of the IAQ Position Paper Committee
  - Member of the Legionella Position Paper Committee
  - Member of the Limiting Indoor Mold and Dampness in Buildings Position Paper Committee
- Member SSPC-62, Standing Standards Project Committee - Ventilation for Acceptable Indoor Air Quality (1992 to 2000)
  - Chairman of Source Control and Air Cleaning Subcommittee
- Chairman of TC-4.10, Indoor Environmental Modeling (1988-92)
  - Member of Research Subcommittee
- Chairman of TC-2.3, Gaseous Air Contaminants and Control Equipment (1989-92)
  - Member of Research Subcommittee

American Society for Testing and Materials (ASTM)

- D-22 Sampling and Analysis of Atmospheres
  - Member of Indoor Air Quality Subcommittee
- E-06 Performance of Building Constructions

American Board of Industrial Hygiene (ABIH)

American Conference of Governmental Industrial Hygienists (ACGIH)

- Bioaerosols Committee (2007-2013)

American Industrial Hygiene Association (AIHA)

Cal-OSHA Indoor Air Quality Advisory Committee

International Society of Indoor Air Quality and Climate (ISIAQ)

- Co-Chairman of Task Force on HVAC Hygiene

U. S. Green Building Council (USGBC)
- Member of the IEQ Technical Advisory Group (2007-2009)
- Member of the IAQ Performance Testing Work Group (2010-2012)

Western Construction Consultants (WESTCON)

PROFESSIONAL CREDENTIALS

Licensed Professional Engineer - Mechanical Engineering

Certified Industrial Hygienist - American Board of Industrial Hygienists

SCIENTIFIC MEETINGS AND SYMPOSIA

Biological Contamination, Diagnosis, and Mitigation, Indoor Air'90, Toronto, Canada, August, 1990.

Models for Predicting Air Quality, Indoor Air'90, Toronto, Canada, August, 1990.

Microbes in Building Materials and Systems, Indoor Air '93, Helsinki, Finland, July, 1993.

Microorganisms in Indoor Air Assessment and Evaluation of Health Effects and Probable Causes, Walnut Creek, CA, February 27, 1997.

Controlling Microbial Moisture Problems in Buildings, Walnut Creek, CA, February 27, 1997.

Scientific Advisory Committee, Roomvent 98, 6th International Conference on Air Distribution in Rooms, KTH, Stockholm, Sweden, June 14-17, 1998.

Moisture and Mould, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Ventilation Modeling and Simulation, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Microbial Growth in Materials, Healthy Buildings 2000, Espoo, Finland, August, 2000.

Co-Chair, Bioaerosols X- Exposures in Residences, Indoor Air 2002, Monterey, CA, July 2002.

Healthy Indoor Environments, Anaheim, CA, April 2003.

Chair, Environmental Tobacco Smoke in Multi-Family Homes, Indoor Air 2008, Copenhagen, Denmark, July 2008.

Co-Chair, ISIAQ Task Force Workshop; HVAC Hygiene, Indoor Air 2002, Monterey, CA, July 2002.

Chair, ETS in Multi-Family Housing: Exposures, Controls, and Legalities Forum, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

Chair, Energy Conservation and IAQ in Residences Workshop, Indoor Air 2011, Austin, TX, June 6, 2011.

Chair, Electronic Cigarettes: Chemical Emissions and Exposures Colloquium, Indoor Air 2016, Ghent, Belgium, July 4, 2016.

SPECIAL CONSULTATION

Provide consultation to the American Home Appliance Manufacturers on the development of a standard for testing portable air cleaners, AHAM Standard AC-1.

Served as an expert witness and special consultant for the U.S. Federal Trade Commission regarding the performance claims found in advertisements of portable air cleaners and residential furnace filters.

Conducted a forensic investigation for a San Mateo, CA pro se defendant, regarding an alleged homicide where the victim was kidnapped in a steamer trunk. Determined the air exchange rate in the steamer trunk and how long the person could survive.

Conducted *in situ* measurement of human exposure to toluene fumes released during nailpolish application for a plaintiffs attorney pursuing a California Proposition 65 product labeling case. June, 1993.

Conducted a forensic *in situ* investigation for the Butte County, CA Sheriff's Department of the emissions of a portable heater used in the bedroom of two twin one year old girls who suffered simultaneous crib death.

Consult with OSHA on the 1995 proposed new regulation regarding indoor air quality and environmental tobacco smoke.

Consult with EPA on the proposed Building Alliance program and with OSHA on the proposed new OSHA IAQ regulation.

Johnson Controls Audit/Certification Expert Review; Milwaukee, WI. May 28-29, 1997.

Winner of the nationally published 1999 Request for Proposals by the State of Washington to conduct a comprehensive indoor air quality investigation of the Washington State Department of Ecology building in Lacey, WA.

Selected by the State of California Attorney General's Office in August, 2000 to conduct a comprehensive indoor air quality investigation of the Tulare County Court House.

Lawrence Berkeley Laboratory IAQ Experts Workshop: "Cause and Prevention of Sick Building Problems in Offices: The Experience of Indoor Environmental Quality Investigators", Berkeley, California, May 26-27, 2004.

Provide consultation and chemical emission rate testing to the State of California Attorney General's Office in 2013-2015 regarding the chemical emissions from e-cigarettes.

PEER-REVIEWED PUBLICATIONS :

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W.W.Nazaroff, F.J.Offermann, and A.W.Robb, "Automated System for Measuring Air Exchange Rate and Radon Concentration in Houses," *Health Physics*, *45*, pp. 525-537, 1983.

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R.G.Sextro, F.J.Offermann, W.W.Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Evaluation of Indoor Control Devices and Their Effects on Radon Progeny Concentrations," *Atmospheric Environment*, *12*, pp. 429-438, 1986.

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F.J.Offermann, "Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," *ASHRAE Transactions* , Volume 94, Part 1, pp 694-704, 1988.

F.J.Offermann and D. Int-Hout "Ventilation Effectiveness Measurements of Three Supply/Return Air Configurations," *Environment International* , Volume 15, pp 585-592 1989.

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R.G.Sextro and F.J.Offermann, "Reduction of Residential Indoor Particle and Radon Progeny Concentrations with Ducted Air Cleaning Systems," submitted to *Indoor Air*, 1990.

S.A.Loiselle, A.T.Hodgson, and F.J.Offermann, "Development of An Indoor Air Sampler for Polycyclic Aromatic Compounds", *Indoor Air* , Vol 2, pp 191-210, 1991.

F.J.Offermann, S.A.Loiselle, A.T.Hodgson, L.A. Gundel, and J.M. Daisey, "A Pilot Study to Measure Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air* , Vol 4, pp 497-512, 1991.

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance Comparisons of Six Different Air Cleaners Installed in a Residential Forced Air Ventilation System," *IAQ'91*, Healthy Buildings, pp 342-350, ASHRAE, Atlanta, GA (1991).

F.J. Offermann, J. Daisey, A. Hodgson, L. Gundell, and S. Loiselle, "Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air,* Vol 4, pp 497-512 (1992).

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance of Air Cleaners Installed in a Residential Forced Air System," *ASHRAE Journal*, pp 51-57, July, 1992.

F.J. Offermann and S. A. Loiselle, "Performance of an Air-Cleaning System in an Archival Book Storage Facility," *IAQ'92*, ASHRAE, Atlanta, GA, 1992.

S.B. Hayward, K.S. Liu, L.E. Alevantis, K. Shah, S. Loiselle, F.J. Offermann, Y.L. Chang, L. Webber, “Effectiveness of Ventilation and Other Controls in Reducing Exposure to ETS in Office Buildings,” Indoor Air ’93, Helsinki, Finland, July 4-8, 1993.

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F.J. Offermann, "Professional Malpractice and the Sick Building Investigator," *IAQ'96*, Paths to Better Building Environments, pp 132-136, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Standard Method of Measuring Air Change Effectiveness," *Indoor Air,* Vol 1, pp.206-211, 1999.

F. J. Offermann, A. T. Hodgson, and J. P. Robertson, "Contaminant Emission Rates from PVC Backed Carpet Tiles on Damp Concrete", Healthy Buildings 2000, Espoo, Finland, August 2000.

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F.J. Offermann, R. Colfer, P. Radzinski, and J. Robertson, "Exposure to Environmental Tobacco Smoke in an Automobile", Indoor Air 2002, Monterey, California, July 2002.

F. J. Offermann, J.P. Robertson, and T. Webster, "The Impact of Tracer Gas Mixing on Airflow Rate Measurements in Large Commercial Fan Systems", Indoor Air 2002, Monterey, California, July 2002.

M. J. Mendell, T. Brennan, L. Hathon, J.D. Odom, F.J.Offermann, B.H. Turk, K.M. Wallingford, R.C. Diamond, W.J. Fisk, "Causes and prevention of Symptom Complaints

in Office Buildings: Distilling the Experience of Indoor Environmental Investigators", submitted to Indoor Air 2005, Beijing, China, September 4-9, 2005.

F.J. Offermann, "Ventilation and IAQ in New Homes With and Without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

F.J. Offermann, "ASHRAE 62.2 Intermittent Residential Ventilation: What's It Good For, Intermittently Poor IAQ", IAQVEC 2010, Syracuse, CA, April 21, 2010.

F.J. Offermann and A.T. Hodgson, "Emission Rates of Volatile Organic Compounds in New Homes", Indoor Air 2011, Austin, TX, June, 2011.

P. Jenkins, R. Johnson, T. Phillips, and F. Offermann, "Chemical Concentrations in New California Homes and Garages", Indoor Air 2011, Austin, TX, June, 2011.

W. J. Mills, B. J. Grigg, F. J. Offermann, B. E. Gustin, and N. E. Spingarm, "Toluene and Methyl Ethyl Ketone Exposure from a Commercially Available Contact Adhesive", Journal of Occupational and Environmental Hygiene, 9:D95-D102 May, 2012.

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F. J. Offermann, A. T. Hodgson, P. L. Jenkins, R. D. Johnson, and T. J. Phillips, "Attached Garages as a Source of Volatile Organic Compounds in New Homes", HB 2012, Brisbane, CA, July, 2012.

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F. J. Offermann, A. Eagan A. C. Offermann, and L. J. Radonovich, "Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

F. J. Offermann, "Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Building and Environment, Vol. 93, Part 1, 101-105, November, 2015.

F. J. Offermann, "Formaldehyde Emission Rates From Lumber Liquidators Laminate Flooring Manufactured in China", Indoor Air 2016, Belgium, Ghent, July, 2016.

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"Ventilation Measurement Techniques," Presented at the Workshop on Sampling and Analytical Techniques, Georgia Institute of Technology, Atlanta, Georgia, September 26, 1986 and September 25, 1987.

"Buildings That Make You Sick: Indoor Air Pollution", Presented to the Sacramento Association of Professional Energy Managers, Sacramento, CA, November 18, 1986.

"Ventilation Effectiveness and Indoor Air Quality", Presented to the American Society of Heating, Refrigeration, and Air Conditioning Engineers Northern Nevada Chapter, Reno, NV, February 18, 1987, Golden Gate Chapter, San Francisco, CA, October 1, 1987, and the San Jose Chapter, San Jose, CA, June 9, 1987.

"Tracer Gas Techniques for Studying Ventilation," Presented at the Indoor Air Quality Symposium, Georgia Tech Research Institute, Atlanta, GA, September 22-24, 1987.

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"Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," Presented at the American Society of Heating, Refrigeration, and Air Conditioning Engineers Winter Meeting, Dallas, Texas, January 31, 1988.

"Indoor Air Quality, Ventilation, and Energy in Commercial Buildings", Presented at the Building Owners &Managers Association of Sacramento, Sacramento, CA, July 21, 1988.

"Controlling Indoor Air Quality: The New ASHRAE Ventilation Standards and How to Evaluate Indoor Air Quality", Presented at a conference "Improving Energy Efficiency and Indoor Air Quality in Commercial Buildings," National Energy Management Institute, Reno, Nevada, November 4, 1988.

"A Study of Diesel Fume Entrainment Into an Office Building," Presented at Indoor Air '89: The Human Equation: Health and Comfort, American Society of Heating, Refrigeration, and Air Conditioning Engineers, San Diego, CA, April 17-20, 1989.

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NV, October 1-2, 1992; New York City, NY, October 26-27, 1992, Las Vegas, NV, March 18-19, 1993; Lake Tahoe, CA, July 14-15, 1994; Las Vegas, NV, April 3-4, 1995; Lake Tahoe, CA, July 11-12, 1996; Miami, Fl, December 9-10, 1996.

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"Duct Cleaning: Who Needs It ? How Is It Done ? What Are The Costs ?" What Are the Risks ?, Moderator of Forum at the ASHRAE Annual Meeting, Indianapolis ID, June 23, 1991.

"Operating Healthy Buildings", Association of Plant Engineers, Oakland, CA, November 14, 1991.

"Duct Cleaning Perspectives", Moderator of Seminar at the ASHRAE Semi-Annual Meeting, Indianapolis, IN, June 24, 1991.

"Duct Cleaning: The Role of the Environmental Hygienist," ASHRAE Annual Meeting, Anaheim, CA, January 29, 1992.

"Emerging IAQ Issues", Fifth National Conference on Indoor Air Pollution, University of Tulsa, Tulsa, OK, April 13-14, 1992.

"International Symposium on Room Air Convection and Ventilation Effectiveness", Member of Scientific Advisory Board, University of Tokyo, July 22-24, 1992.

"Guidelines for Contaminant Control During Construction and Renovation Projects in Office Buildings," Seminar paper at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

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"Building Air Quality: A Guide for Building Owners and Facility Managers," an EPA one half day indoor air quality introductory workshop for building owners and facility managers. Presented throughout Region IX 1993-1995.

“Techniques for Airborne Disease Control”, EPRI Healthcare Initiative Symposium; San Francisco, CA; June 7, 1994.

“Diagnosing and Mitigating Indoor Air Quality Problems”, CIHC Conference; San Francisco, September 29, 1994.

”Indoor Air Quality: Tools for Schools,” an EPA one day air quality management workshop for school officials, teachers, and maintenance personnel; San Francisco, October 18-20, 1994; Cerritos, December 5, 1996; Fresno, February 26, 1997; San Jose, March 27, 1997; Riverside, March 5, 1997; San Diego, March 6, 1997; Fullerton, November 13, 1997; Santa Rosa, February 1998; Cerritos, February 26, 1998; Santa Rosa, March 2, 1998.

ASHRAE 62 Standard “Ventilation for Acceptable IAQ”, ASCR Convention; San Francisco, CA, March 16, 1995.

“New Developments in Indoor Air Quality: Protocol for Diagnosing IAQ Problems”, AIHA-NC; March 25, 1995.

"Experimental Validation of ASHRAE SPC 129, Standard Method of Measuring Air Change Effectiveness", 16th AIVC Conference, Palm Springs, USA, September 19-22, 1995.

“Diagnostic Protocols for Building IAQ Assessment”, American Society of Safety Engineers Seminar: ‘Indoor Air Quality – The Next Door’; San Jose Chapter, September 27, 1995; Oakland Chapter, 9, 1997.

“Diagnostic Protocols for Building IAQ Assessment”, Local 39; Oakland, CA, October 3, 1995.

“Diagnostic Protocols for Solving IAQ Problems”, CSU-PPD Conference; October 24, 1995.

“Demonstrating Compliance with ASHRAE 62-1989 Ventilation Requirements”, AIHA; October 25, 1995.

“IAQ Diagnostics: Hands on Assessment of Building Ventilation and Pollutant Transport”, EPA Region IX; Phoenix, AZ, March 12, 1996; San Francisco, CA, April 9, 1996; Burbank, CA, April 12, 1996.

“Experimental Validation of ASHRAE 129P: Standard Method of Measuring Air Change Effectiveness”, Room Vent ‘96 / International Symposium on Room Air Convection and Ventilation Effectiveness"; Yokohama, Japan, July 16-19, 1996.

“IAQ Diagnostic Methodologies and RFP Development”, CCEHSA 1996 Annual Conference, Humboldt State University, Arcata, CA, August 2, 1996.

“The Practical Side of Indoor Air Quality Assessments”, California Industrial Hygiene Conference ‘96, San Diego, CA, September 2, 1996.

"ASHRAE Standard 62: Improving Indoor Environments", Pacific Gas and Electric Energy Center, San Francisco, CA, October 29, 1996.

"Operating and Maintaining Healthy Buildings", April 3-4, 1996, San Jose, CA; July 30, 1997, Monterey, CA.

"IAQ Primer", Local 39, April 16, 1997; Amdahl Corporation, June 9, 1997; State Compensation Insurance Fund's Safety & Health Services Department, November 21, 1996.

"Tracer Gas Techniques for Measuring Building Air Flow Rates", ASHRAE, Philadelphia, PA, January 26, 1997.

"How to Diagnose and Mitigate Indoor Air Quality Problems"; Women in Waste; March 19, 1997.

"Environmental Engineer: What Is It?", Monte Vista High School Career Day; April 10, 1997.

"Indoor Environment Controls: What's Hot and What's Not", Shaklee Corporation; San Francisco, CA, July 15, 1997.

"Measurement of Ventilation System Performance Parameters in the US EPA BASE Study", Healthy Buildings/IAQ'97, Washington, DC, September 29, 1997.

"Operations and Maintenance for Healthy and Comfortable Indoor Environments", PASMA; October 7, 1997.

"Designing for Healthy and Comfortable Indoor Environments", Construction Specification Institute, Santa Rosa, CA, November 6, 1997.

"Ventilation System Design for Good IAQ", University of Tulsa 10th Annual Conference, San Francisco, CA, February 25, 1998.

"The Building Shell", Tools For Building Green Conference and Trade Show, Alameda County Waste Management Authority and Recycling Board, Oakland, CA, February 28, 1998.

"Identifying Fungal Contamination Problems In Buildings", The City of Oakland Municipal Employees, Oakland, CA, March 26, 1998.

"Managing Indoor Air Quality in Schools: Staying Out of Trouble", CASBO, Sacramento, CA, April 20, 1998.

"Indoor Air Quality", CSOOC Spring Conference, Visalia, CA, April 30, 1998.

"Particulate and Gas Phase Air Filtration", ACGIH/OSHA, Ft. Mitchell, KY, June 1998.

"Building Air Quality Facts and Myths", The City of Oakland / Alameda County Safety Seminar, Oakland, CA, June 12, 1998.

"Building Engineering and Moisture", Building Contamination Workshop, University of California Berkeley, Continuing Education in Engineering and Environmental Management, San Francisco, CA, October 21-22, 1999.

"Identifying and Mitigating Mold Contamination in Buildings", Western Construction Consultants Association, Oakland, CA, March 15, 2000; AIG Construction Defect Seminar, Walnut Creek, CA, May 2, 2001; City of Oakland Public Works Agency, Oakland, CA, July 24, 2001; Executive Council of Homeowners, Alamo, CA, August 3, 2001.

"Using the EPA BASE Study for IAQ Investigation / Communication", Joint Professional Symposium 2000, American Industrial Hygiene Association, Orange County & Southern California Sections, Long Beach, October 19, 2000.

"Ventilation," Indoor Air Quality: Risk Reduction in the 21st Century Symposium, sponsored by the California Environmental Protection Agency/Air Resources Board, Sacramento, CA, May 3-4, 2000.

"Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

"Closing Session Summary: 'Building Investigations' and 'Building Design & Construction', Healthy Buildings 2000, Espoo, Finland, August 2000.

"Managing Building Air Quality and Energy Efficiency, Meeting the Standard of Care", BOMA, MidAtlantic Environmental Hygiene Resource Center, Seattle, WA, May 23rd, 2000; San Antonio, TX, September 26-27, 2000.

"Diagnostics & Mitigation in Sick Buildings: When Good Buildings Go Bad," University of California Berkeley, September 18, 2001.

"Mold Contamination: Recognition and What To Do and Not Do", Redwood Empire Remodelers Association; Santa Rosa, CA, April 16, 2002.

"Investigative Tools of the IAQ Trade", Healthy Indoor Environments 2002; Austin, TX; April 22, 2002.

"Finding Hidden Mold: Case Studies in IAQ Investigations", AIHA Northern California Professionals Symposium; Oakland, CA, May 8, 2002.

"Assessing and Mitigating Fungal Contamination in Buildings", Cal/OSHA Training; Oakland, CA, February 14, 2003 and West Covina, CA, February 20-21, 2003.

"Use of External Containments During Fungal Mitigation", Invited Speaker, ACGIH Mold Remediation Symposium, Orlando, FL, November 3-5, 2003.

Building Operator Certification (BOC), 106-IAQ Training Workshops, Northwest Energy Efficiency Council; Stockton, CA, December 3, 2003; San Francisco, CA, December 9, 2003; Irvine, CA, January 13, 2004; San Diego, January 14, 2004; Irwindale, CA, January 27, 2004; Downey, CA, January 28, 2004; Santa Monica, CA, March 16, 2004; Ontario, CA, March 17, 2004; Ontario, CA, November 9, 2004, San Diego, CA, November 10, 2004; San Francisco, CA, November 17, 2004; San Jose, CA, November 18, 2004; Sacramento, CA, March 15, 2005.

"Mold Remediation: The National QUEST for Uniformity Symposium", Invited Speaker, Orlando, Florida, November 3-5, 2003.

"Mold and Moisture Control", Indoor Air Quality workshop for The Collaborative for High Performance Schools (CHPS), San Francisco, December 11, 2003.

"Advanced Perspectives In Mold Prevention & Control Symposium", Invited Speaker, Las Vegas, Nevada, November 7-9, 2004.

"Building Sciences: Understanding and Controlling Moisture in Buildings", American Industrial Hygiene Association, San Francisco, CA, February 14-16, 2005.

"Indoor Air Quality Diagnostics and Healthy Building Design", University of California Berkeley, Berkeley, CA, March 2, 2005.

"Improving IAQ = Reduced Tenant Complaints", Northern California Facilities Exposition, Santa Clara, CA, September 27, 2007.

"Defining Safe Building Air", Criteria for Safe Air and Water in Buildings, ASHRAE Winter Meeting, Chicago, IL, January 27, 2008.

"Update on USGBC LEED and Air Filtration", Invited Speaker, NAFA 2008 Convention, San Francisco, CA, September 19, 2008.

"Ventilation and Indoor air Quality in New California Homes", National Center of Healthy Housing, October 20, 2008.

"Indoor Air Quality in New Homes", California Energy and Air Quality Conference, October 29, 2008.

"Mechanical Outdoor air Ventilation Systems and IAQ in New Homes", ACI Home Performance Conference, Kansas City, MO, April 29, 2009.

"Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

"Ten Ways to Improve Your Air Quality", Northern California Facilities Exposition, Santa Clara, CA, September 30, 2009.

"New Developments in Ventilation and Indoor Air Quality in Residential Buildings", Westcon meeting, Alameda, CA, March 17, 2010.

"Intermittent Residential Mechanical Outdoor Air Ventilation Systems and IAQ", ASHRAE SSPC 62.2 Meeting, Austin, TX, April 19, 2010.

"Measured IAQ in Homes", ACI Home Performance Conference, Austin, TX, April 21, 2010.

"Respiration: IEQ and Ventilation", AIHce 2010, How IH Can LEED in Green buildings, Denver, CO, May 23, 2010.

"IAQ Considerations for Net Zero Energy Buildings (NZEB)", Northern California Facilities Exposition, Santa Clara, CA, September 22, 2010.

"Energy Conservation and Health in Buildings", Berkeley High SchoolGreen Career Week, Berkeley, CA, April 12, 2011.

"What Pollutants are Really There ?", ACI Home Performance Conference, San Francisco, CA, March 30, 2011.

"Energy Conservation and Health in Residences Workshop", Indoor Air 2011, Austin, TX, June 6, 2011.

"Assessing IAQ and Improving Health in Residences", US EPA Weatherization Plus Health, September 7, 2011.

"Ventilation: What a Long Strange Trip It's Been", Westcon, May 21, 2014.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Indoor Air 2014, Hong Kong, July, 2014.

"Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

"Chemical Emissions from E-Cigarettes", IMF Health and Welfare Fair, Washington, DC, February 18, 2015.

"Chemical Emissions and Health Hazards Associated with E-Cigarettes", Roswell Park Cancer Institute, Buffalo, NY, August 15, 2014.

"Formaldehyde Indoor Concentrations, Material Emission Rates, and the CARB ATCM", Harris Martin's Lumber Liquidators Flooring Litigation Conference, WQ Minneapolis Hotel, May 27, 2015.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposure", FDA Public Workshop: Electronic Cigarettes and the Public Health, Hyattsville, MD June 2, 2015.

"Creating Healthy Homes, Schools, and Workplaces", Chautauqua Institution, Athenaeum Hotel, August 24, 2015.

"Diagnosing IAQ Problems and Designing Healthy Buildings", University of California Berkeley, Berkeley, CA, October 6, 2015.

"Diagnosing Ventilation and IAQ Problems in Commercial Buildings", BEST Center Annual Institute, Lawrence Berkeley National Laboratory, January 6, 2016.

"A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates From Composite Wood Products", AIHce2016, May, 21-26, 2016.

"Admissibility of Scientific Testimony", Science in the Court, Proposition 65 Clearinghouse Annual Conference, Oakland, CA, September 15, 2016.

"Indoor Air Quality and Ventilation", ASHRAE Redwood Empire, Napa, CA, December 1, 2016.

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November 17, 2025

VIA EMAIL &
ONLINE PUBLIC COMMENT PORTAL
Kathryn Barger, Chair
Hilda L. Solis, Chair Pro Tem
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RE: Agenda Item 25-6126 – Entrada South/Valencia Commerce Center Project – Supplemental Submittal

Dear Supervisors,

Moments ago I submitted a comment letter addressing seven comment letters submitted by three law firms, all of which were implementing a "Late Hit" CEQA litigation threat tactic with the goal of delaying or derailing this Board's consideration of the above-referenced project until such time as the applicant executed a labor agreement with their clients.

Immediately after submitting my comment on the Board's portal, one of the three law firms posted an even later "late hit" that was filed at approximately 6pm the night before the Board convenes its meeting tomorrow at 9:30am. This eighth law firm letter is 284 pages.

The "Latest Hit" of these lawyer letters largely restate comments already made and responded to in the record. The letter also again re-transmits a technical report dated March 8, 2021, which was not prepared for the project at issue, and for reasons explained elsewhere in the record does identify substantive or procedural violations of CEQA pursuant to section 21083.1 of the Public Resources Code that warrant any delayed action by this Board.

What the letter does do is again make clear the objective of this and the other two law firms. This letter demands that the County mandate a "local workforce," and require "all construction workers" to complete a training program developed and offered only by carpenters' unions.

Labor plays a very important role in California and the nation, but weaponizing CEQA to increase wages and limit eligible workers is a "lose lose" for members who will remain unemployed if this Project is delayed or derailed by lawsuits enabled by this potentially last of the three "Latest-Ever" Lawyer Letters submitted to the County over the past 48 hours.

Very truly yours,

HOLLAND & KNIGHT LLP

Jennifer L. Hernandez

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ENTRADA SOUTH/VALENCIA COMMERCE CENTER ADDITIONAL INFORMATION

To:	Eyestone Environmental
From:	Dudek Fire Protection Planning Team
Subject:	Additional Information Related to Response to Comments
Date:	November 2025
Attachment(s):	

This tech memo has been prepared to provide additional information related to responses to comment letters submitted to the Los Angeles County Regional Planning Commission prior to the hearing on October 1, 2025. The information in this memo clarifies and adds to the prior responses to comments but does not change the overall analysis or conclusions. The comments raised issues regarding the following topics:

- Allegations that Section 5.14 of the Final SEIR and the supporting Fire Protection Plan (FPP) fail to analyze the open space directly west-southwest of the Entrada South planning area and, allegedly, instead relies upon an inaccurate conclusory determination that the planning area is surrounded by development to support dismissal of consideration of nearby open space.

- Assertions that that the Fire Protection Plan did not account for the Spineflower Preserve and that the Spineflower Preserve creates a wildfire hazard that was not analyzed.

- Claims that the Wildfire Evacuation Plan (WEP) did not address the proximity to undeveloped land and the risk, impacts, and dangers it poses.

As described herein, these comments do not raise any new material issues and incorrectly characterizes the FPP and Final SEIR. The FPP includes a conservative analysis that accounts for the surrounding adjacent land uses and the regional open space, even modeling wildfire behavior in the precise area that the commenter identifies; the open space to the west-southwest. Further, the Spineflower Preserve was specifically addressed through the Spineflower Preserve Fire Management Plan described in section 3.3.4 of the FPP. Finally, measures described in the FPP as a system of fire protection measures are implemented through regulatory compliance which successfully address the hazard and reduce risk to an acceptable level, as determined by relevant codes and regulations and backed by fire science and with additional benefits of wildfire Project Design Features at the Project site. The comments do not require any changes to the FPP or the related analysis in the SEIR.

Comment Topic No. 1 –FPP Evaluation of Open Space

Contrary to this comment, the FPP accurately and appropriately considers surrounding development as a necessary part of wholistic analysis of wildfire risk, including open space and undeveloped areas. The FPP sets the regional context of the Project in Section 1.2.1, which includes a discussion of the open space and natural areas:

> The Project's region is located in a broad ecological and biogeographic transition zone for the coastal and mountain ecoregions. This alluvial Santa Clara River Valley also provides access via the Santa Clara River to the edges of the Mojave Desert and the foothills of the San Gabriel Mountains. While much of the region has been subject to rapid urbanization and historical agricultural and oil development practices, large areas of open space and natural lands border the region. The Los Padres National Forest is located to the north of the Project Site and the Angeles National Forest lies to the north and east. The Santa Susana Mountains, a region of gently rolling hills and sharp, steep-walled canyons, is south of the Modified Project Site.

The FPP, Section 2.2, describes the fire risk from nearby open space and natural areas that could impact the Modified Project:

> Following proposed development activity in the area, would break up large expanses of non-maintained fuels, however, the proximity of the Modified Project Site to large expanses of open space to the south in the Santa Susana Mountains and potential ignition sources along I-5, SR-126, and surface streets in the Stevenson Ranch, Valencia, and Santa Clarita there remains an increased wildfire hazard in the area. Additionally, the terrain within the Santa Clara River Valley, including multiple sub-drainages and canyons, has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazards in the region.

On page 89 of the FPP within Section 5.2.1.1, which is a project specific assessment of offsite wildfire risk potential, the FPP recognizes that the planned development areas are located near both open spaces and development areas. Examples are provided for Entrada South including Magic Mountain Parkway to the north, The Old Road and Interstate-5 to the east, the Westridge Community to the south, and the Mission Village Project to the west which is currently being developed. On page 90, within the same section, further acknowledgement is given to surrounding areas of development "including community areas, industrial parks, and major roadways" which again, significantly alter the progression of fire. On page 120, within Section 8.1.1.1 which addresses wildfire related construction impacts, acknowledgement is again provided that the Project "is generally surrounded by development and not entirely adjacent to undeveloped, high fuel areas".

Surrounding land uses are an important consideration of wildfire planning due to the interruption of available fuels by conversion of wildland to structures, paved areas, and maintained landscaping thereby disrupting availability of wildfire pathways. The surrounding roadways and adjacent land uses are depicted in Figure 3.0-4 of the EIR Project Description. The FPP appropriately considered these immediately adjacent land uses, acknowledging that they create fuel breaks which impact regional fire progression. Nonetheless, the FPP also addresses open space land uses not immediately adjacent to Entrada South in Section 1.2.1 – Location and analyzes fire behavior on adjacent land uses through fire behavior modeling in Section 4 – Modeling: Anticipated Fire Behavior. As noted above, in Section 1.2.1, the FPP acknowledges the rapid urbanization of the area, but points out that open space and natural land border the region. In Section 4, fire behavior is modeled on the southeast facing slope to the southeast of the Entrada South project site between the Project and The Old Road, the south-facing slope south of the Entrada South project site between the Project and The Oaks Golf Course, and north facing slope west-southwest of the Entada South project site in the open space across Westridge Parkway. The vegetation types analyzed are identified in Figure 6A of the FPP, and the fire behavior scenarios are demonstrated geographically in Figure 7A. Both of these figures demonstrate the open space to the west-southwest along with the ongoing grading and development of the Mission Village planning area.

Fire behavior modeling to the west-southwest considered on-shore fire behavior, given that a wind from the southwest would direct fire towards the Project site. The modeling results indicated that fire moving through the vegetation in the wildland west of Westridge Parkway would produce 15-foot flame lengths with an intensity of 2,059 BTU/feet/second and ember spotting up to 0.5 miles ahead of the flaming front.

As discussed throughout the FPP, the project is required to comply with the requirement to provide Fuel Modification Zones (FMZs), a reliable means of slowing wildfire by removing available fuels from the path of the fire. These FMZs would be provided between the southwestern structures and the open space, to include 100 feet of FMZ compliant landscaping on the Project site and 100 feet of paved Westridge Parkway with adjacent pedestrian/bike trails. Further, there is 100 feet of roadside vegetation maintenance along the west side of Westridge parkway. This provides 300 feet of separation between the Project structures and the open space, which is 20 times wider than the 15-foot flame lengths expected in the area. This FMZ will protect the structures from ignition related to direct-flame impingement, radiant heating, or convective heating, but the modeling supports that embers may travel 0.5 miles ahead of the fire front. Should embers fall onto the Project area, they would fail to find available fuel as a result of the FMZs, specifically Zone 0 which requires the complete omission of combustibles within 5 feet of the structures and Zone 1 which is an irrigated limited planting area within 30 feet of homes.

Structures are also required to comply with the ignition resistant construction requirements of Chapter 7A of the California Building Code (CBC), hardening the structures and preventing means of ignition from embers through non-combustible exterior finishes and protected vents. Exhibit 1 was prepared for the Los Angeles County Regional Planning Commission Meeting on October 1, 2025, and demonstrates these features.

Exhibit 1 – Ignition resistant Construction Requirements per Chapter 7A of CBC

The commenter states that fire in the open space to the west-southwest would have a "direct pathway to the Entrada South planning area," but this comment is not accurate because land uses around the Modified Project site and the required FMZs will interrupt that potential fire pathway. The adjacent Mission Village development and Westridge Parkway are important considerations of the wildfire analysis; their role in buffering the Entrada South project from a potential wildfire is a realistic consideration that would disrupt fire progression due to the elimination of vegetative fuels.

Further, the FPP does thoroughly address wildfire in the open spaces beyond immediate improvements surrounding the Project site, even modeling fire in those areas. While fire would not be able to progress directly to the project site given the elimination of fuels through FMZs and surrounding roadways and development that act as fire breaks, modeling did identify that ember spotting could occur and impact the project. However, through compliance with FMZ requirements throughout the Project site and Chapter 7A, the Project is protected from ignition by embers and the analysis determined that impacts to the Modified Project would be less than significant. As extensively detailed in the FPP, Final SEIR and responses to comments, the modern master-planned communities, such as the Modified Project, have proven to be highly resistant to wildfires.

Valencia Commerce Center

Similar to Entrada South, wildfire analysis considers both open space and adjacent land uses in the wholistic wildfire analysis of VCC, including the regional context provided above. As stated in 5.2.1.1 of the FPP, "the VCC planning area is similarly surrounded by areas of development including industrial areas, the Hasley Canyon Community, Highway 126, and Interstate-5". These immediately adjacent areas of development function as fuel breaks and limit potential for wildfire progression from the regional wildland. This is depicted in Figure 3.0-5 of the EIR Project Description and again in Figure 6B and 7B within the FPP. Required FMZs are achieved through onsite landscaping or offsite equivalencies and buffer the project structures from open space adjacent to or within the Project area which will prevent the opportunity for direct flame impingement, convective heat contact, or radiant heat contact with the structures. The VCC planning area is also required to comply with Chapter 7A requirements and onsite FMZs which eliminate susceptible fuel beds for embers. As extensively detailed in the FPP, Final SEIR and responses to comments, the modern master-planned communities, such as the Modified Project, have proven to be highly resistant to wildfires.

Comment Topic No. 2 – FPP Considered Spineflower Preserve

The FPP addresses the Spineflower Preserve in various locations, including it as a component of the Project in Section 1.2.3.2 Modified Project Description and further analyzing the preserve area in 3.3.4 – Spineflower Preserve Fire Management Plan. As discussed in the FPP, the Fire Management Plan for the Spineflower Preserve was developed to avoid and minimize direct and indirect impacts on the San Fernando Valley Spineflower. As stated in the FPP, annual thinning is required in the portion of the Spineflower Preserve that overlaps the Fuel Modification Zones (FMZs). Fuel modification activities are allowed in the Preserve as necessary to satisfy the fuel modification requirements but are limited to selective thinning with hand tools to allow maximum preservation of the Spineflower populations. This method of selective thinning by hand eliminates fuels in accordance with requirements for FMZs while protecting the Spineflower population.

The commenter implies that the inclusion of the Spineflower Preserve in the Project increases proximity to wildland which could support the uncontrolled spread of wildfire into the Project. In reality, the Project provides fully compliant FMZs on the project area between project structures and the Spineflower Preserve, then continues the fuel management into the preserve area through implementation of the Spineflower Preserve Fire Management

Plan. FMZs are highly effective at protecting project structures from wildfire by eliminating fuels from a wildfire's pathway; the effectiveness of FMZs has been thoroughly discussed in Section 3.2 of the FPP. As discussed above and extensively detailed in the FPP, Final SEIR and responses to comments, the modern master-planned communities, such as the Modified Project, have proven to be highly resistant to wildfires.

Comment 3 –Wildland Fire Evacuation Plan Address Fire Risks of Undeveloped Areas

Comments incorrectly assert that the Wildfire Evacuation Plan (WEP) did not account for surrounding development, which is not the case and the WEP accurately analyzed and disclosed potential impacts. On page 4 of the Wildfire Evacuation Plan (WEP) within Section 1.5 - California Office of Attorney General's Guidance, the statement is made that "the Project is a higher density, clustered development that does not have an extended, intermix "edge" with a wildland interface area". This statement is made in response to the previously stated excerpt from the AG guidance that projects should be analyzed relative to the particular risk. In the case of the Project, that risk was substantiated in the FPP.

As discussed throughout the FPP and herein in response to comment 1, the FPP evaluated how wildfire would move through the area and how regulatory compliance would adequately protect the structures with the additional benefit of Project Design Features. There are two methods by which wildfire may impact a project. Wildfire could impact a project by directly igniting structures through direct flame impingement, convective heat transfer, or radiant heat transfer. Wildfire could also impact a project through showering embers upon the Modified Project which can create an ignition when the ember comes in contact with untreated landscape or structures. Through regulatory compliance with FMZ requirements and Chapter 7A Ignition Resistant Construction Requirements, the Modified Project is protected both from direct contact with wildfire and contact with embers. The surrounding improvements identified in the FPP such as the surrounding roadways and developed areas, have a tangible effect on wildfire movement, because they replace fuels with paved areas, treated landscapes, and structures.

The WEP's analysis that "the Project is a higher density, clustered development that does not have an extended, intermix "edge" with a wildland interface area" is in response to the findings from the FPP. This statement differentiates the Modified Project from developments with structures intermixed within wildland,[1] which is not the case for the Project because it has defined clustered areas that are separated from open space, not intermixed. Each clustered development area for the Modified Project includes paved areas, Chapter 7A compliant structures, and landscape compliant with FMZ regulations and is separated from open space by compliant FMZs. This is in stark contrast to an intermix community where untreated fuels weave around structures and create fire pathways through a community.

A comment specifically quotes a portion of a sentence from page 115 of the FPP: "the Modified Project is surrounded by exi[s]ting development and infrastructure and located in a relatively high-density area". The commenter does not include that the sentence continues on to state "…it is more likely that if evacuation were to occur it would occur in a stagged manner". The full sentence as written identifies that the Modified Project is located around existing development, including the City of Santa Clarita, with major roadway arterials, including I-5, Highway 126, The Old Road, and other major roadways, and that evacuation would be carried out in a staged (phased) manner, when possible, utilizing the various roadways available to Project occupants to evacuate those most at risk prior to those less proximate to the fire. The WEP correctly analyzes the evacuation risk for the Modified Project's

[1] https://www.nist.gov/el/fire-research-division-73300/wildland-urban-interface-fire-73305/hazard-mitigation-methodology-9

regional location in contrast to low-density intermix areas that do not have multiple roadways available for evacuation and do not have the ability to phase evacuation. Section 4.1 of the WEP analyzes how phased evacuations could occur based on the regional roadway network that exists and will be available to the Project. In addition, the WEP completed a conservative modeling analysis that analyzed a worst-case mass evacuation, providing that analysis as a worst-case baseline and noting that the County's ability to phase evacuations would improve upon this worst-case model.

Specifically, Appendix C of the WEP is the evacuation modeling and analysis, which modeled a mass evacuation of the existing conditions, the 2017 approved project, and the modified project. The modeling accounted for 4,763 residents in the communities surrounding VCC including North Bluffs, Halsey Hills, Halsey Canyon, Live Oak, and others. In an effort to remain conservative, the modeling did not take into account the proposed secondary emergency access (see Figure 5.9-6 from the Transportation section of the EIR) road that will connect the existing Live Oak Road with the VCC planning area, providing an alternate route to residents of Live Oak Canyon. The modeling concluded that the evacuation times remained unchanged or slightly improved when comparing the modified project against the 2017 approved project, therefore, the Modified Project would not result in a new significant impact related to evacuation.

Entrada South and Valencia Commerce Center Project

Additional Information Related to Responses to Comment Letters Submitted Prior to Regional Planning Commission Hearing

A. Supporters Alliance For Environmental Responsibility (SAFER)

This document provides additional information regarding the responses to the comment letter submitted on behalf of Supporters Alliance For Environmental Responsibility (SAFER) on September 29, 2025, regarding the Entrada South and Valencia Commerce Center Project being heard before the Los Angeles County Regional Planning Commission on October 1, 2025. This additional information clarifies and adds to the prior responses to comments but does not change the overall analysis or conclusions. These comments do not require any changes to the SEIR.

The SAFER comment letter repeatedly asserted that the Entrada South / VCC Project Supplemental Environmental Impact Report (SEIR) did not appropriately disclose the project's significant and unavoidable impacts. These comments are not correct. The SEIR accurately and appropriately described and disclosed the project's significant and unavoidable impacts consistent with CEQA. The SEIR clearly discloses, throughout Section 2.0 (Executive Summary), Section 5.0 (Environmental Impact Analysis), and Section 7.0 (Other Environmental Considerations), which impacts were significant and unavoidable in the State-certified EIR and whether the Modified Project would cause any new or substantially more severe significant impacts.

As discussed in Topical Response 1 of the SEIR, when preparing a subsequent CEQA document, the lead agency focuses on whether the modified project may result in new or substantially more severe significant impacts compared to the original project based on changes to the project, changes in circumstances, or new information that was not known or could not have been known at the time of the prior EIR. As described in Section 3.0, Project Description, of the SEIR, the Modified Project Site is located within the development area analyzed by the State-certified EIR, the State-approved Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP), which was the subject of an EIR and the Additional Environmental Analysis that was certified by the California Department of Fish and Wildlife (CDFW) in 2017 (SCH No. 2000011025; "State-certified EIR"). The residential and commercial development of the Modified Project as currently proposed includes only minor changes and refinements and environmental enhancements as compared to the 2017 Project. Accordingly, the SEIR appropriately discloses whether the prior 2017 Project has significant and unavoidable impacts as identified in the State-certified EIR and then evaluates whether the Modified Project would result in any new or substantially more severe significant impacts.

Air quality is illustrative of how the SEIR analyzes and discloses impacts. The following provides a detailed example of how Air Quality significant and unavoidable impacts are described and analyzed in the SEIR.

First, the Draft SEIR describes the 2017 Project's significant and unavoidable air quality impacts on pages 2.0-24 and 2.0-25 as follows:

> "The State-certified EIR determined that construction in the Entrada South and VCC Planning Areas would generate emissions of volatile organic compounds (VOC), nitrogen oxides (NOX), respirable particulate matter (PM10), and fine particulate matter (PM2.5) that exceed the SCAQMD thresholds of significance. Thus, construction-related air quality impacts would be significant, as concluded in the State-certified EIR. Mitigation Measures RMDP/SCP-AQ-1 through RMDP/SCP-AQ 12 and measure VCC-AQ-1 for VCC construction would reduce construction-related emissions to some extent; however, the State-certified EIR determined that such impacts would remain significant and unavoidable within each planning area. The State-certified EIR also found that cumulative impacts related to these pollutants also would be significant and unavoidable. Similarly, the State-certified EIR concluded localized construction emissions of NO2, PM10, and PM2.5 would be significant and unavoidable.
>
> The State-certified EIR indicated operation of the land uses proposed within the Entrada South and VCC Planning Areas would generate operational emissions of VOC, NOX, CO, PM10, and PM2.5 that exceed the thresholds of significance, and as such operational air quality impacts would be significant. The State-certified EIR assumed air emissions associated with the daily operations using URBEMIS2007. Mitigation Measures RMDP/SCP-AQ-13 through RMDP/SCPAQ-16 and measure VCC-AQ-2 for VCC operations would reduce emissions, but operational air quality impacts would remain significant and unavoidable, as determined by the State-certified EIR. Impacts related to the exposure of sensitive receptors to substantial pollutant concentrations and cumulative impacts likewise would be significant and unavoidable, as concluded in the State-certified EIR."

Table 2.0-2 of the Draft SEIR summarizes each significant and unavoidable impact of the 2017 Project and the corresponding Modified Project conclusion, such as shown on the following graphic:

Table 2.0-2
Summary of Environmental Impacts, Mitigation Measures, and Resulting Levels of Significance

Environmental Issue and Threshold	State-certified EIR Significance Conclusion	Modified Project Impact Conclusion	Applicable Mitigation Measures[a]
A. AIR QUALITY			
Threshold 5.1-1: Would the Project conflict with or obstruct Implementation of applicable air quality plans of the South Coast AQMD (SCAQMD)?	Less Than Significant	No New Significant Impact	**Previously Approved Applicable Mitigation from the State-certified EIR** **RMDP/SCP-AQ-3:** Suspend the use of all construction equipment during first-stage smog alerts. **RMDP/SCP-AQ-4:** Use electricity or alternative fuels for on-site mobile equipment instead of diesel equipment, to the extent feasible. **RMDP/SCP-AQ-5:** Maintain construction equipment by conducting regular tune-ups according to the manufacturer's recommendations. **RMDP/SCP-AQ-6:** Use electric welders to avoid emissions from gas or diesel welders, to the extent feasible. **RMDP/SCP-AQ-7:** Use on-site electricity or alternative fuels rather than diesel-powered or gasoline-powered generators, to the extent feasible. **RMDP/SCP-AQ-12a.** Construction shall be planned in such a way as to minimize heavy construction activity involving the use of diesel-fueled construction equipment within 500 meters of an occupied residence to the extent practical. Heavy construction activity that occurs within 500 meters of an occupied residence that involves the use of diesel-fueled construction equipment shall prohibit non-essential idling and shall utilize equipment certified to the Tier 2 or newer emission standard. Equipment shall be routed in such a way as to minimize travel within 500 meters of an occupied residence to the extent
Threshold 5.1-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			
Regional Emissions			
Construction	**Significant and Unavoidable**[b]	No Substantial Increase in Severity of Impact	
Operation	**Significant and Unavoidable**[b]	No Substantial Increase in Severity of Impact	
Localized Emissions			
Construction	**Significant and Unavoidable**[b]	No Substantial Increase in Severity of Impact	
Operation	Less Than Significant	No New Significant Impact	
Threshold 5.1-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?			
Localized Emissions			
Construction	**Significant and Unavoidable**[b]	No Substantial Increase in Severity of Impact	

For additional specifics, each topical section of the SEIR includes a detailed summary of the State-certified EIR's impact conclusions that describe the significant and unavoidable impacts of the 2017 Project, such as pages 5.1-36 to 5.1-37 of the Draft SEIR describing Air Quality:

> "The State-certified EIR determined that construction in the Entrada South and VCC Planning Areas would generate emissions of volatile organic compounds (VOC), nitrogen oxides (NOX), respirable particulate matter (PM10), and fine particulate matter (PM2.5) that exceed the SCAQMD thresholds of significance. Thus, construction-related air quality impacts would be significant, as concluded in the State-certified EIR. Mitigation Measures RMDP/SCP-AQ-1 through RMDP/SCP-AQ-12 and measure VCC-AQ-1 for VCC construction would reduce construction-related emissions to some extent; however, the State-certified EIR determined that such impacts would remain significant and unavoidable within each planning area. The State-certified EIR also found that cumulative impacts related to these pollutants also would be significant and unavoidable. Similarly, the State-certified EIR concluded localized construction emissions of NO2, PM10, and PM2.5 would be significant and unavoidable. The State-certified EIR, Section 4.7, relied upon OFFROAD2007 emission factors and other

parameters provided in URBEMIS2007.24 Even with implementation of the mitigation measures RMDP/SCP-AQ-12 and -12A as described in the State-certified EIR, construction equipment was assumed by the State-certified EIR to include Tier 1 and Tier 2 equipment.

The State-certified EIR indicated operation of the land uses proposed within the Entrada South and VCC Planning Areas would generate operational emissions of VOC, NOX, CO, PM10, and PM2.5 that exceed the thresholds of significance, and as such operational air quality impacts would be significant. The State-certified EIR assumed air emissions associated with the daily operations using URBEMIS2007. Mitigation Measures RMDP/SCP-AQ-13 through RMDP/SCP-AQ-16 and measure VCC-AQ-2 for VCC operations would reduce emissions, but operational air quality impacts would remain significant and unavoidable, as determined by the State-certified EIR. Impacts related to the exposure of sensitive receptors to substantial pollutant concentrations and cumulative impacts likewise would be significant and unavoidable, as concluded in the State-certified EIR.

With respect to health risk, the State-certified EIR concluded that health impacts associated with construction of the 2017 Project would be less than significant for both cancer and noncancer risks. Moreover, implementation of air quality Mitigation Measures RMDP/SCP-AQ-1, RMDP/SCP-AQ-3 through RMDP/SCP-AQ-7, RMDP/SCP-AQ-10, and RMDP/SCP-AQ-11, which were recommended to mitigate criteria pollutant impacts, would further reduce health risk impacts.

As also evaluated in the State-certified EIR, development of the Entrada South and VCC Planning Areas would not conflict with or obstruct implementation of the SCAQMD's AQMP. In addition, no odor-generating activities would result from construction or operation of the Entrada and South VCC Planning Areas, nor from the creation of the spineflower preserve within Entrada South. Therefore, such impacts were determined in the State-certified EIR to be less than significant."

Further, the Draft SEIR also includes multiple tables presenting modeling results that clearly show the significant and unavoidable impacts of the 2017 Project by pollutant category and emissions levels (e.g., for VOCs, NOx, CO, Sox, PM10, and PM2.5), while identifying whether the emissions exceed the SCAQMD significance thresholds, as shown on the following example Table 5.1-5. The table also includes the Modified Project's net change in emissions by pollutant category and emissions levels (e.g., for VOCs, NOx, CO, Sox, PM10, and PM2.5) and demonstrates that those emissions are below the SCAQMD significance thresholds.

Table 5.1-5
Estimate of Incremental Change in Maximum Regional Project Daily Operational Emissions—Entrada South Planning Area (Winter Emissions)[a]

Emission Source	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2017 Project (State-certified EIR Air Quality Analysis)						
Total Unmitigated Emissions	174	106	647	1.7	325	64
Total Mitigated Emissions[b]	170	95	613	1.7	310	61
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant Impact Identified in the State-Certified EIR Air Quality Analysis?	Yes	Yes	Yes	No	Yes	Yes
Modified Project (Incremental Change in Emissions from State-certified EIR Air Quality Analysis)						
Total Unmitigated Emissions	107	92	644	2	61	17
Total Mitigated Emissions[c]	87	54	285	1	59	16
Net Change	**(83)**	**(41)**	**(328)**	**(1)**	**(251)**	**(45)**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
New Significant Impact or Substantial Increase for the Modified Project?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *The CalEEMod model printout sheets and/or calculation worksheets are presented in **Appendix 5.1** (CalEEMod Output) of this SEIR.*

[b] *Total mitigated emissions include the air quality mitigation identified in the State-certified EIR, where readily quantifiable.*

[c] *Total mitigated emissions include the air quality co-benefits of the Net Zero Newhall mitigation.*

Source: RAMBOLL, 2024.

In sum, the above examples of one topic area—Air Quality—provide additional information supporting the prior response that the SEIR accurately and appropriately describes and discloses the project's significant and unavoidable impacts. The SEIR discloses the 2017 Project's significant and unavoidable impacts and analyzed and disclosed whether the Modified Project would result in new or substantially more severe significant impacts based on changes to the project, changes in circumstances, or new information that was not known or could not have been known at the time of the prior EIR.

For reference, as described in Section 2.0 of the SEIR and in topical sections, the following significant and unavoidable impacts are identified in the SEIR:

- Air Quality: The State-certified EIR determined that construction in the Entrada South and VCC Planning areas would generate emissions of volatile organic compounds (VOC), nitrogen oxides (NOX), respirable particulate matter (PM10), and fine particulate matter (PM2.5) that exceed the South Coast Air Quality Management District ("SCAQMD") thresholds of significance. The State-certified EIR also found that cumulative impacts related to these pollutants also would be significant and unavoidable. As described in the SEIR, the Modified Project would not result in any new or

substantially more severe significant impacts related to air quality as compared to the State-certified EIR.

- Land Use: The State-certified EIR determined a significant and unavoidable project-level impact associated with conflicts with an applicable land use plan, policy, or regulation would occur due to establishment of a Spineflower preserve in the Entrada South site, which would conflict with the site's then existing agricultural zoning. However, following the certification of the State-certified EIR, this conflict has been eliminated because the agricultural zoning for the Spineflower preserve within the Entrada South Planning Area was removed by the updated Santa Clarita Valley Area Plan. As described in the SEIR, the Modified Project would not result in any new or substantially more severe significant impacts related to land use as compared to the State-certified EIR.

- Noise: The State-certified EIR identified significant and unavoidable cumulative operational traffic noise impacts along 11 roadway segments based on the full development analyzed in the State-certified EIR. As described in the SEIR, the Modified Project would not result in any new or substantially more severe significant impacts related to noise as compared to the State-certified EIR.

- Wildfire: The State-certified EIR determined that cumulative wildfire impacts would be significant and unavoidable. In reaching this conclusion, the State-certified EIR identified mitigation measures that would reduce cumulative impacts if implemented by the projects considered in the cumulative analysis. Since the time of the preparation of the State-certified EIR, the measures identified in the State-certified EIR are now required on new development as a matter of regulatory compliance due to the increased stringency of applicable Fire and Building Codes and other regulatory requirements related to wildfire safety. As described in the SEIR, the Modified Project would not result in any new or substantially more severe significant impacts related to wildfire as compared to the State-certified EIR.

- Solid Waste: The State-certified EIR identified significant and unavoidable cumulative solid waste impacts related to increases in the generation of solid waste that requires landfill disposal. At the time of publication of the State-certified EIR, the County had not identified an adequate supply of landfill space beyond 2020. Accordingly, the increase in solid waste disposal was considered a significant and unavoidable impact. However, since the State-certified EIR was certified, adequate disposal capacity through 2036 has been identified by the County. As described in the SEIR, the Modified Project would not result in any new or substantially more severe significant impacts related to solid waste.

B. Coalition for Responsible Equitable Economic Development Los Angeles (CREED LA)

This document provides additional information regarding the response to the comment letter submitted on behalf of Coalition for Responsible Equitable Economic Development Los Angeles (CREED LA) on September 30, 2025, regarding the Entrada South and Valencia Commerce Center Project being heard before the Los Angeles County Regional Planning Commission on October 1,

2025. This additional information clarifies and adds to the prior responses to comments but does not change the overall analysis or conclusions. These comments do not require any changes to the SEIR.

The CREED comment letter made various, unsupported statements about the County being unable to make findings required by the County Code, including that the County could not make findings related to "County Code Section 22.166.05, a Discretionary Housing Permit." These comments are incorrect.

County staff has identified the required housing permit as an Administrative Housing Permit under County Code Chapter 22.166. County Code section 22.166.040 provides "an application that meets all of the requirements for an Administrative Housing Permit shall be approved," subject only to limited exceptions, which are not applicable here. As described in the staff report presented to the Regional Planning Commission, the Modified Project complies with the Administrative Housing Permit requirements.

The commenter asserts without explanation that findings for a Discretionary Housing Permit are needed. As noted above, and to clarify the prior response to this comment, the Modified Project includes an Administrative Housing Permit No. RPPL2024000343 and not a Discretionary Housing Permit. The commenter has not provided evidence or explanation on why the Discretionary Housing Permit findings in Section 22.166.05 would apply, which is not the case.

However, to provide additional information for purposes of the response to this comment, it is noted that the distinction between an Administrative Housing Permit and a Discretionary Housing Permit does not affect the Board considering the Modified Project because the Modified Project includes multiple discretionary approvals that require Board review and approval. The Board review is supported by substantial evidence in the administrative record, including related to the Conditional Use Permit, Parking Permit, Oak Tree Permit, Vesting Tentative Tract Map, Zone Change, and Development Agreement, the Final SEIR, staff reports, and the associated findings recommended by the Regional Planning Commission.

Further, it is noted that even if the Discretionary Housing Permit findings were applicable as the commenter asserts (which is not the case), there is substantial evidence in the record to satisfy the findings for a Discretionary Housing Permit pursuant to County Code section 22.166.050(B)(2).[1] Specifically, the Final SEIR, findings recommended by the Regional

[1] County Code section 22.166.050(B)(2), Findings, provides:
"a. The project will be consistent with the General Plan.
b. The project will not: i. Adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area or within the project; ii. Be materially detrimental to the use, enjoyment, or valuation of property of other persons located in the vicinity of the site; and iii. Jeopardize, endanger, or otherwise constitute a menace to the public health, safety, or general welfare.
c. The project site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area.

Planning Commission, and other evidence in the record, such as the staff report, map applications, and Transportation Impact Analysis, demonstrate that the Modified Project:

- is consistent with the General Plan and Santa Clarita Valley Area Plan (Section 22.166.050(B)(2)(a));

- must comply with mitigation measures and regulatory conditions, as reflected in the Final SEIR, and conditions of approval, that ensure the Modified Project will not result in new or substantially more severe significant impacts compared to the 2017 Project and will address air quality, health risk, noise, and other topics consistent with County standards and therefore will not affect the health, peace, comfort, be materially detrimental to the use, enjoyment, or valuation of property of others, or welfare, or jeopardize, endanger, or otherwise constitute a menace to the public health, safety, or general welfare (Section 22.166.050(B)(2)(b));

- includes sites that are adequate in size, shape, and service infrastructure to integrate the proposed uses and amenities as shown on the VTPM and VTTM applications (Section 22.166.050(B)(2)(c));

- includes sites that are adequately served by highways and streets of sufficient width to carry the kind and quantity of traffic the proposed uses would generate and by other public or private service facilities as demonstrated in the project's Transportation Impact Analysis (Section 22.166.050(B)(2)(d));

- is complimentary to the surrounding area in terms of land use patterns and design by integrating with the adjacent Newhall Ranch Specific Plan and other nearby communities (Section 22.166.050(B)(2)(e));

- has not requested the use of incentives, waivers, or reductions of development standards as part of the current entitlements (Section 22.166.050(B)(2)(f));

- is contributing to satisfying the affordable housing needs of the unincorporated County through the affordable housing program included in the Development Agreement that exceeds the requirements of the Inclusionary Housing Ordinance (Section 22.166.050(B)(2)(g)).

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d. The project site is adequately served: i. By highways or streets of sufficient width, and improved, as necessary, to carry the kind and quantity of traffic such use would generate; and ii. By other public or private service facilities, as are required.
e. The project is complimentary to the surrounding area in terms of land use patterns and design.
f. Any incentives, waivers, or reductions of development standards will contribute to the use and enjoyment of persons residing within the project.
g. The project will contribute to satisfying the affordable housing needs of the unincorporated areas of Los Angeles County."

Accordingly, contrary to the comment, substantial evidence supports the County's findings.

860 Hampshire Road, Suite P
Westlake Village, CA 91361

Date: November 2025

To: Eyestone Environmental

From: Christ Kirikian
Partner | Director of Air Quality & Acoustics

Subject: Additional Information Related to Response to Comments: Entrada South and Valencia Commerce Center Project (SCH No. 2000011025), Western States Regional Council of Carpenters

Western States Regional Council of Carpenters submitted a comment letter to the County of Los Angeles Regional Planning Commission on September 30, 2025 regarding the above-stated project (WSRCC Letter). Written responses were provided to the WSRCC Letter and posted on the County's website. This memo provides additional information related to those responses, in particular, information addressing items raised by a letter from Wilson Ihrig, dated September 24, 2025, which was attached to the WSRCC Letter. The information in this memo clarifies and adds to the prior responses to comments but does not change the overall analysis or conclusions. The comments do not require any changes to the Noise Study or SEIR.

Wilson Ihrig Comment 3-1

As requested, we have reviewed the information and noise impact analysis for the Final Supplemental Environmental Impact Report (FSEIR) for the Entrada South and VCC Project in Valencia, California, State Clearinghouse Number 2000011025. This letter is based on the responses to our letter dated February 12th 2025, based on comments 7-22 through 7-25, as well as 7-55 through 7-65.

Additional Information in Response to Wilson Ihrig Comment 3-1

No further response is needed to this introductory comment.

Wilson Ihrig Comment 3-2

These comments summarize our concerns regarding the potential for groundborne noise impacts at the Grace to You Christian Ministry located in the building at 28001 Harrison Parkway. The comment details how construction vibration was analyzed at the site, showing no potential for damage to structures. The comment then includes an analysis of groundborne noise for potential impacts to radio operations based on traffic noise. The FSEIR concludes that the potential noise level of 37 dBA is 13.6 dBA lower than existing groundborne roadway levels.

Additional Information in Response to Wilson Ihrig Comment 3-2

The comment summarizes findings presented in the FSEIR regarding construction vibration and groundborne noise at the Grace to You Christian Ministry. No further response is necessary.

Wilson Ihrig Comment 3-3

The response does not accurately categorize groundborne noise. The 'FTA conversion factor' referenced in the FSEIR is intended to convert from "ground-borne vibration levels to ground-borne noise levels" (FTA[1], page 145) not from an outdoor noise level to an indoor noise level, as the FEIR erroneously applies. Groundborne noise is the phenomenon of vibration being transmitted through the ground that then radiates into building structures. This is usually heard as a low rumble, as opposed to the whoosh of traffic. The CNEL is already a noise level; there is no conversion from the exterior noise to the noise caused by vibrations, as the CNEL does not categorize vibration levels. Additionally, traffic produces low source vibration levels, so groundborne noise is rarely a problem, unlike for high vibration sources such as construction equipment or trains. This is for two reasons: vehicle suspensions and tires act as dampers, isolating most vibration before it reaches the ground, and the frequency content is typically higher, which is not transmitted as efficiently through soil. As it stands, the FSEIR's analysis does not accurately categorize current noise levels heard within the Grace to You recording studios. We reiterate our comment that vibration from vibratory rollers propagating as noise into the nearby recording studio has the potential to result in a significant impact, and recommend including mitigation measures such as coordination between Grace to You recording schedules and high-vibration construction activities within a certain buffer zone.

Additional Information in Response to Wilson Ihrig Comment 3-3

The commenter mischaracterizes the application of the FTA guidance as presented in the FSEIR. The FTA Transit Noise and Vibration Impact Assessment Manual (September 2018) provides guidance on this conversion (FTA Table 6-14) and notes that groundborne noise is generally only relevant where vibration sources are high amplitude and low frequency, such as trains, pile drivers, or large vibratory equipment operating in close proximity to sensitive receptors. As also acknowledged by the commenter, traffic is typically not a source of significant groundborne noise. The FSEIR's analysis is consistent with FTA guidance and confirms that traffic-induced groundborne vibration at the Grace to You Christian Ministry site is low, and that the estimated groundborne noise level of 37 dBA from vibratory rollers would be more than 13 dBA lower than the existing ambient vibration-related noise levels in the area. This supports the conclusion that no perceptible or adverse impact to radio broadcast operations from construction-related groundborne noise would occur and impacts would be less than significant. Furthermore, even under worst-case scenarios involving the use of vibratory rollers at the closest approach distance, vibration levels would not exceed the FTA's criteria for damage to non-engineered structures or annoyance at sensitive receptors.

Based on the conservative analysis of both vibration and groundborne noise levels, the FSEIR concludes that significant impacts would not occur, and therefore, contrary to the comment, no additional mitigation is required under CEQA.

Wilson Ihrig Comment 3-4

These comments detail how the use of mufflers is an effective noise control measure for noise reduction. We agree that mufflers are a best practice noise control measure. However, there is no proof in either the DSEIR or the FSEIR that the use of mufflers would reliably reduce noise levels. The Federal Highway Administration (FHWA) Construction Noise Handbook states that optimal mufflers can provide an additional 10 dBA of attenuation; yet there is no evidence that the modeled equipment does not already have optimal mufflers in the noise model. The RCNM model uses noise source data that is 25 years old; the FSEIR provides no proof other than idle speculation that advancements in construction equipment technology have led to quieter machinery.

We agree that requiring mufflers is a best practice measure for construction noise control. However, with respect to demonstrating that noise levels remain below significance thresholds, the FSEIR provides no proof that the source levels used in the analysis can actually be reduced through the use of mufflers.

Additional Information in Response to Wilson Ihrig Comment 3-4

The FSEIR correctly identifies the use of mufflers, specifically enhanced or optimal mufflers, as a best practice noise control measure consistent with the FHWA Construction Noise Handbook.

The comment asserts that there is "no proof" that the modeled equipment can be further reduced through muffler use, and that RCNM's source levels are based on data that are approximately 25 years old. However, as discussed in the FSEIR, the FSEIR does not assume baseline ("standard") mufflers already incorporated in RCNM are the final configuration. Rather, it explicitly assumes installation of optimal mufflers, a mitigation strategy recommended by FHWA, which provides agency guidance that an additional 10 dBA or more attenuation beyond standard mufflers is achieved by optimal mufflers as required by Mitigation Measure ES/VCC-MM-NOI-1. This level of reduction is directly supported by the FHWA Construction Noise Handbook, which lists "engine enclosures/optimal mufflers" as one of the most effective mitigation options and the FHWA, Special Report—Measurement, Prediction, and Mitigation, cited in the Noise Report, Appendix 5.8, for the SEIR.[1] It is appropriate to rely on expert agency guidance, such as from the FHWA, notwithstanding the comment.

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1 See Final SEIR, Page 2.0-102 ("the Draft SEIR identifies feasible mitigation measures that are consistent with the County's General Plan and industry best practices and are supported by authoritative sources, including the authoritative agency guidance document on noise analysis—the Federal Highway Administration (FHWA) Roadway Construction Noise Handbook."); Final SEIR, page 2.0-103 (describing how Appendix 5.8, Community Noise Assessment, of the Draft SEIR, page 40, specifies that the 10 dBA

Additionally, while the RCNM's database includes source levels originally developed during the 1990s and 2000s, these values reflect conservative (higher) sound levels from large infrastructure projects like the Boston "Big Dig," which were conducted under standard muffler requirements at that time. As a result, the baseline source levels used in the FSEIR already represent a worst-case scenario compared to today's typically quieter equipment based on newer construction equipment.

By applying noise reductions from enhanced mufflers to RCNM's already conservative source levels, the FSEIR provides a data-supported and industry-recognized estimate of achievable noise reductions, rather than speculation. This approach ensures that the analysis does not underestimate potential construction noise levels and provides a worst-case assessment.

In summary, the FSEIR's mitigation assumptions are consistent with FHWA guidance, reflect worst-case baseline source levels, and explicitly apply enhanced mufflers beyond standard practice, which FHWA confirms yields 10 dBA or more of additional attenuation. As such, the FSEIR provides a reasonable and evidence-based demonstration of the effectiveness of mufflers in reducing construction noise levels and does not rely on "idle speculation."

Wilson Ihrig Comment 3-5

This comment describes our concerns that Mitigation Measures NOI-2, the use of strategic idling locations, and NOI-4, proactive community engagement, would not guarantee the reduction of noise levels. The FSEIR states that no numerical reductions are assumed from these measures, and their inclusion is consistent with best practices in construction noise management. We maintain our original comment that these are not true mitigation measures and would fail to reduce worst case construction noise levels, leaving significant impacts unmitigated. If these measures cannot reduce noise below appropriate thresholds, then the construction noise remains significant and unmitigated.

Additional Information in Response to Wilson Ihrig Comment 3-5

As previously stated in the DSEIR and reiterated in FSEIR, Mitigation Measures ES/VCC-MM-NOI-2 (strategic idling and equipment placement) and ES/VCC-MM-NOI-4 (proactive community engagement) are included as supplemental best practice measures that support overall construction noise management. The FSEIR makes clear that no numerical noise reductions are credited to these measures, and therefore, their inclusion conservatively does not influence the determination of significance under CEQA thresholds.

The assertion that these are "not true mitigation measures" fails to acknowledge that CEQA allows for the incorporation of non-quantitative best practices that reduce the intensity, duration, or

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reduction in construction noise comes from optimal muffler systems); Appendix 5.8, Noise Study, p. 40 ("FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm, Accessed December 2021.").

community disruption associated with a significant impact, even if they do not reduce the peak level of noise at a receptor during a worst-case scenario. More specifically, ES/VCC-MM-NOI-2 minimizes prolonged exposure to noise by recommending placement of idling and stationary equipment away from sensitive receptors where feasible. While it does not eliminate construction activity near all receptors, it is designed to reduce average noise exposure over the construction period, consistent with practices endorsed by the FHWA Construction Noise Handbook. Also, ES/VCC-MM-NOI-4 establishes a formal channel of communication with potentially affected community members. This facilitates advanced notice of particularly disruptive activities, allows for scheduling adjustments when feasible, and contributes to overall impact minimization by improving predictability and community tolerance.

Again, the FSEIR's impact determination does not rely on these measures to reduce noise below the significance threshold. Rather, they are identified as reasonable and effective methods to reduce adverse effects to the extent practicable. Their implementation would result in additional benefits to the surrounding community beyond the conservatively modeled noise levels.

In conclusion, the FSEIR already assumes no noise reduction credit from ES/VCC-MM-NOI-2 and ES/VCC-MM-NOI-4, meaning that any actual benefit realized from their implementation would only serve to further construction noise levels. As documented in the Final SEIR, even without quantifying ES/VCC-MM-NOI-2 and ES/VCC-MM-NOI-4, the Final SEIR determines that the Modified Project with mitigation would not result in new significant impacts. The assertion that the impact remains significant due to these measures being "ineffective" is incorrect, because the significance determination already accounts for their non-quantitative nature.

Wilson Ihrig Comment 3-6

This comment details our concerns that how operational noise levels from mechanical HVAC units were not analyzed, as the DSEIR only cites county code requirements that must be met in the future. The response states that the County Building and Safety Department must review all permit applications to ensure that all proposed mechanical equipment complies with applicable noise regulations, and that noise attenuation measures may be required as part of that future submittal.

Additional Information in Response to Wilson Ihrig Comment 3-6

The DSEIR appropriately addresses operational noise from mechanical HVAC units by HVAC systems are regulated by County design standards and review as part of the final design-level details, which includes mandatory compliance with County noise regulations. For example, as described on page 5.8-43 of the Draft SEIR:

> As required by existing code, air conditioning equipment within the Entrada South and VCC Planning Areas would be designed to meet applicable requirements set forth in the County Noise Ordinance (Section 12.08.530), which limit noise levels to a maximum of 50 dBA at the

adjacent on-site property. Similarly, mechanical equipment associated with the proposed commercial development within the planning areas would be designed so as not to exceed 45 dBA at the nearest off-site residential property or 55 dBA at the nearest commercial property per the County Noise Ordinance (Section 12.08.390).

At the time of environmental review, specific equipment models, locations, and operational parameters (e.g., tonnage, RPM, shielding, roof orientation) are not yet finalized. Therefore, the analysis properly recognizes that precise HVAC noise calculations to the Building and Safety Department's plan check process, which ensures that any mechanical equipment installed during construction will be reviewed for compliance with all applicable County noise standards. This is a consistent with the County's standard CEQA practice for addressing operational HVAC noise impacts, particularly when compliance with objective noise standards is mandatory and enforceable based on adopted County standards and compliance obligations.

Further, the SEIR page 5.8-43, documents that the Modified Project would not increase operational equipment noise levels relative to the 2017 Project, which includes operational noise related to HVAC systems. Therefore, because noise levels would not increase compared to the 2017 Project, the Modified Project would not cause new or substantially more significant impacts from operations. Accordingly, contrary to this comment, the SEIR appropriately analyzed operational noise impacts, included related to noise from HVAC units.

Wilson Ihrig Comment 3-7

However, the analysis includes no discussion of how realistic noise attenuation could be. Typical noise levels associated with mechanical equipment can be placed in a noise model with distance attenuation and project geometry to determine if there is an impact that would require mitigation. Mechanical noise may also combine with other operational noise levels, such as parking lot noise or loading dock noise, and only analyzing noise at a later date may omit significant impacts resulting from the combination of multiple sources. To confirm a less than significant impact, the Project Applicant should demonstrate that the combined noise levels generated by these sources remain below appropriate significance thresholds.

Additional Information in Response to Wilson Ihrig Comment 3-7

As detailed in the DSEIR and FSEIR, the analysis does account for potential operational noise from mechanical equipment, parking areas, and loading zones, and concludes that impacts would be less than significant based on compliance with the Los Angeles County Noise Ordinance and the fact that the Modified Project would not increase operational noise equipment compared to the 2017 Project.

As detailed in the DSEIR, all mechanical equipment associated with residential and commercial uses within the Entrada and Valencia Commerce Center Planning Areas will be required to comply with applicable County noise standards. These enforceable noise standards are applied during the

County's Building and Safety plan check process, and compliance is mandatory prior to permit issuance. While precise mechanical equipment specifications are not available at the environmental review stage, the analysis appropriately assumes that compliance will be achieved through typical and feasible measures such as equipment selection, shielding, and placement/setback, all of which are standard industry practice. Therefore, potential noise impacts from HVAC and other mechanical equipment would remain below applicable thresholds, and no significant impact would occur.

The DSEIR further accounts for noise from parking areas, vehicle circulation, door closures, voices, and intermittent alarms, concluding that these sources are adequately separated from off-site sensitive receptors and, in many cases, shielded by intervening structures and topography:

- In the Entrada Planning Area, commercial buildings are a minimum of 1,200 feet from sensitive receptors in the Westridge and Mission Village communities, with parking areas located behind buildings, and shielded by hillsides or structures.
- In the Valencia Commerce Center Planning Area, off-site residences are located at least 600 feet away, with additional shielding provided by buildings closer to the sensitive receptors. Live Oak Elementary School is located over 1,400 feet from proposed development.

Additionally, loading and unloading activities would occur in compliance with the County Noise Ordinance, which restricts operations during nighttime hours (10:00 PM to 6:00 AM), further reducing potential disturbance.

Further, as detailed above, the SEIR page 5.8-43, documents that the Modified Project would not increase operational equipment noise levels relative to the 2017 Project, therefore, no new significant impacts from operations would result for the Modified Project.

In conclusion, the SEIR does not defer operational noise analysis, as suggested by the comment. Rather, it provides a comprehensive evaluation of foreseeable on-site noise sources and demonstrates that mechanical equipment will comply with enforceable County standards and parking and loading noise will be minimized through design and distance. Accordingly, no new or more severe significant noise impacts would result from the Modified Project, and no additional modeling or recirculated analysis is warranted.

Wilson Ihrig Comment 3-8

This comment details our concerns regarding a circular reference in Appendix 5.8 of the DSEIR and explains how Table 12 shows the traffic levels for the project and indicates whether a more thorough noise analysis is required. We maintain that stating ‘See Table 12’ within Table 12 is confusing and constitutes a circular reference. The analysis should simply state whether there is a traffic increase within the column to the right of the ‘further analysis required’ column for clarity.

Additional Information in Response to Wilson Ihrig Comment 3-8

The assessment of operational roadway noise starts with a comparison of the average daily traffic (ADT) volumes forecasted to occur under the 2017 Approved Project and the Modified Project, which is provided in **Table 12** of the Noise Study (Appendix 5.8 of the SEIR). If ADT volumes go up under the Modified Project compared to the 2017 Approved Project, there is a potential for an increase in community noise levels attributable to motor vehicle travel under the Modified Project compared to the 2017 Approved Project and additional analysis would be required. On the other hand, if ADT volumes remain the same or go down under the Modified Project compared to the 2017 Approved Project, there would not be an increase in community noise levels attributable to motor vehicle travel under the Modified Project compared to the 2017 Approved Project. The analysis in **Table 12** shows 22 segments out of 35 were identified as "No" to requiring further analysis. Additionally, the analysis also states 13 segments out of 35 were identified as "Yes" to requiring further analysis.

For those roadway segments where ADT volumes increase under the Modified Project (compared to the 2017 Approved Project), and identified as "Yes" to requiring further analysis, detailed modeling of community noise levels has been conducted and provided in **Table 13** and **Table 14**. The results of this modeling were compared to the established significance thresholds to assess the extent of potential impacts under the Modified Project. The results clearly state the overall noise level increases are very small and would not be discernible in the context of the community noise environment.

The commenter points out that Table 12 includes a reference to "Table 12." The correct cross-reference should be "Table 14." The commenter made a similar comment on the Draft SEIR (Comment 7-64) and this memo clarifies the response to that comment (Final SEIR, Response to Comment 7-64). Notably, Table 12's reference to "Table 12" was not necessary to present the data and did not impact the analysis or conclusions in any way. Contrary to the comment, Table 12's reference to "Table 12" is not confusing because Table 12 clearly presented data related to offsite noise impacts as intended. Further, the results in Table 12 were accurately and appropriated described in the accompanying text of the Noise Study, as summarized above. Subsequent Table 13 and Table 14 further analyzed the data and demonstrated why roadway noise impacts would not exceed applicable thresholds of significance nor result in a discernable noise increase. The SEIR includes a similar analysis based on the data in the Noise Study, concluding that no new impacts would result from the Modified Project related to roadway noise because the data demonstrate that overall noise level increases would not be discernible in the context of the community noise environment (see, e.g., Table 5.8-9 [2030 Roadway Traffic Noise Impacts] of the Draft SEIR and corresponding text on pages 5.8-39 to 5.8-4 presenting the data from the Noise Study and detailing why the Modified Project would not result in new significant impacts compared to the 2017 Project with respect to this topic). The commenter does not raise any concerns with the description of impacts in the Noise Study or the SEIR. Therefore, the reference raised in this comment does not

have any affect on the analysis or conclusions; accordingly, no additional corrections or analysis is needed.

In summary, the analysis in Table 12 of the Noise Study shows 22 segments out of 35 were identified as "No" to requiring further analysis and 13 segments out of 35 were identified as "Yes" to requiring further analysis. For those roadway segments where ADT volumes increase under the Modified Project (compared to the 2017 Approved Project), and identified as "Yes" to requiring further analysis, detailed modeling of community noise levels was conducted and provided in Table 13 and Table 14 of the Noise Study. The results of this modeling were compared to the established significance thresholds to assess the extent of potential impacts under the Modified Project. The results clearly state the overall noise level increases would not be discernible in the context of the community noise environment, as accurately and appropriately described in the Noise Study and SEIR.

Wilson Ihrig Comment 3-9

We believe that several of our comments are not addressed in the FEIR. As such, we believe this report both underestimates significant impacts from the project and does not study all potential ways to mitigate identified impacts. Feel free to contact us with any questions.

Additional Information in Response to Comment 3-9

This comment concludes the letter, reiterates the criticism of the FEIR contained in the previous comments. Refer to Response to Comment Nos. 3-1 through 3-8. No additional response is necessary. The SEIR appropriately analyzed noise impacts and demonstrated that, with mitigation, the Modified Project would not result in new or substantially more severe significant impacts.

APPENDIX 2

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with the requirements of CEQA Section 21081.6 and CEQA Guidelines Section 15097. CEQA Section 21081.6 requires a Lead Agency to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." In addition, CEQA Guidelines Section 15097(a) requires that a public agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects."

The County of Los Angeles is the Lead Agency for the Entrada South and Valencia Commerce Center (VCC) Project (Modified Project) and therefore is responsible for administering and implementing this MMRP. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity that accepts the delegation; however, until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the adopted mitigation program.

As reflected herein, the Draft Supplemental Environmental Impact Report (SEIR) prepared for the Modified Project incorporates: (1) previously adopted mitigation measures and Project design features (PDFs) from the State-certified EIR and its associated Additional Environmental Analysis (AEA) that remain applicable to the Modified Project;[1] (2) any previously adopted mitigation measures from the County-certified VCC EIR that remain applicable to the Modified Project;[2] and (3) additional proposed mitigation measures

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[1] *The Entrada South and VCC Project is located within the planning boundary of the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP), approved by CDFW, which was the subject of an EIR and Additional Environmental Analysis certified by CDFW in 2017 (SCH No. 2000011025; collectively referred to as the State-certified EIR). In 2017, CDFW revised and re-certified the previously certified EIR from June 2010 in response to litigation.*

[2] *The County of Los Angeles initially approved development of Valencia Commerce Center through the issuance of various entitlements, including Conditional Use Permit (CUP) 87-360, and certification of an EIR (SCH No. 1987-123005; VCC EIR) in 1991.*

and PDFs identified for the Modified Project in the SEIR. Additionally, although not located within the Newhall Ranch Specific Plan area, the Modified Project remains subject to certain mitigation measures set forth in the Newhall Ranch Specific Plan EIR (SCH No. 95011015) that were referenced and relied upon in the State-certified EIR. Accordingly, the measures herein are denoted as "RMDP/SCP" if previously set forth in the State-certified EIR; RMDP/SCP-AEA if previously set forth in the associated AEA; "VCC" if previously set forth in the VCC EIR; "ES," VCC," or "ES/VCC" if set forth in the SEIR prepared for the Modified Project; and "SP" if originally set forth in the Newhall Ranch Specific Plan EIR. It is also noted that mitigation measures related to environmental topics that were addressed in the Initial Study (see **Appendix 1** of the SEIR) and scoped out of further analysis in the SEIR are included below, as many of those previously adopted measures remain applicable. In sum, this MMRP is designed to monitor the implementation and enforcement of all applicable mitigation measures and PDFs for the Modified Project.

This MMRP consists of separate MMRP tables for Entrada South and VCC, each listing the applicable mitigation measures and PDFs and identifying the corresponding action required by the Project Applicant to demonstrate compliance, the timing trigger for implementation, the party responsible for implementation, and the monitoring/enforcement agency(ies) or party(ies) responsible for ensuring each adequate implementation.[3] All previously adopted measures are provided verbatim as originally adopted. However, italicized text in parenthetical notes following certain measures provides updated information and clarification specific to the Modified Project, as needed.[4]

Additionally, as addressed in several of the biological resource mitigation measures, a preserve manager(s) and/or natural lands management organization(s) (NLMO) will ultimately be responsible for management of the proposed Spineflower Conservation Area (Spineflower Preserve) in perpetuity, once such responsibility is transferred from the Project Applicant.

Because the Modified Project represents the phased development of a planned community over time, and because the regulatory and technological frameworks for environmental impact reductions are evolving and are expected to continue to do so for

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[3] *All references to the Project Applicant, applicant, or similar terms in this MMRP refer to The Newhall Land and Farming Company or its successor or designee.*

[4] *Among other clarifications, in 2013, the California Department of Fish and Game (CDFG) became CDFW. Because some of the State-certified mitigation measures were approved prior to that name change, CDFW is referred to as CDFG within the State-certified EIR mitigation measures listed herein. The new Entrada South and VCC-specific mitigation measures refer to the Department as CDFW when references are to guidance after January 1, 2013.*

years to come, minor modifications to the mitigation measures presented in this MMRP are permitted, but can only be made by the Project Applicant or its designee with the approval of the County of Los Angeles Department of Regional Planning (LACDRP) staff. Following consultation with any other appropriate agencies or departments, LACDRP staff may determine the adequacy of any minor modifications by evaluating whether the proposal of the Project Applicant or its designee results in equivalent or greater environmental protections or benefits, as compared to the mitigation measures set forth herein. Any minor modifications cannot result in the creation of new or substantially more severe environmental effects or a reduced level of environmental protection. LACDRP must render its determination based on the evidentiary record before it, including supporting materials and analyses prepared at the request of the Project Applicant or its designee. This minor modifications procedure is generally applicable to the mitigation measures and PDFs set forth in this MMRP.

Mitigation measures and PDFs applicable to Entrada South are provided in **Table 1**, Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area, beginning on page 4. Mitigation Measures and PDFs applicable to Valencia Commerce Center are provided in **Table 2**, Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area, beginning on page 159.

Table 1
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
1. AESTHETICS, VIEWS, AND LIGHT AND GLARE				
RMDP/SCP-PDF-VR-1: During construction, temporary green screen construction fencing 6 feet tall shall be placed on-site adjacent to public roadways to screen much of the construction activity from view at street level.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-PDF-VR-2: During construction, all security lighting shall be properly shielded and projected downwards such that light is focused on construction equipment or materials and not on adjacent roadways or off-site areas.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-PDF-VR-3: Prior to issuance of a building permit, the Project Applicant shall submit Design Guidelines to the County of Los Angeles Department of Regional Planning. The Design Guidelines shall address such issues as site planning, architecture, walls and fencing, landscape design, lighting, signage, and general design themes for each of the major land use categories in the community. In particular, the Design Guidelines shall establish the following: • Major utility systems, including potable water, recycled water, wastewater, electricity, natural gas, and cable/internet, shall be placed underground. • Utility/service areas shall be treated (i.e., through the use of color, landscaping, screening, etc.) to minimize visual impact. • Rooftop equipment shall be screened from view from public streets. • Outdoor lighting within the Project Site shall be projected downwards to illuminate the intended surface and minimize light spillover and glare generation; and	Submit Design Guidelines to LACDRP	Prior to issuance of first building permit	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
shall consist of low-intensity downlights or be equipped with louvers, shields, hoods, or other screening devices, as appropriate. • Only non-reflective or low-reflective building materials, or those treated with a standard non-reflective or low-reflective glazing, shall be used on building exteriors.				
RMDP/SCP-VR-1: Riprap shall be ungrouted and shall contain material with colors and textures that are harmonious with the surrounding natural riverbed and bank materials. The same or similar type, color, and size of riprap shall be used throughout the Project area.	Depict on grading and/or drainage plans	Prior to issuance of grading permit(s)	Applicant	• LACDPW
RMDP/SCP-VR-2: Necessary grouted riprap and bridges shall contain materials with colors and textures that are harmonious with the surrounding natural riverbed and bank materials. The same or similar type, color, and size of riprap shall be used throughout the Project area.	Depict on grading and/or drainage plans	Prior to issuance of grading permit(s)	Applicant	• LACDPW
2. AGRICULTURE AND FOREST RESOURCES				
RMDP/SCP-AG-1: In order to minimize the premature conversion of agricultural lands and to track that conversion, prior to issuance of the first grading permit in the Project area where agricultural soils are designated as prime farmland, unique farmland, and/or farmland of statewide importance exist (Pub. Resources Code section 21060.1), the applicant or its designee shall prepare a phasing map to document the phased discontinuation of existing agricultural activities located within the Project area over the course of its development.	Maintain log demonstrating compliance	Prior to issuance of grading permit(s)	Applicant	• LACDRP
RMDP/SCP-AG-2: Newhall Land shall dedicate a permanent agricultural conservation easement for	Maintain log demonstrating	In conjunction with the dedication of the	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
138 acres of agricultural land located in the Salt Creek conservation area and on adjoining agricultural lands.	compliance	Salt Creek conservation area		
3. AIR QUALITY				
ES/VCC-PDF-AQ-1: During the Project's grading phase, 2010 or newer diesel haul trucks shall be used to transport on-site soil to the extent available.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-2: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 4 emission standards, where available. At a minimum, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 3 emission standards for non-road diesel engines promulgated by the U.S. Environmental Protection Agency. In addition, all off-road diesel-powered construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB), provided those devices are commercially available and: (1) achieve the standards of the California Division of Occupational Safety and Health (also known as Cal/OSHA); (2) are consistent with the construction equipment warranty requirements; (3) are compatible with equipment specifications of the construction equipment manufacturer; and (4) do not otherwise interfere with the proper functioning of the construction equipment. Any BACT devices used shall achieve emissions reductions that are equal to or greater than a Level 3 diesel emissions control strategy for a similarly-sized engine, as defined by CARB regulations, provided that the devices are commercially available and	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
satisfy the four requirements enumerated above.				
ES/VCC-PDF-AQ-3: During the Project's construction contract bidding phase, each construction contractor shall be provided with informational materials regarding the South Coast Air Quality Management District's Surplus Off-Road Opt-In for NO_X (SOON) Program.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-4: During the Project's construction phase, only street sweepers that are certified under Rule 1186 and Rule 1186.1 of the South Coast Air Quality Management District shall be used.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-5: During the Project's construction phase, electricity from on-site power poles shall be utilized where available (i.e., where accessible relative to the area of construction activity). In the event of an emergency or during a power outage, the use of generators shall be permissible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-6: The Project shall install high-efficiency public street and area lighting. Area lighting is defined to include any private common space lighting (e.g., within or along parks, sidewalks, and landscaping) that is not otherwise regulated by the California Building Energy Efficiency Standards (Title 24). For purposes of this measure, the Project also may use solar-powered lighting in lieu of high-efficiency lighting.	Submit building plans	Prior to issuance of building permits	Applicant	• LACDPW
ES/VCC-PDF-AQ-7: When residential appliances are offered by homebuilders, the Project shall install Energy Star appliances (specifically, clothes washers, clothes dryers, dish washers, fans, and refrigerators) in the single-family and multi-family residences.	Maintain log demonstrating compliance	During Construction	Applicant/ Residential Developer	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-AQ-3: Suspend the use of all construction equipment during first-stage smog alerts.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-4: Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment, to the extent feasible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-5: Maintain construction equipment by conducting regular tune-ups according to the manufacturers' recommendations.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-6: Use electric welders to avoid emissions from gas or diesel welders, to the extent feasible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-7: Use on-site electricity or alternative fuels rather than diesel powered or gasoline-powered generators, to the extent feasible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-12a. Construction shall be planned in such a way as to minimize heavy construction activity involving the use of diesel-fueled construction equipment within 500 meters of an occupied residence to the extent practical. Heavy construction activity that occurs within 500 meters of an occupied residence that involves the use of diesel-fueled construction equipment shall prohibit non-essential idling and shall utilize equipment certified to the Tier 2 or newer emission standard. Equipment shall be routed in such a way as to minimize travel within 500 meters of an occupied residence to the extent practical. *(This measure remains applicable to the Modified Project; however, Tier 3 and Tier 4 is now required per Mitigation Measure ES/VCC-AQ-2, which exceeds the requirement*	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
for Tier 2 equipment described in this measure.)				
4. BIOLOGICAL RESOURCES				
ES-PDF-BIO-1: Within six months following completion of development within the Entrada South Planning Area, the Applicant shall offer a conservation easement (as defined in Civil Code Section 815.1) over preserved streambeds and riparian areas within Unnamed Canyon 2 that are subject to CDFW's jurisdiction under Fish and Game Code Sections 1602 et seq. to ensure those areas are maintained in an undeveloped, open space condition in perpetuity. The conservation easement shall be offered to a qualified natural lands management organization or other entity qualified to hold conservation easements under Civil Code Section 815.3.	Record conservation easement for preserved streambeds and riparian areas within Unnamed Canyon 2	Upon completion of work	Applicant	• CDFW • LACDRP
SP-4.6-1: The restoration mitigation areas located within the River Corridor SMA shall be in areas that have been disturbed by previous uses or activities. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. First priority will be given to those restorable areas that occur adjacent to existing patches (areas) of native habitat that support sensitive species, particularly Endangered or Threatened species. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-3 ensure compliance with this measure by requiring mitigation plan approval and mitigation site approval. No additional reporting is required pursuant to this measure.	Prior to approval of revegetation plans	Applicant	• Corps • CDFW • LACDRP
SP-4.6-2: A qualified biologist shall prepare or review revegetation plans. The biologist shall also monitor the restoration effort from its inception through the establishment phase.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-12 ensure compliance with	Prior to Approval of Revegetation Plans and Monitor During Restoration Effort	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	this measure by requiring mitigation plan approval and mitigation implementation reporting. No additional reporting is required pursuant to this measure.			
SP-4.6-3: Revegetation Plans may be prepared as part of a California Department of Fish and Game 1603 Streambed Alteration Agreement and/or a U.S. Army Corps of Engineers Section 404 Permit, and shall include: Input from both the Project proponent and resource agencies to assure that the Project objectives applicable to the River Corridor SMA and the criteria of this RMP are met. The identification of restoration/mitigation sites to be used. This effort shall involve an analysis of the suitability of potential sites to support the desired habitat, including a description of the existing conditions at the site(s) and such base line data information deemed necessary by the permitting agency.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-3 ensure compliance with this measure by requiring mitigation plan approval and mitigation site approval. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-4: The revegetation effort shall involve an analysis of the site conditions such as soils and hydrology so that site preparation needs can be evaluated. The revegetation plan shall include the details and procedures required to prepare the restoration site for planting (*i.e.*, grading, soil preparation, soil stockpiling, soil amendments, *etc.*), including the need for a supplemental irrigation system, if any.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
SP-4.6-5: Restoration of riparian habitats within the River Corridor SMA shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within the River Corridor SMA or purchased from nurseries with local supplies to provide good genetic stock for the replacement habitats. Plant species used in the restoration of riparian habitat shall be listed on the approved project plant palette (Specific Plan Table 2.6-1, Recommended Plant Species for Habitat Restoration in the River Corridor SMA) or as approved by the permitting State and Federal agencies.*(The recommended plant species in Specific Plan Table 2.6-1 are superseded by the CDFW-approved species specified in Mitigation Measure RMDP/SCP-BIO-4, Table 14.)*	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plans and Monitor During Restoration Effort	Applicant	• Corps • CDFW • LACDRP
SP-4.6-6: The final revegetation plans shall include notes that outline the methods and procedures for the installation of the plant materials. Plant protection measures identified by the project biologist shall be incorporated into the planting design/layout.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-7: The revegetation plan shall include guidelines for the maintenance of the mitigation site during the establishment phase of the plantings. The maintenance program shall contain guidelines for the control of non-native plant species, the maintenance of the irrigation system, and the replacement of plant species.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	pursuant to this measure.			
SP-4.6-8: The revegetation plan shall provide for monitoring to evaluate the growth of the developing habitat. Specific performance goals for the restored habitat shall be defined by qualitative and quantitative characteristics of similar habitats on the River (*e.g.*, density, cover, species composition, structural development). The monitoring effort shall include an evaluation of not only the plant material installed, but the use of the site by wildlife. The length of the monitoring period shall be determined by the permitting state and/or federal agency.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-9: Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.	Mitigation Measure RMDP/SCP-BIO-12 ensures compliance with this measure by requiring reporting of mitigation implementation (see note above). No additional reporting is required pursuant to this measure.	During Revegetation Activities	Applicant	• Corps • CDFW • LACDRP
SP-4.6-10: Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	reporting is required pursuant to this measure.			
SP-4.6-11: Habitat enhancement as referred to in this document means the rehabilitation of areas of native habitat that have been moderately disturbed by past activities (***e.g.***, grazing, roads, oil and natural gas operations, *etc.*) or have been invaded by non-native plant species such as giant cane (*Arundo donax*) and tamarisk (*Tamarix* sp.).	This measure provides a definition of "habitat enhancement" and does not impose any substantive requirements. No reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-13: To provide guidelines for the installation of supplemental plantings of native species within enhancement areas, a revegetation plan shall be prepared prior to implementation of mitigation (see guidelines for revegetation plans above). These supplemental plantings will be composed of plant species similar to those growing in the existing habitat patch (see Specific Plan Table 2.6-1). *(The recommended plant species in Specific Plan Table 2.6-1 are superseded by the CDFW-approved species specified in Mitigation Measure RMDP/ SCP-BIO-4, Table 14.)*	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). The recommended plant species specified in Specific Plan Table 2.6-1 are superseded by the CDFW-approved plant species specified in Mitigation Measure RMDP/SCP-BIO-4, Table 14. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
SP-4.6-14: Not all enhancement areas will necessarily require supplemental plantings of native species. Some areas may support conditions conducive for rapid "natural" reestablishment of native species. The revegetation plan may incorporate means of enhancement to areas of compacted soils, poor soil fertility, trash or flood debris, and roads as a way of enhancing riparian habitat values.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-15: Removal of non-native species such as giant cane (*Arundo donax*), salt cedar or tamarisk (*Tamarix* sp.), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), if included in a revegetation plan to mitigate impacts, shall be subject to the following standards: • First priority shall be given to those habitat patches that support or have a high potential for supporting sensitive species, particularly Endangered or Threatened species. • All non-native species removals shall be conducted according to a resource agency approved exotics removal program. • Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native riparian plant species.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-16: Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources shall be conducted pursuant to the Oak Resources Replacement Program. Mitigation banking for elderberry scrub shall be	This measure applies only to the extent mitigation banking is conducted as part of Entrada South Planning Area activities. If	Prior to Approval of Mitigation Banking Program, approval of Oak Tree Permit, and prior to grading	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
subject to approval of plans by the County Forester.	mitigation banking is conducted, Mitigation Measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP/SCP-BIO-22 (for oak trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No mitigation banking for elderberry scrub is proposed as elderberry scrub is absent from the Entrada South Planning Area. No additional action or reporting is required pursuant to the measure.			
SP-4.6-26a: Two types of habitat restoration may occur in the High Country SMA: (1) riparian revegetation activities principally in Salt Creek Canyon; and (2) oak tree replacement in, or adjacent to, existing oak woodlands and savannahs. • Mitigation requirements for riparian revegetation activities within the High Country SMA are the same as those for the River Corridor SMA and are set forth in Mitigation Measures SP-4.6-1 through SP-4.6-11 and SP-4.6-13 through SP-4.6-16, above. • Mitigation requirements for oak tree replacement are	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-22 ensure compliance with this measure by requiring mitigation plan approval and Oak Resource Management Plan approval (see note above). No additional reporting is required pursuant to this	Approval of Revegetation Plans	Landowner	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
set forth in Mitigation Measure SP-4.6-48, below.	measure.			
SP-4.6-27: Removal of grazing from the High Country SMA except for those grazing activities associated with long-term resource management programs, is a principal means of enhancing habitat values in the creeks, brushland and woodland areas of the SMA. The removal of grazing in the High Country SMA is discussed below under (b) 4. Long Term Management. All enhancement activities for riparian habitat within the High Country SMA shall be governed by the same provisions as set forth for enhancement in the River Corridor SMA. Specific Plan Table 2.6-3 of the Resource Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA.	This measure applies only to the extent the project conducts enhancement activities for riparian habitat in the High Country SMA. Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	During Enhancement Activities	Landowner/CNLM	• CDFW • LACDRP
SP-4.6-28: Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.	This measure applies only to the extent mitigation banking is conducted as part of Entrada South Planning Area activities. If mitigation banking is conducted, Mitigation Measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP/SCP-BIO-22 (for oak trees) will ensure compliance with this measure by	Prior to Approval of Mitigation Banking Program	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	requiring mitigation reporting and accounting. No mitigation banking for elderberry scrub is proposed as elderberry scrub is absent from the Entrada South Planning Area. No additional reporting is required pursuant to this measure.			
SP-4.6-43: Suitable portions of *Open Area* may be used for mitigation of riparian, *oak resources*, or elderberry scrub. Mitigation activities within *Open Area* shall be subject to the following requirements, as applicable. • River Corridor SMA Mitigation Requirements, including: Mitigation Measures 4.6-1 through 4.6-11 and 4.6-13 through 4.6-16; and • High Country SMA Mitigation Requirements, including: Mitigation Measures 4.6-27, 4.6-29 through 4.6-42, and • Mitigation Banking—Mitigation Measure 4.6-16.	To the extent the project provides mitigation located in designated Open Area, measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3 and RMDP/SCP-BIO-12 will ensure compliance with this measure by requiring mitigation plan approval, mitigation site approval and reporting of mitigation implementation. If mitigation banking is conducted, measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP-SCP-BIO-22 (for oak trees) will ensure	During Mitigation	Manager of Open Area	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	compliance with this measure by requiring mitigation reporting and accounting. No additional reporting is required pursuant to this measure.			
SP-4.6-47a: Mitigation Banking will be permitted within the River Corridor SMA, the High Country SMA, and the *Open Area land use designations*, subject to the following requirements: • Mitigation banking activities for riparian habitats will be subject to State and Federal regulations, and shall be conducted pursuant to the mitigation requirements set forth in Mitigation Measure 4.6-1 through 4.6-15 above. • Mitigation banking for oak resources shall be conducted pursuant to 4.6-48, below. • Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester	This measure applies only to the extent mitigation banking is conducted as part of Entrada South Planning Area activities. If mitigation banking is conducted, Mitigation Measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP/SCP-BIO-22 (for oak trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No mitigation banking for elderberry scrub is proposed as elderberry scrub is absent from the Entrada South Planning Area. No additional reporting is required pursuant to this	Prior to Approval of Mitigation Banking Program	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	measure.			
SP-4.6-48: Standards for the restoration and enhancement of oak resources within the High Country SMA and the Open Area include the following (oak resources include oak trees of the sizes regulated under the County Oak Tree Ordinance, southern California black walnut trees, Mainland cherry trees, and Mainland cherry shrubs): • To mitigate the impacts to oak resources that may be removed as development occurs in the Specific Plan Area, replacement trees shall be planted in conformance with the oak tree ordinance in effect at that time. • Oak resource species obtained from the local gene pool shall be used in restoration or enhancement. • Prior to recordation of construction-level final subdivision maps, an oak resource replacement plan shall be prepared that provides the guidelines for the oak tree planting and/or replanting. The Plan shall be reviewed by the Los Angeles Department of Regional Planning and the County Forester and shall include the following: site selection and preparation, selection of proper species including sizes and planting densities, protection from herbivores, site maintenance, performance standards, remedial actions, and a monitoring program. • All plans and specifications shall follow County oak tree guidelines, as specified in the County Oak Tree Ordinance.	To the extent the project provides oak resource mitigation located in designated Open Area or the High Country SMA, measures RMDP/SCP-BIO-22 (for oak trees) or RMDP/SCP-BIO-88 (for mainland cherry or black walnut trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No additional reporting is required pursuant to this measure.	Prior to Final Subdivision Map Recordation	Applicant	• LA County Forester

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
SP-4.6-55: Prior to development or disturbance within wetlands or other sensitive habitats, permits shall be obtained from pertinent Federal and State agencies and the Specific Plan shall conform to the specific provisions of said permits. Performance criteria shall include that described in Mitigation Measures 4.6-1 through 4.6-16 and 4.6-42 through 4.6-47 for wetlands, and Mitigation Measures 4.6-27, 4.6-28, and 4.6-42 through 4.6-48 for other sensitive habitats. *(The measure applies to the Entrada South Project without change, except that the reference to the Specific Plan should be read as referring to the Entrada South Planning Area.)*	Compliance with the requirement to obtain permits will be documented by providing copies of permits authorizing impacts to jurisdictional waters. Compliance with the performance criteria required by this measure will be ensured through Mitigation Measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3 and RMDP/SCP-BIO-12, which require mitigation plan approval, mitigation site approval and reporting of mitigation implementation (see note above). No additional reporting is required pursuant to this measure.	Prior to Grading	Applicant	• Corps • CDFW
SP-4.6-56: All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.	Compliance with this measure will be verified through County approval of building plans for the Entrada South Planning Area. No additional reporting is required	Prior to Issuance of Building Permit(s)	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	pursuant to this measure.			
SP-4.6-58: To limit impacts to water quality the Specific Plan shall conform with all provisions of required NPDES permits and water quality permits that would be required by the State of California Regional Water Quality Control Board. *(This measure applies to the Entrada South Project , except that the reference to the Specific Plan does not apply.)*	Compliance with this measure will be documented by providing the County with copies of annual reports required by any Regional Board NPDES permit and/or waste discharge requirements obtained for the Entrada South Planning Area.	Prior to Issuance of Grading Permit(s)	Project Engineer	• LACDPW
SP-4.6-62: When a map revision or Substantial Conformance determination on any subdivision map or Conditional Use Permit would result in changes to an approved oak tree permit, then the oak tree report for that oak tree permit must be amended for the area of change, and the addendum must be approved by the County Forester prior to issuance of grading permits for the area of the map or CUP being changed.	Compliance with this measure will be documented by providing copies of any required approvals for changes to an approved oak tree permit.	Prior to Issuance of Grading Permit(s)	Applicant	• LA County Forester
SP-4.6-63: Riparian resources that are impacted by buildout of the Newhall Ranch Specific Plan shall be restored with similar habitat at the rate of one acre replaced for each acre lost.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-12 ensure compliance with this measure by requiring mitigation plan approval and reporting of mitigation implementation (see note above). No	As specified in BIO-1	Applicant	• Corps • CDFW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	additional reporting is required pursuant to this measure.			
RMDP/SCP-BIO-1: Mitigation Measures SP-4.6-1 through SP-4.6-16 specify requirements for riparian mitigation conducted in the High Country SMA, Salt Creek area, and Open Area. The RMDP includes requirements for mitigation of both riparian and upland habitats (such as riparian adjacent big sagebrush scrub), and incorporates these Mitigation Measures (SP-4.6-1 through SP-4.6-16). A Comprehensive Mitigation Implementation Plan (CMIP) has been developed by Newhall Land that provides an outline of mitigation to offset impacts described in the RMDP. The CMIP demonstrates the feasibility of creating the required mitigation acreage from RMDP project impacts (see BIO-2). However, the CMIP does not identify mitigation actions specifically for impacts to waters of the United States. But since these waters are a subset of CDFG jurisdiction, the necessary Corps mitigation requirements would be met or exceeded. Detailed riparian/wetland mitigation plans, in accordance with the CMIP, shall be submitted to, and are subject to the approval of, the Corps and CDFG as part of the subnotification letters for individual projects. Individual project submittals shall include applicable CMIP elements, complying with the requirements outlined below. The detailed wetlands mitigation plan shall specify, at a minimum, the following: (1) the location of mitigation sites; (2) site preparation, including grading, soils preparation, irrigation installation, (2a) the quantity (seed or nursery stock) and species of plants to be planted (all species to be native to region); (3) detailed procedures for creating	The mitigation plans required by this measure will be reviewed and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Mitigation plan approval by Corps/ CDFW prior to jurisdictional impacts	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
additional vegetation communities; (4) methods for the removal of non-native plants; (5) a schedule and action plan to maintain and monitor the enhancement/restoration area; (6) a list of criteria by which to measure success of the mitigation sites (e.g., percent cover and richness of native species, percent survivorship, establishment of self-sustaining native of plantings, maximum allowable percent of non-native species); (7) measures to exclude unauthorized entry into the creation/enhancement areas; and (8) contingency measures in the event that mitigation efforts are not successful. The detailed wetlands mitigation plans shall also classify the biological value (as "high," "moderate," or "low") of the vegetation communities to be disturbed as defined in these conditions, or may be based on an agency-approved method (e.g., Hybrid Assessment of Riparian Communities (HARC)). The biological value shall be used to determine mitigation replacement ratios required under BIO-2 and BIO-10. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of CDFG and the Corps and approved prior to the impact to riparian resources. BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and BIO-2 and BIO-10 describe the replacement ratios for the habitats that will be impacted. *(This measure applies to the Entrada South Planning Area with the following exceptions and/or changes: approval of mitigation plans will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process*				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
referenced in the measure. Newhall shall record a conservation easement or declaration of restrictive covenants, in a form approved by CDFW, over all areas within the RMDP identified in the CMIP as providing mitigation for Project impacts prior to Project ground-disturbing activities, if not already recorded pursuant to the State-certified EIR and related approvals.)				
RMDP/SCP-BIO-2: The permanent removal of existing habitats in Corps and/or CDFG jurisdictional areas in the Santa Clara River and tributaries shall be replaced by creating habitats of similar functions and values/services (see BIO-4 and Mitigation Measure SW-3 of Section 4.6 of the Final EIS/EIR) on the Project Site, or as allowed under Mitigation Measure BIO-10. a. Permanent impacts to Corps jurisdiction (which is a subset of CDFG jurisdiction) are to be mitigated by initiating mitigation site creation and/or restoration in advance of impacts, to replace the combined loss of acreage, functions, and services at a minimum 1:1 ratio. Initiation of a Corps mitigation site is defined as: (1) completion of site preparation; (2) installation of temporary irrigation; and (3) seeding and/or planting of the mitigation site. For detailed information, please refer to the *Mitigation Plan for Impacts to Waters of the United States* included in the Draft 404(b)(1) Alternatives Analysis in Appendix F1.0 of the Final EIS/EIR. The Potrero Canyon CAM creation and restoration site and the Mayo Crossing restoration site (*i.e.*, an existing agricultural field) are considered the initial sites to be implemented prior to Corps jurisdictional impacts by development, thereby establishing upfront mitigation credits. As individual	The mitigation ratios required by this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Prior to impacts within Corps jurisdiction	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Project components are proposed for construction, consistent with the construction notification, quantities of mitigation acreage required to offset permanent impact acreages shall be calculated and compared to pre-mitigation area credits remaining. A project would not proceed unless adequate mitigation capacity is demonstrated. Temporary impact areas shall be mitigated in place in a manner that restores impacted functions and services as described in the mitigation plan noted above. If upfront compensatory mitigation cannot be achieved, a Corps-approved method would be utilized to determine the additional compensatory mitigation to offset the temporal loss of functions and services not included in the 1:1 mitigation ratio for permanent impacts. These measures satisfy the Corps mitigation requirements for impacts to Corps jurisdictional areas. However, impacts to jurisdictional areas (which include all areas subject to Corps and/or CDFG jurisdiction) are also subject to all of the mitigation requirements for impacts to CDFG jurisdiction, including BIO-2b. b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the subnotification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below: • If suitable mitigation sites have met success criteria (BIO-6) prior to disturbance at the impact site, the mitigation sites shall replace the permanently impacted habitats in kind at a 1:1 ratio. • If a suitable mitigation site has not met success criteria prior to disturbance of the impact site, habitat shall be				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
replaced in kind (tributary for tributary impacts, river for river impacts) according to the replacement ratios specified in Table 13. These ratios provide compensatory mitigation for temporal losses of riparian function by considering the existing functional condition of the resources to be impacted, as well as time required for different vegetation types to become established and mature. • If a suitable mitigation site has not been initiated within two years following disturbance of the impact site, but is initiated within five years following such disturbance, the permanently impacted habitats shall be replaced in kind at a replacement ratio equal to the ratio required by Table 13 plus 0.5:1. (For example, if mitigation for impacts to high-quality mulefat scrub were initiated three years after disturbance, the required replacement ratio would be 2.5:1.) • If a suitable mitigation site has not been initiated within five years following disturbance of the impact site, the permanently impacted habitats shall be replaced in kind at a replacement ratio equal to the ratio required by Table 13 plus 1:1. (For example, if mitigation for impacts to high-quality mulefat scrub were initiated six years after disturbance, the required replacement ratio would be 3:1.) • Where temporary impacts to CDFG-jurisdictional areas are proposed, the mitigation acreage required shall be determined based upon the duration of the proposed construction disturbance and the type of vegetation to be impacted. As individual Project components are				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
proposed for construction, consistent with the subnotification process, the quantities of mitigation acreage required for temporary impacts to CDFG jurisdictional areas shall be calculated according to the following criteria: – If suitable mitigation sites have met success criteria prior to temporary disturbance at the impact site, the mitigation sites shall replace the temporarily impacted habitats in kind at a 1:1 ratio regardless of the duration of the temporary disturbance. – If the duration of temporary disturbance is less than two years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 1:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality. – If the duration of temporary disturbance is between two and five years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 1.5:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality. – If the duration of temporary disturbance exceeds five years, and no suitable mitigation sites have met success criteria prior to the disturbance,				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
temporarily impacted habitats shall be replaced in kind at a 2:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality. – In lieu of the habitat replacement described above and subject to CDFG approval, removal of invasive, exotic plant species from existing CDFG jurisdictional areas, followed by restoration/revegetation, may also be used to offset impacts. If this method is employed, mitigation shall be credited at an acreage equivalent to the percentage of exotic vegetation present at the restoration site. For example, if a 10-acre jurisdictional area is occupied by 10% exotic species, restoration shall be credited for one acre of impact. If appropriate, as authorized by CDFG, reduced percentage credits may be applied for invasive removal with passive restoration (weeding and documentation of natural recruitment only). *(This measure applies to the Entrada South Planning Area with the following exceptions and/or changes: mitigation ratios will be applied when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. Mitigation sites may be located within the Entrada South Planning Area and/or within the larger RMDP/SCP area, subject to the site approval process described in Mitigation Measure RMDP/SCP-BIO-3. Table number corresponds to the numbering in the Entrada South Bio Report.)*				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-3: Creation of new vegetation communities and restoration of impacted vegetation communities shall occur at suitable sites in or adjacent to jurisdictional areas or in areas where bank stabilization would occur. Locations where the excavation of uplands for bank protection/stabilization results in creation of new, unvegetated creek bed or other disturbance shall receive the highest level of priority for vegetation community restoration. Restoration sites may occur at locations outside the riverbed where there are appropriate hydrologic conditions to create a self-sustaining riparian vegetation community and where upland and riparian vegetation community values are absent or very low. All sites shall contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian vegetation community. Candidate restoration sites shall be described in the annual mitigation status report (see BIO-12). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the subnotification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and mitigation accounting form agency review. Each mitigation plan will include acreages, maps and site-specific descriptions of the proposed revegetation site, including analysis of soils, hydrologic suitability, and present and future adjacent land uses. *(This measure applies to the Entrada South Planning Area with the following exceptions and/or changes: mitigation site approval will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process*	The mitigation site criteria required by this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Mitigation plan approval by Corps/ CDFW prior to jurisdictional impacts	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
referenced in the measure. The mitigation accounting form referenced in the measure is not required.)				
RMDP/SCP-BIO-4: Replacement vegetation communities shall be designed to replace the functions and values of the vegetation communities being removed. The replacement vegetation communities shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected vegetation communities (see Table 14 for example of recommended plant species for the River Corridor SMA and tributaries). In addition, the replacement vegetation communities shall be designed to replicate the density and structure of the affected vegetation communities once the replacement vegetation communities have met the mitigation success criteria. *(Table number corresponds to the numbering in the Entrada South Bio Report.* [**Table 14**, Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA and Tributaries, is provided on page 152 of this MMRP.])	The requirements of this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Mitigation plan approval by Corps/ CDFW prior to jurisdictional impacts	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-5: Average plant spacing shall be determined based on an analysis of vegetation communities to be replaced. The applicant shall develop plant spacing specifications for all riparian vegetation communities to be restored. Plant spacing specifications shall be reviewed and approved by the Corps and CDFG when restoration plans are submitted to the agencies as part of the subnotification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.	The requirements of this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters.	Mitigation plan approval by Corps/ CDFW prior to jurisdictional impacts	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(This mitigation measure applies to the Entrada South Planning Area with the following exceptions and/or changes: restoration plans will be reviewed and approved when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)	Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.			
RMDP/SCP-BIO-6: The revegetation site will be considered "complete" upon meeting all of the following success criteria. In a subnotification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps. 1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion. 2. The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas. 3. Native shrubs and trees shall have at least 80% survivorship after two years beyond the beginning of the success evaluation start date. This may include natural recruitment. 4. Non-native species cover will be no more than 5% absolute cover through the term of the restoration. 5. Giant reed (*Arundo donax*), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissimus*),	The criteria required by this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	From plan implementation through Corps/CDFW acceptance as complete	Applicant	• Corps • CDFW • LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
pampas grass (*Cortaderia selloana*) and any species listed on the California State Agricultural list, or Cal-IPC list of noxious weeds will not be present on the revegetation site as of the date of completion approval. 6. Using the HARC assessment methodology, the compensatory mitigation site shall meet or exceed the baseline functional scores of the impact area in Corps' jurisdictional waters, as described in the Conceptual Mitigation Plan for Waters of the United States. *(This mitigation measure applies to the Entrada South Planning Area with the following exceptions and/or changes: modification of success criteria may occur when the Applicant obtain permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. In addition, the HARC assessment may be replaced by another agency-approved method.)*				
RMDP/SCP-BIO-7: If at any time prior to Agency approval of the restoration area, the site is subject to an act of God (flood, fires, or drought) the applicant shall be responsible for replanting the damaged area. The site will be subject to the same success criteria provided for in BIO-6. Should a second act of God occur prior to Agency approval of the restoration area, the applicant shall coordinate with the Agencies and develop an alternative restoration strategy (ies) to meet success requirements. This may include restoration elsewhere in the River Corridor or tributaries.	Status of mitigation sites and any replanting required pursuant to this measure will be reported in the annual mitigation monitoring reports required by Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-8: Temporary irrigation shall be installed	Temporary irrigation will	Until success criteria	Applicant	• Corps

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self-sustaining regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.	be described in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable, and through annual reports as required by Mitigation Measure RMDP/SCP-BIO-12.	are met		• CDFW • LACDRP
RMDP/SCP-BIO-9: In areas where invasive exotic plant species control is authorized by CDFG in lieu of other riparian habitat mitigation (BIO-2), removal areas shall be kept free of exotic plant species for five years after initial treatment. In areas where extensive exotic removal occurs, revegetation with native plants or natural recruitment shall be documented.	If exotic plant control is performed as mitigation, it will be described in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the	Continuing for five years after initial treatment	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable, and through annual reports as required by Mitigation Measure RMDP/SCP-BIO-12.			
RMDP/SCP-BIO-10: The exotics control program may utilize methods and procedures in accordance with the provisions in the Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan Final Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval. Exotic plant species control will be credited at an acreage equivalent to the percentage of exotic vegetation at the restoration site. By example: a 10-acre site occupied by 10% exotic species will be credited for one acre of mitigation. The exotic weed control location will be documented on the annual mitigation status report and mitigation accounting form. If "in-lieu fees" are paid, it will be documented on the annual mitigation status report and mitigation accounting form, along with a reporting of the status of exotic vegetation treatment.	Compliance with this measure will be documented through annual mitigation monitoring reports submitted pursuant to Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-12: An annual monitoring report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in BIO-6. This report shall include any required plans for plant spacing, locations of candidate restoration and weed	Compliance with this measure will be documented by submitting copies of the annual mitigation	By April 1st each year beginning with approval of detailed riparian/wetland mitigation plans and	Applicant	• Corps • CDFW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
control sites or proposed "in-lieu fees," restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation account form (see BIO-11), which outlines account information related to species planted or exotics control and mitigation credit remaining. The annual mitigation and monitoring report shall document the current functional capacity of the compensatory mitigation site using the HARC assessment methodology, as well as documenting the baseline functional scores of the impact site in jurisdictional waters of the United States. *(This mitigation measure applies to the Entrada South Planning Area with the following exceptions and/or changes: The functional assessment of the compensatory mitigation site may use a method other than the HARC assessment methodology, subject to the approval of the Corps and CDFW. The mitigation account form referenced in this measure is not required because the Entrada South Planning Area will not utilize or require any permits issued for the RMDP.)*	monitoring reports to the County.	continuing for the life of the permit or until all credits have been used up for individual projects and success criteria are met		
RMDP/SCP-BIO-13: The mitigation program shall incorporate applicable principles in the interagency	This measure applies only if the applicant sells	Until success criteria	Applicant	• Corps

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (60 FR 58605–58614) to the extent feasible and appropriate, particularly the guidance on administration and accounting. Nothing in the Section 404 or Section 2081 Permit or Section 1605 agreement shall preclude the Applicant from selling mitigation credits to other parties wishing to use those permits or that agreement for a project and/or maintenance activity included in the permits/agreement.	mitigation credits to other parties. If credits are sold, CDFW and/or the Corps will approve the accounting and administration procedures at the time of mitigation approval. No additional reporting is required pursuant to this measure.	are met		• CDFW • LACDRP
RMDP/SCP-BIO-15: All native riparian trees with a three-inch diameter at breast height (dbh) or greater in temporary construction areas shall be replaced using one- or five-gallon container plants, containered trees, or pole cuttings in the temporary construction areas in the winter following the construction disturbance. The mitigation ratios for temporary impacts to vegetation communities are described in BIO-2. The growth and survival of the replacement trees shall meet the performance standards specified in BIO-6. In addition, the growth and survival of the planted trees shall be monitored until they meet the self-sustaining success criteria in accordance with the methods and reporting procedures specified in BIO-6, BIO-11, and BIO-12. *(This mitigation measure applies to the Entrada South Planning Area with the following exceptions and/or changes: mitigation accounting in accordance with Mitigation Measure RMDP/SCP-BIO-11 is not required because the Entrada South Planning Area will not utilize or require any permits issued for the RMDP.)*	Compliance with this measure will be documented through annual mitigation monitoring reports submitted pursuant to Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-16: Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in BIO-2. Large trunks of removed trees may also remain on site to provide habitat for invertebrates, reptiles, and small mammals or may be anchored on the Project site for erosion control. To facilitate restoration, mulch, or native topsoil (the top six- to 12-inch-deep layer containing organic material), may be salvaged from the work area prior to construction. Following construction, salvaged topsoil shall be returned to the work area and placed in the restoration site. Within one year, the Project biologist will evaluate the progress of restoration activities in the temporary impact areas to determine if natural recruitment has been sufficient for the site to reach performance goals. In the event that native plant recruitment is determined by the Project biologist to be inadequate for successful habitat establishment, the site shall be revegetated in accordance with the methods designed for permanent impacts (i.e., seeding, container plants, and/or a temporary irrigation system may be recommended). This will help ensure the success of mitigation areas. The Applicant shall restore the temporary construction area per the success criteria and ratios described in BIO-1, BIO-2, and BIO-6. Annual monitoring reports on the status of the recovery or temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (BIO-11 and BIO-12). *(This mitigation measure applies to the Entrada South Planning Area with the following exceptions and/or changes: mitigation accounting in accordance with Mitigation Measure RMDP/SCP-BIO-11 is not required*	Compliance with this measure will be documented through annual mitigation monitoring reports submitted pursuant to Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
because the Entrada South Planning Area will not utilize or require any permits issued for the RMDP.)				
RMDP/SCP-BIO-20: Approximately 1,900 acres of coastal scrub shall be preserved on The Project Site. The preservation of this vegetation type shall occur on site within the High Country SMA, the Salt Creek area, and the River Corridor SMA within the Specific Plan site. Irrevocable offers of dedication will be provided to CDFG for identified impact offsets in accordance with the Plan (BIO-1) using a "rough step" land dedication approach. Some of this habitat is recovering from wildfire and the expectation is that it will recover without active intervention. The functional values of any burned dedicated land areas shall be evaluated annually until such time that conditions are commensurate with the quality of the impacted habitat being mitigated. In the event that the functional value of this burned habitat has not recovered within five years of the dedication due to invasive species, to fire ecology, erosion, drought, or unforeseen events, then adaptive management pursuant to BIO-21 will be implemented for coastal scrub restoration. *(This mitigation measure applies to the Entrada South Planning Area with the following exceptions and/or changes: approximately 178.6 acres of coastal scrub shall be preserved on lands identified in the CMIP to offset impacts to coastal scrub associated with development of the Entrada South Planning Area.)*	The 178.6 acres of coastal scrub required to be preserved by this measure may be preserved initially through a project-specific offer of dedication or as part of a larger offer of dedication that includes lands preserved to offset RMDP impacts.	Upon recordation of tract map, unless previously recorded as part of another Newhall Ranch RMDP/SCP-related project or land dedication	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-21: Supplemental restoration of coastal scrub shall be conducted as an adaptive management measure pursuant to BIO-20. Eight areas were identified	If coastal scrub restoration is required pursuant to Mitigation	Beginning five years after dedication, if functional value of	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
in the Draft Newhall Ranch Mitigation Feasibility Report in the High Country SMA, Salt Creek area, and River Corridor SMA (Dudek 2007A) for coastal scrub restoration. In the event that coastal scrub restoration is required pursuant to BIO-20, the applicant shall develop a Coastal Scrub Restoration Plan, subject to the approval of CDFG. The plan shall specify, at a minimum, the following: (1) the location of mitigation sites to be selected from suitable mitigation land in the High Country and Salt Creek areas identified in the Feasibility Study; (2) a description of "target" vegetation (native shrubland) to include estimated cover and abundance of native shrubs; (3) site preparation measures to include topsoil treatment, soil decompaction, erosion control, temporary irrigation systems, or other measures as appropriate; (4) methods for the removal of non-native plants (e.g., mowing, weeding, raking, herbicide application, or burning); (5) the source of all plant propagules (*e.g.*, seed, potted nursery stock, etc. collected from within five miles of the restoration site), the quantity and species of seed or potted stock of all plants to be introduced or planted into the restoration/enhancement areas; (6) a schedule and action plan to maintain and monitor the enhancement/restoration areas, to include at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no less than two years; (7) as needed where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the restoration/ enhancement areas; and (8) contingency measures such as replanting, weed control, or erosion control to be implemented if habitat improvement/restoration efforts are	Measure RMDP/SCP-BIO-20 for all or part of the 178.6 acres of coastal scrub preserved as mitigation for Entrada South Planning Area impacts, the Coastal Scrub Restoration Plan and annual reports required by this measure will be submitted to CDFW. If coastal scrub restoration is not required pursuant to Mitigation Measure RMDP/SCP-BIO-20, no further action will be required pursuant to this measure.	burned habitat has not recovered by that time, and continuing until success criteria are met.		

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
not successful. Habitat restoration/enhancement will be judged successful when: (1) percent cover and species richness of native species reach 50% of cover and species richness at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation. Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning. Monitoring reports will describe all restoration/enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe vegetation survival or establishment in quantitative terms.				
RMDP/SCP-BIO-22: a. Newhall Land shall prepare an Oak Resource Management Plan, to be submitted for approval to CDFG and County of Los Angeles, and implemented upon approval. The Plan shall identify areas suitable for oak woodland enhancement and creation. The Plan shall distinguish between oaks to be planted in compliance with CLAOTO (BIO-22b) and the additional measures required by this EIS/EIR (BIO-2 for woodlands in jurisdictional streambeds and BIO-22c and BIO-22d for upland areas). The Oak Resource Management Plan shall include measures to create or enhance woodlands as follows (1) locations and acreages of mitigation sites where woodland creation or enhancement will occur; (2) a	The Oak Resource Management Plan required by this measure has been prepared and approved by CDFW and the County of Los Angeles. No further action is required regarding the Plan. The applicant will implement oak tree mitigation as required by the Plan and this measure to offset impacts to oak trees within the Entrada South	Prior to final map recordation	Applicant	• LACDRP • CDFW • LACFD

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
description of proposed cover and number of native trees, shrubs, and grasses per acre to be established. This description shall be based on comparable intact woodlands in the area of impact or elsewhere within the RMDP planning area, consistent with conditions of the proposed mitigation site; (3) site preparation measures to include (as appropriate) topsoil treatment, soil decompaction, erosion control, weed grow/kill cycle, or as otherwise approved by the agencies; (4) methods for the removal of non-native plants (e.g., mowing, weeding, raking, herbicide application, or burning); (5) a plant palette listing all species, including sizes, planting densities, or seeding rates, to be based on target vegetation; (6) the source of all plant propagules (e.g., seed, potted nursery stock) and the quantity and species of seed or potted stock of all plants to be introduced or planted into the mitigation areas; (7) temporary irrigation, protection from herbivores, fertilizer, weeding, *etc.*; (8) a schedule and action plan to maintain and monitor the enhancement/restoration areas to include, at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no less than five years total and no less than two years after removal of irrigation (if any); (9) where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the mitigation areas shall be implemented as needed; (10) tree protection standards to be implemented for individual trees or woodlands adjacent to development activity; (11) success criteria as stated in BIO-22b and	Planning Area.			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
BIO-22d; and (12) contingency measures, such as replanting, erosion control, irrigation system repair, or understory re-seeding, to be implemented if habitat improvement/restoration efforts do not meet the success criteria stated in the plan. b. To meet the minimum mitigation criteria set forth in CLAOTO, Newhall Land will replace impacted oaks (measuring eight inches in diameter, or greater, or with a combined diameter of 12 inches for multi-stem oaks) at a ratio of 2:1. Additionally, oaks meeting the criteria for classification as a Heritage Tree (defined by CLAOTO as "any oak tree measuring 36 inches or more in diameter") will be replaced at a ratio of 10:1. Whether they are planted in dedicated open space areas or developed areas, replacement oak trees planted in conformance with CLAOTO shall adhere to the following standards: 1. Replacement oak trees shall be exclusively indigenous species, shall be at least a 15-gallon size specimen, and measure at least one inch in diameter one foot above the base, unless otherwise approved by the County Forester. 2. Replacement trees shall be properly cared for and maintained for a period of two years and replaced by Newhall Land if mortality occurs within that period. 3. Replacement planting shall be conducted in phases as impacts occur. Alternatively, Newhall Land may choose to plant replacement trees in open space areas prior to realization of Project-related impacts (pre-mitigation). Any pre-mitigation shall adhere to				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
the standards outlined herein. 4. Following completion of the two-year maintenance period, the County Forester shall provide final authorization that CLAOTO standards have been met. c. In addition to the CLAOTO requirements (BIO-22b), this EIS/EIR requires replacement of oak trees at the ratios in the table below for trees lost or impacted in uplands. These trees are in addition to the CLAOTO requirement described above. These additional trees may also be incorporated into woodland habitat enhancement or creation, as described above. Additional replacement ratios are provided in Table 15. d. Newhall will mitigate lost oak woodlands occurring on upland sites (i.e., outside CDFG/Corps jurisdictional stream channels) by creating or enhancing oak woodlands in the Salt Creek area and High Country SMA. At minimum, Newhall Land will mitigate woodland habitat at a 1:1 ratio through creation of new oak woodlands. As an alternative, Newhall Land may choose to enhance, improve, and manage existing degraded woodland areas at a minimum 2:1 ratio for lost woodland acreage. For woodland enhancement or replacement, dominant species (coast live oak or valley oak) and planting densities will be based on mitigation site suitability. All plant propagules, including acorns or tree cuttings and all seed or potted nursery stock of oaks or other species, shall be collected within a five-mile radius and within 1,000 feet elevation of the restoration site.				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
The woodland creation or enhancement sites shall be monitored for oak tree survival and vigor and other habitat values, including species diversity and wildlife use. The replacement or enhancement sites will be considered "complete" upon meeting all of the following success criteria, or as otherwise approved by CDFG. Any replacement oak trees planted in woodlands for conformance with CLAOTO will also be subject to CLAOTO performance criteria (BIO-22b). General performance standards for woodland creation or enhancement sites include the following: 1. Regardless of the date of initial woodland creation or enhancement, each site must have been without active manipulation by irrigation, planting, or re-seeding for a minimum of three years prior to evaluation for successful completion. 2. The percent cover and species richness of restored or enhanced native vegetation shall be evaluated based on target vegetation described in the woodland creation or enhancement plan. 3. Densities (numbers/acre) of surviving, healthy oak trees shall be within 5% of the plan target density. Cover and species richness of other native shrubs shall reach 50% of the cover and species richness described for the "target" woodland. Optimal woodland densities and acorn planting quantities, by oak woodland type, are presented in Table 16. 4. Non-native grass cover shall not exceed the "target" woodland non-native grass cover, and other non-native species shall not exceed 10% cover at any time. Any species listed on the California State				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Agricultural list (CDFA 2009) or Cal-IPC invasive plant inventory (Cal-IPC 2006, 2007) will not be present on the revegetation site at the time that project success is determined. *(Table number corresponds to the numbering in the Entrada South Bio Report.* [**Table 15**, Additional BIO-22c Oak Tree Replacement Ratios, and **Table 16**, Optimal Woodland Densities and Acorn Planting Quantities, by Oak Woodland Type, are provided on page 153 of this MMRP.])				
RMDP/SCP-BIO-23: A final Spineflower Conservation Plan (SCP) shall be adopted and implemented after approval by CDFG, including the permanent dedication of preserves (see draft in Appendix 1.0). The proposed spineflower preserve areas shall be offered to CDFG as a permanent conservation easement within one year after issuance of the requested 2081 Permit to ensure long-term protection. The conservation easement shall be to CDFG and contain appropriate funding and restrictions to help ensure that the spineflower preserve lands are protected in perpetuity. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP for the Entrada South preserve.)*	CDFW approval and adoption of the SCP and permanent protection of the spineflower preserves, including the Entrada South spineflower preserve, have been completed. Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation. No additional reporting is required pursuant to this	Prior to spineflower impact on-site resulting from Project activities until management responsibility transferred to NLMO	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	measure.			
RMDP/SCP-BIO-24: The spineflower preserves shall be managed by Newhall Land and their preserve manager(s) and/or natural lands management organization(s) (NLMO). Newhall Land shall submit a statement of qualifications for their proposed preserve manager(s)/NLMO(s) for approval by CDFG. Newhall Land will fund in full all implementation of spineflower preserve management as described in the SCP and all mitigation measures listed in this document. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	Adoption and CDFW approval of the SCP, and permanent protection of the SCP spineflower preserves, have been completed. Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation. No additional reporting is required pursuant to this measure.	In conjunction with the Compliance Verification Notice (CVN) reviewed and approved by CDFW	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-25: Disturbed portions (i.e., agricultural lands, disturbed lands, and developed lands) of the spineflower preserves, including buffers, will be restored through revegetation with native plant communities. In summary, areas that have greater than 30% relative cover by weeds will be restored to have relative cover comparable to that of existing occupied spineflower habitat. Habitat restoration and enhancement plans (including restoration plans) for areas within the preserves shall be prepared at the direction of the preserve manager by a qualified biologist and submitted to the County and	Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance	Prior to spineflower impact on-site resulting from Entrada South Planning Area activities until success criteria are met	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
CDFG for approval prior to implementation. In addition, Cal-IPC List A and B plants that are present within the spineflower preserve will be controlled. Restoration and enhancement efforts within the spineflower preserve areas shall be in conformance with the Spineflower Conservation Plan. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	documentation.			
RMDP/SCP-BIO-26: In the event that a spineflower preserve, or buffer, or a portion of a spineflower preserve, or buffer burns in a wildfire or suffers from mass movements (e.g., landslides, slope sloughing, or other geologic events), the spineflower preserve manager and Newhall Land shall promptly review the site and determine what action, if any, should be taken. The primary anticipated post-fire spineflower preserve management activity involves monitoring the site and controlling annual weeds that may invade burned areas following a fire event, especially when such weeds (that were not previously present or not present in similar densities) exceed the 30% maximum threshold (see BIO-25). If fire-control lines or other forms of bulldozer damage occur in the spineflower preserves, these areas will be repaired and revegetated to pre-burn conditions or better. An emergency fire response plan will be prepared (in accordance with Mitigation Measure SP-4.6-72) prior to the establishment of the spineflower preserves and approved by CDFG and Los Angeles County Fire Department. The preserve manager will contact the LACFD at least once every five years to review the plan	Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	In perpetuity	Applicant	• CDFW • LACFD • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and consult with them on implementation of the plan. The same methods will be applied to mass-movement, landslide, or slope-sloughing types of events. This measure shall be implemented in conformance with the Spineflower Conservation Plan. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*				
RMDP/SCP-BIO-27: Spineflower preserve temporary fencing shall be shown on construction plans and installed prior to initiating construction clearing and grubbing activities within 500 feet of spineflower preserves, including the buffers. The spineflower preserve manager or a qualified biologist shall monitor fence installation. Clearing for fence installation shall be minimized to what is necessary to install the fence and, where possible, shall leave the roots of native plants in place to allow regrowth. As necessary, native vegetation will be restored and weed management will be performed following fence installation to ensure temporarily cleared native plant areas do not become weed dominated after installation. General Project clearing and grubbing within 500 feet of the fence may commence upon verification by the spineflower preserve manager or the qualified biologist that protective fencing is in place and is adequate. Appropriate BMPs shall be installed at the edge of development manufactured slopes when the spineflower preserve is within 500 feet and down-slope of proposed development. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada*	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	During grading/ construction within 500 feet of spineflower preserve	Applicant/Preserve Manager	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
South spineflower preserve.)				
RMDP/SCP-BIO-28: Construction documents shall indicate that the grading contractor is responsible for protecting spineflower preserves during construction work. The construction documents shall indicate that the contractor is responsible for informing all employees and subcontractors of the environmentally sensitive areas and the proper conduct of work when working near (e.g., within 500 feet) of these areas. The construction documents shall require a pre-construction meeting to perform an "environmental education session" with the grading contractor/contractor's employees, subcontractors, and equipment operators prior to commencing construction work within 500 feet of the spineflower preserves. The environmental education session shall be conducted by the spineflower preserve manager or a qualified biologist and focus on informing workers of the location and sensitivity of the spineflower and the requirements for protecting it. The construction documents shall indicate that the grading contractor shall be responsible for mitigating any impacts to spineflower preserves due to the negligence of the grading contractor/contractor's employees, subcontractors, or equipment operators. If accidental trespass into a spineflower preserve occurs during construction, the violation shall be documented by the preserve manager and immediately reported to CDFG. Follow-up action will be taken in accordance with the Section 2081 of the Fish and Game Code, Incidental Take Permit issued by CDFG. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada*	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Prior to commencement of grading within 500 feet of spineflower preserve	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
South spineflower preserve.)				
RMDP/SCP-BIO-29: Construction plans shall include necessary design features and construction notes to demonstrate consistency of development in the vicinity of spineflower preserves with the Spineflower Conservation Plan (SCP). In addition to applicable erosion control plans and performance under SCAQMD Rule 403d dust control (SCAQMD 2005), the Project stormwater pollution prevention plan (SWPPP) shall include minimum BMPs. Together, the implementation of these requirements shall ensure that spineflower preserve populations are protected during construction. At a minimum, the following measures/restrictions shall be incorporated into the SWPPP and noted on construction plans, where appropriate, to avoid impacting spineflower preserves during construction: • Avoid planting or seeding invasive species in development areas during construction phases; • Do not use erosion control devices that may contain weeds, such as hay bales, etc., within 200 feet of spineflower preserves or anywhere upstream of spineflower preserves; • Do not windrow or stockpile soil within 200 feet of spineflower preserve boundaries or anywhere upstream of spineflower preserves; • Do not locate staging areas, maintenance, or concrete washout areas within 500 feet (unless otherwise authorized by CDFG, and no closer than 200 feet in any instance), where adjacent to or anywhere upstream of spineflower preserves; • Do not store toxic compounds, including fuel, oil,	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Approval of CVN by CDFW	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
lubricants, paints, release agents, or any other construction materials that could damage spineflower habitat if spilled near spineflower preserve areas, or anywhere upstream of spineflower preserves, or along spineflower preserve boundaries; • Provide location and details for any fencing for temporary and permanent access control along preserve boundaries (per BIO-31 for temporary fencing and BIO-36 for permanent fencing); • Provide location and details for any dust control fencing along preserve boundaries (per BIO-32); and • Provide location and details for any stormwater run-on controls/BMPs coming from development area to spineflower preserve (per BIO-38 and BIO-39). *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*				
RMDP/SCP-BIO-30: The spineflower preserve manager or qualified biologist shall review construction plans and specifications, SWPPP, and, where appropriate, erosion control plans and implementation of SCAQMD Rule 403d dust control measures (SCAQMD 2005) prior to construction within 500 feet of spineflower preserves for compliance with the Spineflower Conservation Plan and associated permits and Project-related environmental documents. A copy of the SWPPP and associated monitoring reports will be provided to CDFG. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Prior to construction within 500 feet of spineflower preserves	Preserve Manage	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-31: Spineflower preserves shall be protected prior to clearing and during construction with temporary construction fencing as described in BIO-27. Openings shall be included in the fence when located within wildlife corridors and vegetation community connectivity areas to allow for the safe passage of wildlife. The spineflower preserve manager or a qualified biologist shall indicate the location and width of each of these openings. The fencing shall be three-strand non-barbed wire fence or bright orange U.V. stabilized polyethylene construction "snow" fencing, attached to metal T-posts that extend at least four feet above grade or equivalent. Protective fencing shall be maintained in good condition until completion of Project construction. Where construction activities occur within 500 feet of a spineflower preserve, the spineflower preserve manager or qualified biologist shall review fencing weekly during construction monitoring visits and note any fencing that is in need of repair. Repairs shall be completed within three working days of notification by the spineflower preserve manager or qualified biologist. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Prior to grading until completion of construction	Applicant/Preserve Manager	• CDFW • LACDRP
RMDP/SCP-BIO-32: Development areas shall have dust control measures implemented and maintained to prevent dust from impacting vegetation within the spineflower preserve areas. Dust control shall be implemented during construction in compliance with SCAQMD Rule 403d (SCAQMD 2005). Where construction activities occur within 100 feet of a spineflower location, chemical dust suppression shall not be utilized. Where determined	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in	Prior to and during grading	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
necessary by the spineflower preserve manager or qualified biologist, a screening fence (i.e., a six-foot high chain link fence with green fabric up to a height of five feet) shall be installed to protect spineflower locations. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	the SCP annual work plan and spineflower ITP compliance documentation.			
RMDP/SCP-BIO-33: The spineflower preserve manager or qualified biologist shall perform weekly construction monitoring for all construction activities within 500 feet of spineflower preserve areas. The spineflower preserve manager's or qualified biologist's construction monitoring tasks shall include reviewing and approving protective fencing, dust control measures, and erosion control devices before construction work begins; conducting a contractor education session at the preconstruction meeting; reviewing the site weekly (minimum) during construction to ensure the fencing, dust control, and BMP measures are in place and functioning correctly and that work is not directly or indirectly impacting spineflower plants; and quarterly monitoring shall be initiated for Argentine ants along the construction–open space interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or	Protection and management of the Entrada South spineflower preserve during construction is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	During construction within 500 feet of spineflower preserve	Applicant/Preserve Manager	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Each site visit shall be followed up with a summary monitoring report sent electronically to Newhall Land indicating the status of the site. Monthly monitoring reports, as needed, shall be submitted to CDFG and the County of Los Angeles. Monitoring reports shall include remedial recommendations and issue resolution discussions when necessary. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*				
RMDP/SCP-BIO-34: Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and FMZ areas within 200 feet of a spineflower preserve shall be reviewed and approved within 30 days by the spineflower preserve manager or qualified biologist and CDFG to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation community degradation in the spineflower preserve and buffer areas. Container plants to be installed within public areas within 200 feet of the spineflower preserves shall be inspected by the spineflower preserve manager or qualified biologist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, for public areas within 200 feet of spineflower preserves, landscape plants shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental	Compliance with the measure will be implemented and monitored through the SCP compliance verification process and documented in the SCP annual work plan.	Prior to installation of landscaping in the specified areas	Applicant/Preserve Manager	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Plants listed in Appendix B of the SCP. The current Cal-IPC list can be obtained from the Cal-IPC web site (http://www.cal-ipc.org/ip/inventory/index.php). *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve, except that the current Cal-IPC website is www.cal-ipc.org/ip/inventory/.)*				
RMDP/SCP-BIO-35: All portions of the spineflower preserves shall be closed, with the exception of pre-identified existing dirt roads and utility easements. The pre-identified existing dirt roads and utility easement access roads shall function as access routes for the spineflower preserve manager, spineflower preserve maintenance personnel, utility personnel, and emergency services vehicles only (e.g., police, fire, and medical). No other vehicle or foot traffic, including nature or recreational trails, will be permitted in the preserve, including the buffer. The dirt roads shall be gated and locked at the outside edges of the buffer zone. Signs discouraging unauthorized access shall be posted. The only persons or entities issued gate keys shall be the spineflower preserve managers and their employees, easement holding utility companies, emergency services, Newhall Land, and CDFG. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Prior to issuance of first certificate of occupancy	Applicant/Preserve Manager	• CDFW • LACDRP
RMDP/SCP-BIO-36: Fencing shall be installed along the outside edge of the spineflower preserve and buffer areas adjacent to proposed developments, parks, golf courses, or other “active land uses” to prevent unauthorized	Protection and management of the Entrada South spineflower preserve is	Prior to issuance of first certificate of occupancy	Applicant/Preserve Manager	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
access. Specific areas that are adequately protected by steep terrain (1.5:1 or steeper) and/or dense vegetation may not require fencing but would require signage. The determination of the need for fencing in these areas shall be subject to the approval of the spineflower preserve manager or qualified biologist. If monitoring determines that slope and/or vegetation is not effective at deterring unauthorized access, additional fencing may be required by the spineflower preserve manager or qualified biologist. Fencing is not required in areas bordered by large parcels of conserved natural open space areas or the Santa Clara River riparian corridor, as installing fencing in these areas would be unnecessary and damaging to existing vegetation and wildlife corridors. Fencing must extend a minimum of four feet above grade and include wood-doweled split rail fencing, exterior grade heavy-duty vinyl three-railed fencing, three-strand non-barbed wire, or similar. Fencing installed adjacent to native vegetation communities and natural open space areas will allow for the passage of animals. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.			
RMDP/SCP-BIO-37: Outdoor all-weather signs measuring approximately 12 by 16 inches shall be posted on all spineflower preserve access gates and along spineflower preserve fencing at approximately 800 feet on center, except adjacent to road crossings, where signs will be posted. The placement will take topography into account, emphasizing placement on ridgelines where signs will be visible to emergency fire personnel and	Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work	Prior to issuance of first certificate of occupancy	Applicant/Preserve Manager	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
others. Signs shall state in English and Spanish that the area is a biological preserve that hosts a state-listed endangered and federal candidate plant species and that trespassing is prohibited (in accordance with Mitigation Measure SP-4.6-68). Signs shall indicate that fuel modification and management work is not allowed within the spineflower preserve (including buffer areas). The signage shall state that people who do not abide by these rules or who damage the protected species will be subject to prosecution, including fines and/or imprisonment. All signage shall include emergency contact information and shall be reviewed and approved by the spineflower preserve manager or qualified biologist. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	plan and spineflower ITP compliance documentation.			
RMDP/SCP-BIO-38: Storm drain outfalls from proposed development areas shall only be installed uphill from spineflower preserve areas where necessary to retain pre-construction hydrological conditions within the spineflower preserves, sustain existing riparian and wetland vegetation communities, and/or allow for the restoration of currently disturbed areas to native riparian/alluvial vegetation communities. When located in a spineflower preserve area, storm drains must meet the following criteria: • Storm drains must not impact spineflower either directly or indirectly, and • Under no circumstances shall storm drains daylight onto steeply sloped areas or other areas that would cause erosion.	Protection and management of the Entrada South spineflower preserve is implemented and monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Approval of CVN by CDFW	Applicant/Preserve Manager	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)				
RMDP/SCP-BIO-39: Any surface water entering a spineflower preserve area from development areas during construction is required to pass through BMP measures, which will be described in the SWPPP. Storm drain outlets must contain hydrologic controls (e.g., adequate energy dissipaters) to prevent downstream erosion and stream channel down-cutting. Additionally, storm drain outlets must be designed based on pre- and post-construction hydrological studies (in accordance with Mitigation Measure SP-4.6-69). Storm drains and permanent structural BMPs shall be designed by a licensed civil engineer. Requirements of BIO-29 and BIO-38, where applicable, shall be incorporated into the facility design and shall be subject to approval by the spineflower manager or qualified biologist. Long-term maintenance of storm drain BMPs will be the responsibility of the designated maintenance entity. *(This mitigation measure applies to the Entrada South Planning Area without change in regard to the Entrada South spineflower preserve.)*	Compliance with this measure will be ensured through preparation and implementation of a SWPPP for the Entrada South Planning Area that incorporates the requirements of the measure. Protection and management of the Entrada South spineflower preserve is further monitored through the SCP and documented in the SCP annual work plan and spineflower ITP compliance documentation.	Approval of CVN by CDFW	Applicant/Preserve Manager	• CDFW • LACDRP
RMDP/SCP-BIO-40: The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007c) shall be revised and submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The revised plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open	Revision and approval of the RMDP Slender Mariposa Lily Mitigation and Monitoring Plan has been completed. Implementation of the Plan is documented in the annual monitoring	Prior to ground disturbance to occupied habitat	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
space (i.e., the Salt Creek area or High Country SMA, spineflower preserves, or River Corridor SMA) without conflicting with other resource management objectives. Habitat replacement/enhancement will be at a 1:1 ratio (acres restored/enhanced to acres impacted). The revised plan will describe habitat improvement/restoration measures to be completed prior to introducing slender mariposa lily. Habitat improvement/ restoration will be based on native occupied slender mariposa lily habitat. The revised plan will specify: (1) the location of mitigation sites (may be selected from among 559 acres of suitable mitigation land in the High Country SMA and Salt Creek area identified in the Draft Newhall Ranch Mitigation Feasibility Study (Dudek 2007a); (2) a description of "target" vegetation (native shrubland or grassland) to include estimated cover and abundance of native shrubs and grasses in occupied slender mariposa lily habitat on Newhall Ranch land (either at sites to be destroyed by construction or at sites to be preserved); (3) site preparation measures to include topsoil treatment, soil decompaction, erosion control, temporary irrigation systems, or other measures as appropriate; (4) methods for the removal of non-native plants (e.g., mowing, weeding, raking, herbicide application, or burning); (5) the source of all plant propagules (seed, potted nursery stock, *etc.*), the quantity and species of seed or potted stock of all plants to be introduced or planted into the restoration/enhancement areas; (6) a schedule and action plan to maintain and monitor the enhancement/restoration areas, to include at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no	reports prepared and submitted to CDFW pursuant to the measure.			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
less than two years; (7) as needed where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the restoration/ enhancement areas; and (8) contingency measures such as replanting, weed control, or erosion control to be implemented if habitat improvement/restoration efforts are not successful. Habitat restoration/enhancement will be judged successful when (1) percent cover and species richness of native species reach 50% of their cover and species richness at undisturbed occupied slender mariposa lily habitat at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation. At that point slender mariposa lily propagules (seed or bulbs) will be introduced onto the site. The revised plan will specify methods to collect propagules and introduce slender mariposa lily into these mitigation sites. Introductions will use source material (seeds or bulbs) from no more than 1.0 mile distant, similar slope exposures, and no more than 500 feet elevational difference from the mitigation site, unless otherwise approved by CDFG. Bulbs may be salvaged and transplanted from slender mariposa lily occurrences to be lost; alternately, seed may be collected from protected occurrences, following CDFG-approved seed collection guidelines (i.e., MOU for rare plant seed collection). No bulbs will be translocated into areas within 300 feet of proposed or existing development. Newhall Land or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate slender mariposa lily survivorship (for bulbs) or seedling establishment (for				

Table 1 (Continued)
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seeded sites). Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning for slender mariposa lily. Monitoring reports will describe all restoration/ enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe mariposa lily survival or establishment in quantitative terms. A minimum of 133 acres of slender mariposa lily cumulative occupied area will be conserved and managed in the RMDP and SCP Project boundaries. Of these 133 acres, approximately 103 acres of slender mariposa lily cumulative occupied area will be conserved and managed in the RMDP and SCP Project boundary in the High Country SMA and Salt Creek area, and two acres occur within the River Corridor SMA and/or proposed spineflower preserves. Additional cumulative occupied area will be conserved and managed in the San Martinez Grande Canyon area at a 1:1 ratio (acres conserved and managed to acres impacted) based on impacts to cumulative occupied area within the Entrada planning area, as a means to ensure regional biodiversity of the species. Up to an additional 28 acres of slender mariposa lily cumulative occupied area can be conserved and managed in the San Martinez Grande Canyon area for this purpose.				
RMDP/SCP-BIO-41: Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable	Submittal of pre-construction survey reports and construction	Prior to ground disturbance in suitable habitat as	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for American badger. If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200 foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFG. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than four inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFG. A written report documenting the badger removal shall be provided to CDFG within 30 days of relocation. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.	monitoring and/or relocation reports, as applicable	specified		
RMDP/SCP-BIO-42: All oaks that will not be removed that are regulated under CLAOTO with driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed in a temporary fenced zone for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (i.e., the area at least 15 feet from the trunk or five feet beyond the	Submittal of construction monitoring reports	Prior to and during clearing and grading	Applicant	• LACDRP

Table 1 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
drip line, whichever distance is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Removal of the fence shall occur only after the Project arborist or qualified biologist confirms the health of preserved trees.				
RMDP/SCP-BIO-49: Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can reasonably be expected to occur.	Compliance with this measure will be ensured through preparation and implementation of a SWPPP for the Entrada South Planning Area. No further reporting is required pursuant to this measure.	During clearing and grading	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-52: Prior to grading and construction activities, a qualified biologist shall be retained to conduct a Worker Environmental Awareness Program (WEAP) for all construction/contractor personnel. A list of construction personnel who have completed training prior to the start of construction shall be maintained on site and this list shall be updated as required when new personnel start work. No construction worker may work in the field for more than five days without participating in the WEAP. Night work and use of lights on equipment shall not be allowed unless CDFG approves of the night work and use of lights. Lighting shall not be used where threatened or endangered species occur. Lights shall be directed from natural areas and remain 200 feet away from natural areas unless otherwise approved by CDFG. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with	Submittal of a WEAP training log and construction monitoring reports	Prior to grading and construction	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following: • Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements. • A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts; • Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts); • Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations; • Discuss procedures for minimizing harm to or				

Table 1 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife; • Review/designate the construction area in the field with the contractor in accordance with the final grading plan; • Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected); • Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity; • Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas; • Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented; • To reduce the potential for the spread of exotic invasive invertebrates (e.g., New Zealand mud snails) and weeds (including weed seeds) during Project clearing and construction, all heavy equipment proposed for use on the Project site shall be verified cleaned (including wheels, tracks, undercarriages, and bumpers, as applicable) before delivery to the Project site. Equipment must be documented as exotic invasive invertebrate (e.g., mud snail) and weed free upon delivery to the Project site initial staging area, including: (1) vegetation clearing equipment (skid steer loaders,				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
loaders, dozers, backhoes, excavators, chippers, grinders, and any hauling equipment, such as off-road haul trucks, flat bed, or other vehicles); (2) earth-moving equipment (scrapers, dozers, excavators, loaders, motor-graders, compactors, backhoes, off-road water trucks, and off-road haul trucks); and (3) all Project-associated vehicles (including personal vehicles) that, upon inspection by the monitoring biologist, are deemed to present a risk for spreading exotic invasive invertebrates (e.g., mud snails) or weeds. Equipment shall be cleaned at existing construction yards or at a wash station. The biological monitor shall document that all construction equipment (as described above) has been cleaned prior to working within the Project work site. Any equipment/vehicles determined to not be free of exotic invasive invertebrates (e.g., mud snails) and weeds shall immediately be sent back to the originating construction yard for washing, or wash station where rinse water is collected and disposed of in either a sanitary sewer or other legal point of disposal. Equipment/vehicles moved from the site must be inspected, and re-washed as necessary, prior to re-engaging in construction activities in the Project work area. A written daily log shall be kept for all vehicle/equipment washing that states the date, time, location, type of equipment washed, methods used, and location of work; • Be present during initial vegetation clearing and grading; and • Submit to CDFG an immediate report (within 72 hours) of any conflicts or errors resulting in impacts to				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
special-status biological resources.				
RMDP/SCP-BIO-52a: The WEAP required by Mitigation Measure RMDP/SCP-BIO-52 shall instruct workers to ensure that all pipes, tubing, or similar items staged or stored at the Project site for one or more overnight periods shall be capped, screened, covered, or filled with material. All pipes, tubing, or similar items shall be thoroughly inspected for wildlife by the qualified biologist or biological monitor, prior to capping or use in Project activities.	Submittal of a WEAP training log and construction monitoring reports	Prior to grading and construction	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-53: Prior to the issuance of a grading permit for ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the Project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (e.g., the presence of rain pools). If western spadefoot toad is identified on the Project site, the following measures will be implemented. 1. Under the direct supervision of the qualified biologist, western spadefoot toad habitat shall be created within suitable natural sites on the Specific Plan site outside the proposed development envelope. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a 2:1 ratio. The actual relocation site design and location shall be approved by CDFG. The location shall be in suitable habitat as far away as feasible from any of the homes and roads to be built. The relocation ponds shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic	Submit pre-construction survey reports and, if applicable, monitoring reports for relocation sites.	Prior to ground disturbance in suitable habitat	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
predators (e.g., fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing ponds as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adults, tadpoles, and egg masses detected are moved to the created pool habitat. 2. Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in the identified/created relocation ponds described above. 3. The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFG by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFG at the end of the monitoring effort. Success criteria for the monitoring				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
program shall include verifiable evidence of toad reproduction at the relocation site. *(This measure applies to the Entrada South Planning Area with the following exceptions and/or changes: replacement habitat also may be created within areas of the Entrada South Planning Area Site not subject to development, where approved by CDFW.)*				
RMDP/SCP-BIO-54: Prior to construction the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and provide for the documentation/recordation of the species and number of the animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground disturbing activities within potentially occupied habitat. The Plan shall include the specific survey and relocation efforts that would occur for construction activities that occur both during the activity period of the special status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, oak woodland, riparian habitats, or other areas supporting	Compliance with the relocation plan requirement of this measure will be demonstrated by CDFW approval of the submitted plan. Compliance with the survey and relocation requirements of the measure, if applicable, will be documented through pre-construction survey reports and, if applicable, relocation reports submitted to CDFW.	Prior to ground disturbance within potentially occupied habitat as specified	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
these species qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake in order to avoid or minimize take of these special-status species. The plan shall require a minimum of three (3) surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low activity period (generally December through February) the surveys shall be conducted prior to this period if possible and exclusion fencing shall be placed to limit the potential for re-colonization of the site prior to construction. The qualified biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Clearance surveys for special-status reptiles shall be conducted by a qualified biologist prior to the initiation of construction each day. Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits. *(Coast horned lizard and coastal western whiptail are referred to as Blainville's horned lizard and San Diegan tiger whiptail, respectively, in this document.)*				
RMDP/SCP-BIO-55: a. As a supplement to BIO-1 through BIO-16, additional habitat mitigation through replacement or enhancement of nesting/foraging habitat for least	If mitigation for habitat of least Bell's vireo or California gnatcatcher is required, submit	Prior to impacts to jurisdictional resources.	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Bell's vireo will be provided for certain key habitat zones at higher ratios (identified as "key population areas" in Figure 4.5-86, Alternative 2 Impacts to Least Bell's Vireo Habitat). Southern willow scrub, southern cottonwood–willow riparian, arrow weed scrub, mulefat scrub, and Mexican elderberry scrub and woodland that provide nesting/foraging habitat for least Bell's vireo in "key population areas" shall be replaced or enhanced. All permanent loss to nesting/foraging habitat in key population areas shall be mitigated at a 5:1 ratio unless otherwise authorized by CDFG or USFWS. Temporary habitat loss of foraging/nesting habitat in key population areas shall be mitigated at a 2:1 ratio. The requirements for replacing habitat by either creating new habitat or removing exotic species from existing habitat shall follow the procedures outlined in BIO-1 through BIO-16. To replace the lost functions of habitat located adjacent to the Santa Clara River due to noise impacts, all nesting/foraging habitat within the 60 dBA sound contour (associated with development site roadway improvements) shall be considered degraded. Nesting/foraging habitat within this area shall be mitigated at a ratio of 2:1.	mitigation reports annually to CDFW.			
b. The loss of documented occupied nesting habitat for coastal California gnatcatcher shall be mitigated. If the coastal California gnatcatcher is identified nesting on-site, the Applicant will acquire or preserve nesting coastal California gnatcatcher habitat at a 3:1 ratio for impacts to documented occupied habitat, or by the ratio specified in BIO-2, whichever is greater. Mitigation acquisition shall occur at an agreed-upon				

Table 1 (Continued)
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location as approved by the USFWS upon consultation. The Applicant shall enter into a binding legal agreement regarding the preservation of occupied habitat describing the terms of the acquisition, enhancement, and management of those lands. *(Figure 4.5-86, Alternative 2 Impacts to Least Bell's Vireo Habitat, is provided in the State-certified EIR.)*				
RMDP/SCP-BIO-56: Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the Project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. Pre-construction surveys shall include nighttime surveys to identify active rookery sites. The surveys shall continue on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground-disturbing activities. If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and	Submit pre-construction survey reports and, if applicable, construction monitoring reports to CDFW.	Within 30 days of ground disturbance in suitable habitat during nesting/ breeding season and ending no more than 7 days prior to initiation of work	Applicant	• USFWS • CDFW • LACDRP •

Table 1 (Continued)
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juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. In the event that golden eagles establish an active nest in the River Corridor SMA, the buffers will be established in consultation with CDFG. Potential golden eagle nesting will be reported to CDFG within 24 hours. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFG in the annual mitigation status report. For listed riparian songbirds (least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo) USFWS protocol surveys shall be conducted. If active nests are found, clearing and construction within 300 feet of the nest shall be postponed or halted, at the discretion of the biologist in consultation with CDFG and USFWS, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. If no active nests are observed, construction may proceed. If active nests are found, work may proceed provided that construction activity is located at least 300 feet from active nests (or as authorized through the context of the Biological Opinion and 2081b Incidental Take Permit). This buffer may be adjusted provided noise levels do not exceed 60 dBA hourly L_{eq} at the edge of the nest site as determined by a qualified biologist in coordination with a qualified				

Table 1 (Continued)
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acoustician. If the noise meets or exceeds the 60 dBA L_{eq} threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dBA L_{eq} hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFG and USFWS. For coastal California gnatcatcher, the applicant shall conduct USFWS protocol surveys in suitable habitat within the Project area and all areas within 500 feet of access or construction-related disturbance areas. Suitable habitats, according to the protocol, include “coastal sage scrub, alluvial fan, chaparral, or intermixed or adjacent areas of grassland and riparian habitats.” A permitted biologist shall perform these surveys according to the USFWS’ (1997a) Coastal California Gnatcatcher Presence/ Absence Survey Guidelines. If a territory or nest is confirmed, the USFWS and CDFG shall be notified immediately. If present, a 500-foot disturbance-free				

Table 1 (Continued)
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buffer shall be established and demarcated by fencing or flagging. No Project activities may occur in these areas unless otherwise authorized by USFWS and CDFG. Construction activities in suitable gnatcatcher habitat will be monitored by a full-time qualified biologist. The monitoring shall be of a sufficient intensity to ensure that the biologist could detect the presence of a bird in the construction area.				
RMDP/SCP-BIO-57a: ~~Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether the western burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by field crops, disturbed habitat, grasslands, and along levee locations, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).~~ ~~Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between Project activities and nesting burrowing owls during the nesting season. This protected~~	Submit pre-construction survey reports and, if applicable, Burrowing Owl plan, and construction monitoring reports to CDFW	Prior to ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 1 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
~~area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.~~ ~~Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report.~~ Prior to Project activities, and within 120 days of Project commencement, focused surveys by a CDFW-approved qualified biologist shall be conducted to determine presence of western burrowing owl. Surveys shall include four site visits conducted from as many fixed points as necessary to provide visual coverage of the site using spotting scopes or binoculars. Disturbance shall be minimized around potential occupied burrows during all seasons. Site visits shall be repeated on four separate days. Visits shall be conducted two hours before to one hour after sunset, or from one hour before to two hours after sunrise. Surveys shall be conducted during weather that is conducive to observing owls outside their burrows. Surveys shall be avoided during heavy rain, high winds (> 20 mph), or dense fog. Results of all surveys shall be provided to CDFW after surveys are complete, 30 days prior to Project commencement. If a burrowing owl is observed during the focused surveys, the qualified biologist shall notify CDFW immediately and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval 30 days prior to commencing Project activities. The Burrowing Owl Plan shall describe survey results, proposed avoidance measures, and monitoring plan. In the event of any conflict between this mitigation measure and the terms of an incidental take permit or				

Table 1 (Continued)
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other instrument authorizing take of western burrowing owl under applicable law, the terms of the incidental take permit or other authorization shall control. *(This measure replaces mitigation measure RMDP/SCP-BIO-57 and applies to the VCC Planning Area without change.)*				
RMDP/SCP-BIO-58: Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit and San Diego desert woodrat. If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to CDFG within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.	Submit pre-construction survey reports and, if applicable, relocation reports and/or construction monitoring reports to CDFW	Prior to ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 1 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone or within 100 feet of the disturbance zone, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist in consultation with CDFG. Clearing and construction within the fenced area will be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. If avoidance is not possible, the applicant will take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off site, and (3) the nest sticks shall be removed from the Project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. The applicant shall document all woodrat nests moved and provide a written report to CDFG. All woodrat relocation shall be conducted by a qualified biologist in possession of a scientific collecting permit.				
RMDP/SCP-BIO-60: Thirty days prior to construction activities, a qualified biologist shall conduct a pre-construction survey for mountain lion natal dens.	Submit pre-construction survey reports and, if applicable, construction	Prior to ground disturbance in suitable habitat as	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
The survey area shall include the construction footprint and the area within 2,000 feet of the Project disturbance boundaries. Should an active natal den be located, the applicant shall cease work within 2000 feet and inform CDFG with 24 hours. No construction activities shall occur in the 2000 foot buffer until a qualified biologist in consultation with CDFG establishes an appropriate setback from the den that would not adversely affect the successful rearing of the cubs. No construction activities or human intrusion shall occur within the established setback until the cubs have been successfully reared or the cats have left the area. *(The mountain lion is referred to as cougar in this SEIR.)*	monitoring reports to CDFW	specified		
RMDP/SCP-BIO-61: No earlier than 30 days prior to the commencement of construction activities, a pre-construction survey shall be conducted by a qualified biologist to determine if active roosts of bats are present on or within 300 feet of the Project disturbance boundaries. Should an active maternity roost be identified (in California, the breeding season of native bat species is generally from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, until the roost is vacated and juveniles have fledged. Surveys shall include rocky outcrops, caves, structures, and large trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). Trees and rocky outcrops shall be surveyed by a qualified bat biologist (i.e., a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied	Submit pre-construction survey reports and, if applicable, construction monitoring reports to CDFW	Prior to ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
by the roost shall be avoided (i.e., not removed) by the Project. If avoidance of the maternity roost must occur, the bat biologist shall survey (through the use of radio telemetry or other CDFG approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of CDFG that there are alternative roost sites used by the maternity colony and young are not present then no further action is required. If a maternity roost will be impacted by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the Project site no less than three months prior to the eviction of the colony. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative potential roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. CDFG shall also be notified of any hibernacula or active nurseries within the construction zone. If non-breeding bat hibernacula are found in trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist in consultation with CDFG shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal). These actions should allow bats to leave during nighttime hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. If an active maternity roost is located on the Project site, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to March 1) or after young are flying (i.e., after July 31) using the exclusion techniques described above.				
RMDP/SCP-BIO-63: Each tract map Home Owners' Association shall supply educational information to future residents regarding pets, wildlife, and open space areas. The material shall discuss the presence of native animals (e.g., coyote, bobcat, and mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. Control of stray and feral cats and dogs will be conducted in open	The educational information required by the measure has been prepared by the Applicant and approved by CDFW. The CC&Rs for the project will require the project HOA to distribute the material to residents. No further action is required	Prior to occupancy and in perpetuity during operation	HOA	• LACDRP • LACDAC

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
space areas on an as-needed basis by the NLMO(s) or the Newhall Ranch *joint powers authority* (JPA) managing the River Corridor SMA, High Country SMA, or Salt Creek area or by the HOAs managing the Open Areas. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control.	pursuant to the measure.			
RMDP/SCP-BIO-64: An integrated pest management (IPM) plan that addresses the use of pesticides (including rodenticides and insecticides) on site will be prepared prior to the issuance of building permits for the initial tract map. The IPM will implement appropriate Best Management Practices to avoid and minimize adverse effects on the natural environment, including vegetation communities, special-status species, species without special status, and associated habitats, including prey and food resources (e.g., insects, small mammals, seeds). Potential management practices include cultural (e.g., planting pest-free stock plants), mechanical (e.g., weeding, trapping), and biological controls (e.g., natural predators or competitors of pest species, insect growth regulators, natural pheromones, or biopesticides), and the judicious use of chemical controls, as appropriate (e.g., targeted spraying versus broadcast applications). The IPM will establish management thresholds (i.e., not all incidences of a pest require management); prescribe monitoring to determine when management thresholds have been exceeded; and identify the most appropriate and efficient control method that avoids and minimizes risks to natural resources. Preparation of the CC&Rs for each tract map shall include language that prohibits the use of anticoagulant rodenticides in the Project site.	An IPM Plan has been prepared pursuant to the measure and provided to CDFW. The recorded CC&Rs for the Entrada South Planning Area will prohibit anti-coagulant rodenticides. No further action is required pursuant to the measure.	Prior to issuance of building permit(s)	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-68: Any common or special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per BIO-61, to be directly (within project disturbance footprint) or indirectly (within 300 feet of project disturbance footprint) impacted are to be mitigated with creation of artificial roost sites. The Project applicant shall establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance.	Submit pre-construction survey reports and, if applicable, mitigation implementation reports to CDFW.	As required by approved roosting habitat replacement plan	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-70: Construction plans shall include necessary design features and construction notes to ensure protection of vegetation communities and special-status plant and aquatic wildlife species adjacent to construction. In addition to applicable erosion control plans and performance under SCAQMD Rule 403d dust control (SCAQMD 2005), the Project stormwater pollution prevention plan (SWPPP) shall include the following minimum BMPs. Together, the implementation of these requirements shall ensure protection of adjacent habitats and wildlife species during construction. At a minimum, the following measures/restrictions shall be incorporated into the SWPPP, and noted on construction plans where appropriate, to avoid impacting special-status species during construction: • Avoid planting or seeding invasive species in development areas within 200 feet of native vegetation communities. • Provide location and details for any dust control fencing along Project boundaries (BIO-71). • Vehicles shall not be driven or equipment operated in	Submit construction plans and a SWPPP containing the required BMPs.	Prior to issuance of grading permit	Applicant	• LACDPW • LACDRP • CDFW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the 404 Permit or 1603 Agreement. • Silt settling basins installed during the construction process shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes. • If a stream channel has been altered during the construction and/or maintenance operations, its low flow channel shall be returned as nearly as practical to pre-Project topographic conditions without creating a possible future bank erosion problem or a flat, wide channel or sluice-like area. The gradient of the streambed shall be returned to pre-Project grade, to the extent practical, unless it represents a wetland restoration area. • Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur. • Staging/storage areas for construction equipment and materials shall be located outside of the ordinary high water mark. • Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily, to prevent leaks of materials that could be deleterious to aquatic life if introduced to water. • Stationary equipment such as motors, pumps,				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
generators, and welders which may be located within the riverbed construction zone shall be positioned over drip pans. No fuel storage tanks shall be allowed in the riverbed. • No debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, watercourses included in the permit. When construction operations are completed, any excess materials or debris shall be removed from the work area. • No equipment maintenance shall be done within or near any stream where petroleum products or other pollutants from the equipment may enter these areas with stream flow. • The operator shall install and use fully covered trash receptacles to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. • The operator shall not permit pets on or adjacent to the construction site. • No guns or other weapons are allowed on the construction site during construction, with the exception of the security personnel and only for security functions. No hunting shall be authorized/permitted during construction.				
RMDP/SCP-BIO-71: Development areas shall have dust control measures implemented and maintained to	Submittal of construction plans containing the	During construction	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
prevent dust from impacting vegetation communities and special-status plant and aquatic wildlife species. Dust control shall comply with SCAQMD Rule 403d (SCAQMD 2005). Where construction activities occur within 100 feet of known special-status plant species locations, chemical dust suppression shall not be utilized. Where determined necessary by a qualified biologist, a screening fence (i.e., a six-foot-high chain link fence with green fabric up to a height of five feet) shall be installed to protect special-status species locations. See BIO-32 for dust control requirements related to spineflower preserves.	required BMPs and construction monitoring reports to CDFW			
RMDP/SCP-BIO-72: Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and FMZ areas within 200 feet of native vegetation communities shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation community degradation in the open space areas (River Corridor SMA, High Country SMA, Salt Creek area, and natural portions of the Open Area). Container plants to be installed within public areas within 200 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 200 feet of native vegetation communities shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal-IPC list can be obtained from the Cal-IPC web site (http://www.cal-ipc.org/ip/inventory/index.php). Landscape plans will	Approval of landscape plans and/or submittal of plant inspection reports, as applicable.	Prior to installation of landscaping	Applicant	• LACDRP • CDFW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (i.e., until plants become established). *(The current Cal-IPC website is https://www.cal-ipc.org/plants/inventory/.)*				
RMDP/SCP-BIO-78: A cowbird trapping program shall be implemented once vegetation clearing begins and maintained throughout the construction, maintenance, and monitoring period of the riparian restoration sites. A minimum of five traps shall be utilized, with at least one trap adjacent to the project site and one or two traps located at feeding areas or other CDFG-approved location. The trapping contractor may consult with CDFG to request modification of the trap location(s). CDFG must approve any relocation of the traps. Traps will be maintained beginning each year on April 1 and concluding on/or about November 1 (may conclude earlier, depending upon weather conditions and results of capture). The trapping contractor may also consult CDFG on a modified, CDFG-approved trapping schedule modification. The applicant shall follow CDFG and USFWS protocol. In the event that trapping is terminated after the first few years, subsequent phases of the RMDP development will require initiation of trapping surveys to determine whether re-establishment of the trapping program is necessary.	This measure applies to riparian restoration sites on the Santa Clara River that provide compensatory mitigation for Entrada South Planning Area impacts. Compliance is documented in annual cowbird trapping reports provided with the annual mitigation status report required by Mitigation Measure BIO-12	At the start of vegetation clearing and throughout monitoring of riparian restoration sites	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-80: The Project applicant will retain a qualified biologist to develop an Exotic Wildlife Species Control Plan and implement a control program for bullfrog, African clawed frog, and crayfish. The program will	An Exotic Wildlife Species Control Plan has been developed in accordance with the	During construction within specified areas	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
require the control of these species during construction within the River corridor and modified tributaries (bridges, diversions, bank stabilization, drop structures). The Plan shall include a description of the species targeted for eradication, the methods of harvest that will be employed, the disposal methods, and the measures that would be employed to avoid impacts to sensitive wildlife (e.g., stickleback, arroyo toad, nesting birds) during removal activities (i.e., timing, avoidance of specific areas). Annual monitoring shall occur for the first five years after construction of Project facilities. After five years, bi-annual monitoring shall occur in perpetuity to determine if additional control is necessary. The Project applicant will fund an endowment, approved by CDFG, for monitoring in perpetuity. Monitoring will be conducted within sentinel locations along the River Corridor SMA and where the Project provides potential habitat for these species (e.g., future ponds and water features). Control shall be conducted within Project facilities where monitoring results indicate that exotic species have colonized an area. *(This measure applies to the Entrada South Planning Area without change with respect to modified tributaries or other potential habitat for the identified species within the Entrada South Planning Area.)*	measure. Document in monitoring reports submitted to CDFW.			
RMDP/SCP-BIO-82: a. All surfaces on new antennae and phone/utility towers shall be designed and operated with anti-perching devices in conformance with APLIC standards to deter California condors and other raptors from perching. During construction the area shall be kept clean of debris, such as cable, trash, and construction	Review of construction plans, where applicable, and submittal of construction monitoring reports to CDFW	Prior to approval of improvement plans	Applicant	• CDFW • USFWS • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
materials. The Applicant shall collect all microtrash and litter (anything shiny, such as broken glass), vehicle fluids, and food waste from the Project area on a daily basis. Workers will be trained on the issue of microtrash: what constitutes microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash. b. The Applicant shall retain a qualified biologist with knowledge of California condors to monitor construction activities within the Project area. The resumes of the proposed biologist(s) will be provided to CDFG for concurrence. This biologist(s) will be referred to as the authorized biologist hereafter. During clearing and grubbing of construction areas, the qualified biologist shall be present at all times. During mass grading, construction sites shall be monitored on a daily basis. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. If condors are observed landing in the Project area, the Applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFW and USFWS. All condor sightings in the Project area will be reported to CDFW and USFWS within 24 hours of the sighting. Should condors be found roosting within 0.5 mile of the construction area, no construction activity shall occur between 1 hour before sunset to 1 hour after sunrise, or until the condors leave the area, or as otherwise directed by USFWS. Should condors be found nesting within 1.5 miles of the construction area, no construction				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
activity will occur until further authorization occurs from CDFW and USFWS. c. To further protect California condor potentially foraging in the Project area over the long term from negative interactions with humans and/or artificial structures, the Applicant or the JPA or the NLMO shall remove dead cattle that are found or reported within 1,000 feet of a residential or commercial development boundary. Dead cattle shall be relocated to a predetermined location within the High Country SMA/SEA or Salt Creek area. The locations where carcasses shall be placed shall be a minimum of 1,000 feet from a development area boundary. Appropriate locations for transfer of carcasses include open grasslands and oak/grassland areas where condors can readily detect carcasses and easily land and take off without encountering physical obstacles such as powerlines and other utility structures. The proposed locations would be selected and approved by the CDFG and USFWS. Pursuant to this measure, a telephone number for reporting dead cattle shall be provided and actively maintained. Any cattle carcasses transferred to the relocation areas shall be reported to the USFWS Condor group.				
RMDP/SCP-BIO-84: Bridge and culvert designs, where practicable, shall provide roosting habitat for bats. A qualified biologist shall work with the Project engineer in identifying and incorporating structures into the design that provide suitable roosting habitat for bat species occurring in the Project area. The final design of the roosting structures would be chosen in consultation with CDFG.	Approval of bridge and culvert design plans by the County Department of Public Works	Prior to approval of improvement plans	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-85: To preclude the invasion of Argentine ants into the spineflower preserves and their associated buffers, controls will be implemented using an integrated pest management (IPM) approach in accordance with the approved SCP. The controls include the following. (1) Providing "dry zones" between urban development and spineflower populations, where typical soil moistures are maintained at levels below about 10% soil saturation, which will deter the establishment of nesting colonies of ants; and providing dry zone buffers of sufficient width to reduce the potential for Argentine ant activity within core habitat areas. (2) Where feasible, and/or appropriate, dry areas such as parking lots and roadways shall be built next to preserve boundaries. These will be designed to slope away from the preserve to avoid runoff entering the preserve. (3) Pedestrian pathways placed next to preserves shall consist of decomposed granite or other gravel to minimize the holding of moisture, thereby preventing establishment of suitable habitat for Argentine ant colonies. (4) Ensuring that landscape container plants installed within 200 feet of spineflower preserves are ant free prior to installation, to reduce the chance of colonies establishing in areas close to the preserves. (5) Maintaining natural hydrological conditions in the spineflower preserves, including the buffers, through project design features for roadways, French drains, irrigation systems, underground utilities, drainage	Submittal of development plans and annual reports to CDFW pursuant to the SCP	During preserve management	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
pipes and fencing, storm drains, and any other BMP measures that apply to surface water entering the preserve areas. (6) Using drought-resistant plants in FMZs and minimizing irrigation to the extent feasible.				
RMDP/SCP-BIO-87: Upon initiating landscaping within a development area, quarterly monitoring shall be initiated for Argentine ants along the urban–open space interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Monitoring and control of Argentine ants would occur in perpetuity. The Project applicant will fund an endowment.	Submit monitoring reports to CDFW	During Operation	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-88: Any southern California black walnut and mainland cherry trees or shrubs outside riparian areas greater than one inch dbh shall be replaced in the ratio of at least 2:1. Multi-trunk trees/shrub dbh shall be calculated based on combined trunk dbh. Mitigation shall be deemed complete when each replacement tree attains	Compliance with the measure, where applicable, will be documented through annual mitigation status reports to CDFW	Until success criteria are met	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
at least one inch in diameter one foot above the base.				
RMDP/SCP-SW-3: The applicant shall create or expand Corps jurisdictional wetlands on site, so that the acreage of wetlands on site would exceed the acreage that existed prior to Project implementation. In order to ensure that created wetlands persist in the long-term, wetlands shall be constructed in locations where suitable hydrology can be created by using existing streamflow, without the need for artificial water sources. New or expanded wetland areas shall be created in one or more of the following locations: • The Salt Creek drainage within the High Country SMA or the Salt Creek area in Ventura County. This area is the first priority for creation of mitigation wetlands, as the entire watershed would be preserved in perpetuity. The lower reach of this drainage supports year-round surface flows, and the presence of an existing, high-quality wetland shows that the topographic and hydrologic conditions are suitable for the persistence of wetlands. Approximately 23.3 acres of new wetlands would be created in the Salt Creek drainage, unless it is determined that a lesser acreage would be sufficient to ensure that the project does not result in a net loss of federally protected wetlands. • Lower or middle Potrero Canyon. These reaches support intermittent to perennial surface flows, and the broad, flat Potrero canyon bottom provides opportunities for expanded wetlands acreage though the creation of palustrine fringe wetlands. In the event that the proposed creation of 23.3 acres of wetlands in the Salt Creek watershed is insufficient to ensure that the proposed project does not result in a net loss of	Compliance with the measure, where applicable, will be documented through review and approval of compensatory mitigation plans pursuant to RMDP/SCP-BIO-1 and reporting of mitigation implementation pursuant to RMDP/SCP-BIO-12. No further action is required pursuant to this measure.	Mitigation plan approval by Corps/ CDFW prior to jurisdictional impacts. Mitigation monitoring reports by April 1st each year beginning with approval of detailed riparian/wetland mitigation plans and continuing until success criteria are met,	Applicant	• Corps • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
wetlands, any remaining mitigation acreage would be provided in these two locations. Although the river supports substantial surface flows, with the exception of the conversion of portions of the existing agricultural fields to wetlands outside of the active channel area (above the ordinary high water mark), the creation of mitigation wetlands along the Santa Clara River mainstem is not proposed due to the extreme scouring that occurs within the mainstem at relatively frequent intervals. The geomorphic character of the river is derived from large flood events that move large amounts of sediment, scour vegetation, and reshape the active channel. Because of this, it is uncertain whether mitigation wetlands created along the river mainstem within the active channel would persist in the long run. However, existing agricultural fields along the Santa Clara River mainstem above the OHWM, Salt Creek, and Potrero Canyon locations offer ample opportunities to create the wetlands acreage necessary to mitigate the Project's impacts on federally protected wetlands. This mitigation measure would result in short-term adverse impacts associated with wetland creation, including construction-related noise, emissions from equipment; and loss of upland habitats in areas where wetlands creation is proposed. (*This measure applies to the Entrada South Planning Area without change, except that the mitigation acreage requirements in the measure do not apply, as they indicate the minimum acreage required to compensate for wetlands impacts of the RMDP, which is not part of the current Project.)*				
RMDP/SCP-SW-4: All areas where temporary	Documented through	Until success criteria	Applicant	• CDFW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
construction impacts affect Corps or CDFG jurisdictional areas (generally, these are areas where impacts would occur due to the construction of Project facilities, but that are outside the permanent footprint of the actual facility), shall be revegetated with appropriate native vegetation after completion of construction in the area. A revegetation plan shall be prepared and implemented in accordance with the terms set forth in mitigation measures SP-4.6-1 though SP-4.6-15 and SP-4.6-63. *(The process for verifying that revegetation plans comply with the terms set forth in Mitigation Measures SP-4.6-1 though SP-4.6-15 and SP-4.6-63 is implemented through Mitigation Measures RMDP/SCP-BIO-1, RMDP/ SCP-BIO-3 and RMDP/SCP-BIO-12.)*	annual mitigation reports required by Mitigation Measure RMDP/SCP-BIO-12.	are met		• Corps • LACDRP
RMDP/SCP-SW-6: To the extent that on-site mitigation for impacts to jurisdictional tributary drainages is insufficient to meet the mitigation ratios required by revised Mitigation Measure BIO-2, then the remaining mitigation obligation shall be met at off-site properties within the Santa Clara River watershed, via use of one or more of the following mitigation approaches (at applicant's option): (a) creation of additional jurisdictional acreage in tributaries to the Santa Clara River occurring off site such that the mitigation site has an equal or greater value than the impacted site;(b) preservation of property containing jurisdictional tributaries to the Santa Clara River having an equal or greater value than the impacted site via a conservation easement or analogous method; or (c) habitat enhancement activities in jurisdictional tributaries for the necessary acreage (e.g., exotic species removal under the terms and conditions specified in	The mitigation site criteria required by this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Submit copies of the issued permits and/or copies of mitigation plan approval, as applicable	Until success criteria are met	Applicant	• CDFW • Corps • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Mitigation Measures BIO-9 and BIO-10).				
ES/VCC-MM-BIO-1: Prior to construction, the Applicant shall develop a relocation plan for California glossy snake, to be incorporated into the relocation plan developed for other special-status reptile species, according to requirements in RMDP/SCP-BIO-54. *(A draft California glossy snake relocation plan is included as Appendix FEIR-~~XX~~3 to the Final SEIR for the Project.)*	Approval of relocation plan pursuant to Mitigation Measure RMDP/SCP-BIO-54.	Prior to construction	Applicant	• CDFW • LACDRP
ES/VCC-MM-BIO-2: ~~Should Project ground-disturbing activities be scheduled to occur during the Crotch bumble bee colony active period, a qualified biologist shall conduct a habitat assessment to identify areas containing suitable habitat for Crotch bumble bee. The qualified biologist shall conduct pre-construction surveys for Crotch bumble bee in the areas identified, using a methodology (including number and timing of surveys) accepted by the California Department of Fish and Wildlife (CDFW).~~ ~~If Crotch bumble bee are not detected, no further measures are required. A qualified biologist shall be present during ground-disturbing Project activities that occur during the Crotch bumble bee colony active period.~~ ~~If Crotch bumble bee are detected:~~ ~~1. Ground-disturbing activities shall be prohibited within 100 feet of any known, occupied Crotch bumble bee nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The prohibition will continue for the duration of the Crotch bumble bee colony active period, unless the nest is determined to be inactive by a qualified biologist or~~	Submit pre-construction survey reports and, if applicable, Bumble Bee Avoidance Plan ~~proof of avoidance~~.	Prior to ground disturbance in suitable habitat	Applicant	• CDFW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
~~is relocated or removed with CDFW authorization.~~ ~~2. The Project proponent shall prepare a Crotch Bumble Bee Avoidance and Minimization Plan for review and approval by CDFW, which shall include additional, site-specific measures to avoid take of Crotch bumble bee during Project ground-disturbing activities during the colony active period.~~ ~~3. If the Crotch bumble bee remains a candidate for listing, or has been listed, as endangered or threatened under the California Endangered Species Act ("CESA"), and Project activities will cause "take" of Crotch bumble bee, as that term is defined for purposes of the CESA, the Project proponent shall obtain authorization for such take pursuant to Fish and Game Code Section 2081 or any other applicable provision of law providing such authorization.~~ Prior to the start of any Project activities during the Queen Flight and Colony Active Periods (February 1 through October 31), a qualified biologist shall conduct a habitat assessment to identify suitable habitat for Crotch's bumble bee within Project activity areas, and then survey prior to construction for Crotch's bumble bee and nests in those areas. Qualified biologist(s) shall be approved by CDFW 14 days prior to survey commencement. Survey protocols shall adhere to CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023) or another methodology approved by CDFW. Survey results, including negative findings or a map of nest location(s), shall be submitted to CDFW for review 14 days prior to starting Project activities. If Crotch's bumble bee nests are found during pre-construction surveys or detected during				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Project activities, Project activities within 100 feet of a nest shall be suspended until the CDFW-approved qualified biologist, with expertise in bumble bees, receives approval from CDFW for a Bumble Bee Avoidance Plan to avoid impacts to the nest(s). If Crotch's bumble bee nests are not found during the surveys (negative finding) then no further measures are required. A qualified biologist shall be present during initial ground disturbing Project activities (clearing and grubbing) in areas where suitable habitat was identified. The Bumble Bee Avoidance Plan shall include: 1. On-site daily monitoring by CDFW-approved biologist during Project activities, such as ground or vegetation disturbance, during the Queen Flight Period and Colony Active Period. 2. No-impact buffers. Ground-disturbing activities shall be prohibited within 100 feet of any known occupied Crotch's bumble bee nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. If Project activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, should expand the buffer zone as necessary to prevent disturbance or take. The prohibition will continue for the duration of the Crotch's bumble bee colony active period, unless the nest is determined to be inactive by a qualified biologist. 3. If a nest is found, Project proponent will provide a survey report to CDFW with a summary of the physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found, within a 10-foot radius. This shall include native plant				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
composition (e.g., density, cover, and abundance) within affected habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species). 4. If the Crotch's bumble bee remains a candidate for listing, or has been listed, as endangered or threatened under the California Endangered Species Act ("CESA"), and Project activities will cause "take" of Crotch's bumble bee, as that term is defined by Fish and Game Code section 86, the Project proponent shall obtain authorization for such take pursuant to Fish and Game Code Section 2081 or any other applicable provision of law providing such authorization. In the event of any conflict between this mitigation measure and the terms of an incidental take permit or other instrument authorizing take of Crotch's bumble bee under applicable law, the terms of the incidental take permit or other authorization shall control.				
5. CULTURAL RESOURCES				
RMDP/SCP-CR-3: Pursuant to the requirements of the Tataviam Agreement, a qualified archaeologist and a Native American monitor shall monitor all earth disturbances, including scarification and placement of fill, within 300 feet of any known archaeological site. If archaeological discoveries are made, earth disturbing activities will be diverted to other locales while the archaeological resources are exposed, mapped, evaluated, and recovered, as appropriate.	Maintain log demonstrating compliance. As determined by the qualified archaeologist, steep slopes or previously graded areas that have no potential for the presence of cultural remains may not require monitoring	During grading within 300 feet of any known archaeological site	Applicant	• LACDRP
RMDP/SCP-CR-4: During any earth disturbance within	Fence known	During grading within	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
300 feet of any known archaeological site, the area of the site and a 50-foot buffer shall be temporarily fenced with chain link flagged with color to ensure construction avoidance.	archaeological site(s), as specified	300 feet of any known archaeological site		
RMDP/SCP-CR-5: In the event that cultural resources are encountered during grading anywhere in the Project area, work shall be stopped immediately or redirected until a qualified archaeologist and Native American representative pursuant to the requirements of the Tataviam Agreement are retained by the applicant to evaluate the eligibility of the resources pursuant to CRHR and NRHP criteria. If the remains are found to be significant, they shall be subject to a Phase III data recovery mitigation program consistent with federal, state, and county guidelines and funded by the applicant to the extent allowed by law (see, Pub. Resources Code § 21083.2).	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP
RMDP/SCP-CR-6: If, during any phase of Project construction, there is the discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps, which are based on Public Resources Code section 5097.98 and State CEQA Guidelines section 15064.5(e), shall be taken: 1. There will be no further excavation or disturbance of the site or any nearby area reasonably susceptible to overlying adjacent human remains until: a. The Los Angeles County Coroner is contacted to determine that no investigation of the cause of death is required; and b. If the Coroner determines the remains to be Native American:	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(i) The Coroner shall contact the Native American Heritage Commission within 24 hours; (ii) The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American; and (iii) The most likely descendent may make recommendations to the Project applicant for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or, 2. Where the following conditions occur, the Project applicant, or its designee, shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: a. The Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the Commission; b. The descendant identified fails to make a recommendation; or c. The Project applicant, or its designee, rejects the recommendation of the descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the Project applicant.				
6. ENERGY				
Refer to Section 8, Greenhouse Gas Emissions, below.				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
7. GEOLOGY AND SOILS				
ES/VCC-MM-GEO-1: Prior to issuance of building permits, to address potential risks related to seismic shaking, all structures shall be designed using sound engineering judgment and the latest California Building Code requirements, as a minimum, which prescribe minimum lateral forces, applied statically to each habitable structure, combined with the gravity forces of dead and live loads, as determined in a report by a registered geotechnical engineer and submitted to the Department of Public Works pursuant to the County of Los Angeles Manual for Preparation of Geotechnical Reports.	Submit building plan	Prior to issuance of building permit(s)	Applicant	• LACDPW
ES/VCC-MM-GEO-2: Prior to issuance of rough grading permits, and in those portions of the Entrada South and VCC planning areas beneath habitable structural improvements where the anticipated seismic differential settlement exceeds the County of Los Angeles' one-inch seismic differential settlement standard, one or more of the following design requirements will be implemented: a. Alluvium removal to reduce liquefaction-induced settlement to less than 1 inch. b. Ground improvements such as rammed aggregate piers (RAPs), deep soil mixing (DSM), or stone columns to reduce liquefaction-induced settlement to less than 1 inch. c. Ground improvements such as deep dynamic compaction (DDC) or compaction grouting to reduce liquefaction-induced settlement to less than 1 inch. d. Sufficiently stiff foundations or deep foundations. e. An approved alternative design requirement capable of	Submit grading plan	Prior to issuance of grading permit(s)	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
reducing liquefaction induced settlement to less than 1 inch. The above design requirements shall be performed by removing and/or improving enough liquefiable alluvium to achieve a less than 1-inch seismic differential settlement, pursuant to the County of Los Angeles Manual for Preparation of Geotechnical Reports, or by specific foundation design. Geotechnical recommendations and design requirements shall be presented and approved as a conceptual design at the 100-scale grading plan stage and as a detailed design at the 40-scale grading plan stage.				
ES/VCC-MM-GEO-3: Prior to issuance of rough grading permit, in order to address landslides, unstable soil, liquefaction, expansive soil and dry-sand settlement, a Corrective Grading Plan delineating the areas where such geotechnical conditions exist shall be prepared by a registered geotechnical engineer and submitted to the Department of Public Works pursuant to the County of Los Angeles Manual for Preparation of Geotechnical Reports. The Corrective Grading Plan shall address the following: a. Project grading shall include a combination of ground modification and/or structural mitigation in areas subject to liquefaction to reduce the risk to an acceptable level (as defined by CGS in Special Publication 117a, Chapter 2, or as superseded by CGS guidance in effect at the time of implementation of this measure). Ground modification shall consist of the removal of some of the soil material subject to liquefaction. The recommended depth of removal for mitigation of liquefaction ranges from 5 to 30 feet. Structures shall be designed to resist the anticipated	Submit grading plan	Prior to issuance of grading permit(s)	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
static and seismic total and differential settlements. b. Landslides shall be stabilized and/or removed, and/or building setbacks shall be used to protect structural integrity. c. Grading and engineering design requirements shall address the removal of unstable soil, stabilization of potential landslide areas, and compaction of engineered fill to meet County of Los Angeles soil compaction requirements (County of Los Angeles Grading Guidelines, 2017). d. Areas where expansive soil is encountered shall include grading measures designed to reduce hazard of construction in expansive soil including but not limited to removing expansive soil and replacing with engineered fill, installing drainage systems, using stiffened foundations systems, or conducting engineered preparation of building pads.				
ES/VCC-MM-GEO-4: Prior to the issue of building permits, and after the site has been mass graded, soil corrosion testing shall be completed and appropriate design requirements shall be implemented in accordance with the latest California Building Code (CBC) as a minimum, to reduce the hazard of construction in corrosive soil.	Submit building plan	Prior to issuance of building permit(s)	Applicant	• LACDPW
8. GREENHOUSE GAS EMISSIONS				
RMDP/SCP-AEA-2-1: Prior to the issuance of residential building permits for the project or a portion of the project, the project applicant or its designee shall submit one or more Zero Net Energy Confirmation (ZNE) Reports (ZNE Report) prepared by a qualified building energy efficiency	Submit ZNE Report for County review and confirmation An energy efficiency and design consultant is	Prior to issuance of residential building permit(s)	Applicant	• LACDPW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and design consultant to Los Angeles County for review and confirmation that the residential development covered by the ZNE Report achieves the ZNE standard specified in this mitigation measure. Specifically, a ZNE Report shall demonstrate that the residential development within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations has been designed and shall be constructed to achieve ZNE, as defined by CEC in its 2015 Integrated Energy Policy Report, which requires the value of the net energy produced by project renewable energy resources to equal the value of the energy consumed annually by the project using the CEC's Time Dependent Valuation metric. A ZNE Report shall provide, at a minimum, the following information: • Confirmation that the residential development shall comply with Title 24, Part 6 building standards that are operative at the time of building permit application. • Identification of additional measures or building performance standards that shall be relied upon to achieve the ZNE standard (as defined above), assuming ZNE is not already achieved by meeting the operative Title 24, Part 6 building standards. In demonstrating that the residential development achieves the ZNE standard, the ZNE Report may: • Evaluate multiple buildings and/or land use types. For example, a ZNE Report may cover all of the residential and non-residential buildings within a neighborhood/community, or a subset thereof, including an individual building.	qualified to prepare a ZNE Report if the consultant is a Certified Energy Analyst, as established by the California Association of Building Energy Consultants, or, alternatively, has similar qualifications as confirmed by staff for the County of Los Angeles.			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• Rely upon aggregated or community-based strategies to support its determination that the subject buildings are designed to achieve ZNE. For example, shortfalls in renewable energy generation for one or more buildings may be offset with excess renewable generation from one or more other buildings. As such, a ZNE Report could determine a building is designed to achieve ZNE based on aggregated or community-based strategies even if the building on its own may not be designed to achieve ZNE. • Make reasonable assumptions about the estimated electricity and natural gas loads and energy efficiencies of the subject buildings. • If interconnection of the project's renewable generation is not sufficient to allow compliance with the ZNE standard for the project, or a portion of the project, then Los Angeles County shall allow the project applicant or its designee to achieve an equivalent level of GHG emissions reductions to mitigate such shortfall by providing 5.1 metric tonnes carbon dioxide equivalents ($MTCO_2e$) of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard for the project, or a portion of the project, as demonstrated in the ZNE Report. (*This mitigation measure applies to Entrada South with the qualification that the village-specific equivalency metric is 4.3 (not 5.1) $MTCO_2e$ of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard.)*				
RMDP/SCP-AEA-2-2: Prior to the issuance of building	Submit ZNE Report for	Prior to issuance of	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
permits for commercial development and private recreation centers, and prior to the commencement of construction for the public facilities, respectively, for the project or a portion of the project, the project applicant or its designee shall submit one or more Zero Net Energy Confirmation Reports (ZNE Report) prepared by a qualified building energy efficiency and design consultant to Los Angeles County for review and confirmation that the commercial development, private recreation centers, and/or public facilities covered by the ZNE Report achieve the ZNE standard specified in this mitigation measure. Specifically, a ZNE Report shall demonstrate that the commercial development, private recreation centers, and public facilities within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations have been designed and shall be constructed to achieve ZNE, as defined by CEC in its 2015 Integrated Energy Policy Report, which requires the value of the net energy produced by project renewable energy resources to equal the value of the energy consumed annually by the project using the CEC's Time Dependent Valuation metric. A ZNE Report shall provide, at a minimum, the following information: • Confirmation that the commercial development, private recreation centers, and/or public facilities shall comply with Title 24, Part 6 building standards that are operative at the time of building permit application. • Identification of additional measures or building performance standards that shall be relied upon to achieve the ZNE standard (as defined above), assuming ZNE is not already achieved by meeting the	County review and confirmation prior to issuance of building permits for commercial development and private recreation centers, and prior to the commencement of construction for the public facilities. An energy efficiency and design consultant is qualified to prepare a ZNE Report if the consultant is a Certified Energy Analyst, as established by the California Association of Building Energy Consultants, or, alternatively, has similar qualifications as confirmed by staff for the County of Los Angeles.	commercial building permit(s)		• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
operative Title 24, Part 6 building standards. In demonstrating that the commercial development, private recreation centers, and/or public facilities achieves the ZNE standard, the ZNE Report may: • Evaluate multiple buildings and/or land use types. For example, a ZNE Report may cover all of the residential and non-residential buildings within a neighborhood/community, or a subset thereof, including an individual building. • Rely upon aggregated or community-based strategies to support its determination that the subject buildings are designed to achieve ZNE. For example, short falls in renewable energy generation for one or more buildings may be offset with excess renewable generation from one or more other buildings. As such, a ZNE Report could determine a building is designed to achieve ZNE based on aggregated or community-based strategies even if the building on its own may not be designed to achieve ZNE. • Make reasonable assumptions about the estimated electricity and natural gas loads and energy efficiencies of the subject buildings. • If interconnection of the project's renewable generation is not sufficient to allow compliance with the ZNE standard for the project, or a portion of the project, then Los Angeles County shall allow the project applicant or its designee to achieve an equivalent level of GHG emissions reductions to mitigate such shortfall by providing 5.1 $MTCO_2e$ of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
for the project, or a portion of the project, as demonstrated in the ZNE Report. *(This mitigation measure applies to Entrada South with the qualification that the village-specific equivalency metric is 4.3 (not 5.1) $MTCO_2e$ of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard.)*				
RMDP/SCP-AEA-2-3: Prior to the issuance of private recreation center building permits, the project applicant or its designee shall submit swimming pool heating design plans to Los Angeles County for review and approval**.** The design plans shall demonstrate that all swimming pools located at private recreation centers on the RMDP/SCP project site have been designed and shall be constructed to use solar water heating or other technology with an equivalent level of energy efficiency**.**	Submit swimming pool heating design plans for County review and approval prior to issuance of building permit for private recreation center.	Prior to issuance of recreation center building permit(s)	Applicant	• LACDPW
RMDP/SCP-AEA-2-4: Prior to the issuance of residential building permits, the project applicant or its designee shall submit building design plans, to Los Angeles County for review and approval, which demonstrate that each residence within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations shall be equipped with a minimum of one single-port electric vehicle (EV) charging station. Each charging station shall achieve a similar or better functionality as a Level 2 charging station. Additionally, prior to the issuance of the first building permit for the RMDP/SCP project site, the project applicant or its designee shall establish and fund a dedicated account for the provision of subsidies for the purchase of zero emission vehicles (ZEVs), as defined by	As to the charging stations, submit building design plan prior to issuance of residential building permits. As to the subsidies, the Project applicant or its designee shall submit proof of the establishment and funding of a dedicated account for the administration of the subsidies to the County prior to the issuance of	Prior to issuance of residential building permit(s)	Applicant	• LACDPW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
CARB. The project applicant or its designee shall provide proof of the account's establishment and funding to Los Angeles County. The dedicated account shall be incrementally funded, for each village-level project, in an amount that equals the provision of a $1,000 subsidy per residence—on a first-come, first-served basis—for 65 percent of the village's total residences subject to application of Title 24, Part 6, of the California Code of Regulations.	the first building permit for the RMDP/SCP Project site. The dedicated account shall be funded incrementally, prior to the issuance of residential building permits for each village-level project in an amount that equals the provision of subsidies for 65 percent of the village's total residences. For purposes of the Entrada South Project there are a total of 1,574 residential dwelling units. Therefore, the Project applicant or its designee would have a $1,023,100 funding obligation [(1,574 units x 0.65) x ($1,000)], which equates to a funding obligation of $650 per dwelling unit. Prior to the issuance of residential building permits, the Project applicant or its designee			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	shall provide proof of payment in an amount that corresponds to the number of residential units being permitted at that time. The dedicated account shall be administered by the Project's Transportation Management Organization (see Mitigation Measure RMDP/SCP-2-6), which shall be responsible for marketing and promoting the availability of the purchase subsidies to each village's residences and tracking the utilization of the subsidies. In the event that the account is not depleted after occupancy of the final residential dwelling unit, the Project applicant or its designee, which may include the Transportation Management			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	Organization or its equivalent management entity, shall coordinate with the Los Angeles County Planning Director and secure the Planning Director's approval of one or more strategies that secure an equivalent level of GHG emissions reductions. For purposes of calculating the greenhouse gas emissions reductions required to demonstrate equivalency, each un-used subsidy shall equal 3.89 MT CO_2e reductions per year. The Project applicant or its designee shall be permitted to utilize any unused subsidy funding for purposes of achieving this equivalency requirement. ~~An energy efficiency and design consultant is qualified to prepare a ZNE Report if the~~			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	~~consultant is a Certified Energy Analyst, as established by the California Association of Building Energy Consultants, or, alternatively, has similar qualifications as confirmed by staff for the County of Los Angeles.~~			
RMDP/SCP-AEA-2-5: Prior to the issuance of commercial building permits, the project applicant or its designee shall submit building design plans, to Los Angeles County, which demonstrate that the parking areas for commercial buildings on the RMDP/SCP project site shall be equipped with electric vehicle (EV) charging stations that provide charging opportunities to 7.5 percent of the total number of required parking spaces. ("Commercial buildings" include retail, light industrial, office, hotel, and mixed-use buildings.) The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station. In the event that the installed charging stations use functionality/ technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall	Submit building design plan for County review and approval prior to issuance of commercial building permits.	Prior to issuance of commercial building permit(s)	Applicant	• LACDPW • LACDRP

Table 1 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
be assumed to provide charging capabilities of 25 range miles per hour.				
RMDP/SCP-AEA-2-6: The project applicant-submitted Newhall Ranch Transportation Demand Management (TDM) Plan, located in Final AEA Appendix 7, shall be implemented to reduce vehicle miles traveled (VMT) resulting from project build out with oversight from Los Angeles County. The TDM Plan is designed to influence the transportation choices of residents, students, employees, and visitors, and serves to enhance the use of alternative transportation modes both on and off the project site through the provision of incentives and subsidies, expanded transit opportunities, bikeshare and carshare programs, technology-based programs, and other innovative means. Village-level implementation of relevant elements of the TDM Plan shall proceed in accordance with village-level applicability supplements prepared by a qualified transportation engineer that are reviewed and considered by Los Angeles County when approving tentative subdivision maps for land developments that are part of the project. Accordingly, the TDM Plan identifies key implementation actions that are critical to the effectiveness of the VMT-reducing strategies, as well as timeline and phasing requirements, monitoring standards, and performance metrics and targets tailored to each of the strategies. In accordance with the TDM Plan, a non-profit Transportation Management Organization (TMO) or equivalent management entity shall be established to provide the services required, as applicable. *(The Valencia Transportation Demand Management Plan*	A copy of the Valencia TDM Plan is provided in **Appendix 5.9b** of the SEIR. Implementation of the TDM Plan shall proceed in accordance with the provisions outlined in the plan. Additionally, monitoring and implementation of the Valencia TDM Plan shall proceed in accordance with a village-level applicability supplement to the TDM Plan, which is provided in **Appendix 5.9c** of the SEIR. The Valencia TDM Plan includes the provision of subsidies for the purchase of neighborhood electric vehicles (NEVs) and electric bikes (E-Bikes). The Newhall Ranch Transportation Management Organization or equivalent management	Prior to issuance of building permit(s)	Applicant	• LACDPW • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and above-referenced village-level applicability supplement, entitled Entrada South & Valencia Commerce Center: Transportation Demand Management Plan Evaluation, are provided in ***Appendices 5.9b*** *and* ***5.9c*** *of the SEIR, respectively.)*	entity shall be responsible for marketing and promoting the availability of the NEV and E-Bike purchase subsidies to each village's residences and tracking the utilization of the subsidies. In the event that the NEV and E-Bike subsidies are not fully utilized after occupancy of the final residential dwelling unit, the Project applicant or its designee, which may include the Transportation Management Organization or its equivalent entity, shall coordinate with the Los Angeles County Planning Director and secure the Planning Director's approval of one or more strategies that secure an equivalent level of GHG emission reductions. For purposes of calculating the			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	greenhouse gas emissions reductions required to demonstrate equivalency, each un-used NEV purchase subsidy shall equal 2.7 MT CO_2e reductions per year and each un-used E-Bike purchase subsidy shall equal 0.9 MT CO_2e reductions per year. The Project applicant or its designee shall be permitted to utilize any unused subsidy funding for purposes of achieving this equivalency requirement.			
RMDP/SCP-AEA-2-7: Prior to the issuance of traffic signal permits, the project applicant or its designee shall work with Los Angeles County and the California Department of Transportation (Caltrans), as applicable, to facilitate traffic signal coordination along: • State Route 126 from the Los Angeles County line to the Interstate 5 north-bound ramps; • Chiquito Canyon Road, Long Canyon Road, and Valencia Boulevard within the RMDP/SCP Project site; • Magic Mountain Parkway from Long Canyon Road to	The Project applicant or its designee shall submit traffic signal plan(s) for County or Caltrans review and approval, as applicable, and/or pay applicable fees as needed for signal operations and timing adjustments to affected traffic signals prior to traffic signal permit	Prior to issuance of traffic signal permit(s)	Applicant	• LACDRP • Caltrans

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
the Interstate 5 north-bound ramps; and, • Commerce Center Drive from Franklin Parkway to Magic Mountain Parkway. To effectuate the signal synchronization and specifically the operational and timing adjustments needed at affected traffic signals, the project applicant or its designee shall submit traffic signal plans for review and approval, and/or pay needed fees as determined by Los Angeles County or Caltrans, as applicable. A majority of the signals that will be synchronized will be new signals constructed/installed by the project**.** Thus, for these signals, the project will provide the necessary equipment at the signal controller cabinet, as well as within the new roadways themselves, to enable and facilitate synchronization**.** The project is responsible for paying 100 percent of the applicable fee amount for the signal synchronization work, with assurance that the necessary funding will be available to fully implement this measure.	issuance.			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-AEA-2-8: Consistent with the parameters of the Newhall Ranch TDM Plan, the project applicant or its designee shall provide Los Angeles County with proof that funding has been provided for the purchase, operation and maintenance of zero emission school buses in furtherance of the school bus program identified in the project's TDM Plan. The proof of funding shall be demonstrated incrementally as the school bus program is paced to village-level occupancy and student enrollment levels. (The Newhall Ranch TDM Plan is now referred to as the Valencia TDM Plan.)	See Mitigation Measure RMDP/SCP-2-6, above. Provide the County with proof of payment per the standards established in the TDM Plan for the administration of the school bus program; the funding shall be made available incrementally as the school bus program is paced to village-level occupancy and associated student enrollment levels.	Per TDM Plan Phasing	Applicant	• LACDRP
RMDP/SCP-AEA-2-9: Prior to the issuance of the first 2,000th residential building permit within the RMDP/SCP project site and every 2,000th residential building permit thereafter, the project applicant or its designee shall provide Los Angeles County with proof that it has provided a subsidy of $100,000 per bus for the replacement of up to 10 diesel or compressed natural gas transit buses with zero emission buses to the identified transit provider(s).	Prior to the issuance of the first 2,000th residential building permit within the RMDP/SCP project site and every 2,000th residential building permit thereafter, provide the County with proof of establishment of an escrow account in the amount of $100,000, representing a subsidy for one zero emission transit bus for the benefit of the identified transit provider(s). The	Prior to issuance of building permit(s)	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	escrow instructions shall document that the subsidies only can be used by the transit provider(s) exclusively for the purpose specified herein (i.e., the purchase of zero emission transit buses). The Project applicant or its designee, which may include the Transportation Management Organization or its equivalent management entity, shall monitor the transit provider(s)'s utilization of the subsidies.			
RMDP/SCP-AEA-2-10: Prior to issuing grading permits for village-level development within the RMDP/SCP project site, Los Angeles County shall confirm that the project applicant or its designee shall fully mitigate the construction and vegetation change GHG emissions associated with each such grading permit (the "Incremental Construction GHG Emissions") by relying upon one of the following compliance options, or a combination thereof, in accordance with the project applicant-submitted Newhall Ranch GHG Reduction Plan (GHG Reduction Plan; see Final AEA Appendix 6): Directly undertake or fund activities that reduce or	Prior to obtaining grading permits for development within the Entrada South Project Site, the incremental GHG emissions associated with such construction and vegetation change-related activities shall be offset. Compliance with this measure shall be	Prior to issuance of grading permit(s)	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Credits" in a quantity equal to the Incremental Construction GHG Emissions. A "GHG Mitigation Credit" shall mean an instrument issued by an Approved Registry that satisfies the performance standards set forth in the GHG Reduction Plan and shall represent the estimated reduction or sequestration of one metric tonne of carbon dioxide equivalent that will be achieved by a Direct Reduction Activity that is not otherwise required (California Environmental Quality Act [CEQA] Guidelines Section 15126.4(c)(3)). An "Approved Registry" is an accredited carbon registry as defined by the GHG Reduction Plan; or–Obtain and retire "Carbon Offsets" in a quantity equal to the Incremental Construction GHG Emissions. "Carbon Offset" shall mean an instrument issued by an Approved Registry that satisfies the performance standards set forth in the GHG Reduction Plan and shall represent the past reduction or sequestration of one metric tonne of carbon dioxide equivalent achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4(c)(3)).	demonstrated as provided for in Section VIII of the Newhall Ranch GHG Reduction Plan (see Final AEA Appendix 6). In the event that multiple village-level projects have shared improvements, as defined to include any type of utility, roadway and/or infrastructure improvement identified for the implementation of each project, the construction-related emissions for the shared improvements only shall be offset once and shall be the responsibility of the village-level project that occurs first in time from a grading permit issuance perspective.			
RMDP/SCP-AEA-2-11: Prior to the issuance of building permits for development within the RMDP/SCP project site, the project applicant or its designee shall undertake or fund Direct Reduction Activities pursuant to the Building Retrofit Program ("Retrofit Program"), as included in Final AEA Appendix 13 to improve the energy efficiency of existing buildings located primarily in disadvantaged	Prior to the issuance of building permits for development within the RMDP/SCP project site, the Project Applicant or its designee shall provide the County with	Prior to issuance of building permit(s)	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
communities (as defined in the Retrofit Program). The project applicant or its designee shall retire GHG Mitigation Credits or Carbon Offsets issued by an Approved Registry based on such Direct Reduction Activities in a quantity equal to the sum of the following (together, the "Retrofit Reduction Requirement") as included in Final AEA Appendix 13: • For the residential portion of a building permit application, the product of the planned number of residential units for the village-level project multiplied by 0.0377 $MTCO_2e$; • For the commercial portion of a building permit application, the product of the planned commercial development per thousand commercial square feet multiplied by 0.0215 $MTCO_2e$. ("Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.) Building retrofits covered by the Retrofit Program can include, but are not limited to: cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting (including, but not limited to, light bulb replacement), energy efficient appliances, energy efficient windows, pool covers, insulation, and water conservation measures. The Retrofit Program shall be implemented within the geographic area defined to include Los Angeles County and primarily within disadvantaged communities, as defined by the Retrofit Program, or in other areas accepted by the Los Angeles County Planning Director.	an attestation from an Approved Registry that the Project Applicant has retired a sufficient quantity of GHG Mitigation Credits or Carbon Offsets associated with Direct Reduction Activities to undertake or fund building retrofits in a quantity equal to the Retrofit Reduction Requirement. See Final AEA Appendix 6.			
RMDP/SCP-AEA-2-12: Prior to the issuance of the first building permit for the RMDP/SCP project site, the project	As part of implementation of the	Prior to issuance of building permit(s), as	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
applicant or its designee shall provide Los Angeles County with proof of installation of EV charging stations capable of serving 20 off-site parking spaces. Thereafter, the project applicant or its designee shall provide Los Angeles County proof of installation of EV charging stations prior to the issuance of residential and commercial building permits per the following ratios: one (1) off-site parking space shall be served by an electric vehicle charging station for every 30 dwelling units, and one (1) off-site parking space shall be served by an electric vehicle charging station for every 7,000 square feet of commercial development. ("Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.) Off-site EV charging stations capable of servicing 2,036 parking spaces would be required if the maximum allowable development facilitated by the RMDP/SCP project occurs; fewer EV charging stations would be required if maximum build-out under the RMDP/SCP project does not occur. The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station and may service one or more parking spaces. In the event that the installed charging stations use functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour. The EV charging stations shall be located within the	Mission Village project, the County has been provided with proof (e.g., illustrative photos) of installation of electric vehicle charging stations capable of servicing 20 off-site parking spaces prior to the issuance of the first building permit for the RMDP/SCP project site; therefore, this portion of the measure has been satisfied. Prior to issuance of the 30th residential building permit and each 30th residential building permit thereafter, provide evidence (e.g., illustrative photos) of installation of one off-site parking space being equipped with an electric vehicle charging station. Prior to the issuance of a commercial building permit for 7,000 square feet and each additional 7,000 square feet	specified		

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
geographic area defined to include Los Angeles County**.** The EV charging stations shall be in areas that are generally accessible to the public, such as areas that include, but are not limited to, retail centers, employment centers and office complexes, recreational facilities, schools, and other categories of public facilities.	thereafter, provide evidence (e.g., illustrative photos) of installation of one off-site parking space being equipped with an electric vehicle charging station.			
RMDP/SCP-AEA-2-13: In addition to Mitigation Measures 2-1 through 2-12, the project applicant or its designee shall offset GHG emissions to zero by funding or undertaking Direct Reduction Activities or, if necessary, obtaining Carbon Offsets through the Newhall Ranch GHG Reduction Plan. The project applicant-submitted Newhall Ranch GHG Reduction Plan focuses on achieving GHG reductions or sequestration through the Direct Reduction Activities in coordination with an Approved Registry, such as the Climate Action Reserve. If these Direct Reduction Activities do not achieve the necessary amount of GHG reductions, the project applicant or its designee can obtain Carbon Offsets issued by an Approved Registry. Prior to issuing building permits for development within the RMDP/SCP project site, Los Angeles County shall confirm that the project applicant or its designee shall fully offset the, project's remaining (i.e., post implementation of Mitigation Measures 2-1 through 2-12) operational GHG emissions over the 30-year project life associated with each such building permit (the "Incremental Operational GHG Emissions") by relying upon one of the following compliance options, or a combination thereof, in accordance with the Newhall Ranch GHG Reduction Plan:	Prior to obtaining building permits for an incremental amount of development within the RMDP/SCP project site, the incremental operational GHG emissions over the 30-year Modified Project life associated with such building permits that must be offset (the "Incremental Operational GHG Emissions") will be equal to the sum of: (1) the number of proposed residential units covered by the applicable building permit multiplied by 108.89 MT CO_2e; and (2) every thousand square feet (TSF) of proposed	Prior to issuance of building permit(s)	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• Undertake or fund Direct Reduction Activities that are estimated to result in GHG Mitigation Credits, as described in the GHG Reduction Plan, and retire such GHG Mitigation Credits in a quantity equal to the Incremental Operational GHG Emissions; • Undertake or fund Direct Reduction Activities and retire the Carbon Offsets in a quantity equal to the Incremental Operational GHG Emissions; or • If necessary, as determined by the Los Angeles County Planning Director in accordance with the GHG Reduction Plan, to fully offset Incremental Operational GHG Emissions, the project applicant or its designee may purchase and retire Carbon Offsets that have been issued by an Approved Registry in a quantity equal to the Incremental Operational GHG Emissions. Compliance with Mitigation Measure (MM) 2-13 shall be demonstrated incrementally prior to obtaining building permits. The incremental Operational GHG Emissions shall be equal to the sum of (1) the number of proposed residential units covered by the applicable building permit multiplied by a "GHG Residential Ratio" and (2) every thousand square feet of proposed commercial development covered by the applicable building permit multiplied by a "GHG Commercial Ratio." ("Commercial development" includes retail, light industrial, office, hotel, and mixed-use buildings.) GHG Residential Ratio and GHG Commercial Ratio shall mean the emissions ratios in $MTCO_2e$ set forth in the applicable CEQA analysis completed by the County of Los Angeles for a specific village-level project to ensure that the related GHG emissions are reduced to zero.	commercial development covered by the applicable building permit multiplied by 506.86 MT CO_2e. For example, to obtain a building permit for 75 residential units and 40,000 square feet of commercial development, the Incremental Operational GHG Emissions would be: 75 units x 108.89 MT CO_2e/unit + 40 TSF x 506.86 MT CO_2e/sq. ft. = 28,441 MT CO_2e. Compliance with this measure shall be demonstrated as provided for in Section VIII of the Newhall Ranch GHG Reduction Plan (see Final AEA Appendix 6).			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Project Applicant–Proposed Supplemental Commitment In addition to the installation of EV charging stations required by Mitigation Measures 2-5 and 2-12, and although not required for the project to achieve net zero GHG emissions, the project applicant or its designee shall provide Los Angeles County with proof of installation of EV charging stations prior to the issuance of residential and commercial building permits per the following ratios: one (1) parking space shall be served by an electric vehicle charging station for every 50 dwelling units, and one (1) parking space shall be served by an electric vehicle charging station for every 15,900 square feet of commercial development. ("Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.) EV charging stations capable of servicing 1,010 parking spaces would be required if the maximum allowable development facilitated by the RMDP/SCP project occurs; fewer EV charging stations would be required if maximum build-out under the RMDP/SCP project does not occur. The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station and may service one or more parking spaces. In the event that the installed charging stations use functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be	Prior to issuance of each additional 50th residential building permit, provide evidence (e.g., illustrative photos) of installation of one on- or off-site parking space being equipped with an electric vehicle charging station. Prior to issuance of a commercial building permit for each additional 15,900 square feet, provide evidence (e.g., illustrative photos) of installation of one on- or off-site parking space being equipped with an electric vehicle charging station. If installed on the RMDP/SCP project site, the parking spaces equipped with an electric vehicle charging station must be in addition to the parking spaces otherwise required to have such infrastructure by Mitigation Measure	Prior to issuance of building permits, as specified	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
assumed to provide charging capabilities of 25 range miles per hour. The EV charging stations shall be located either on the project site or within the jurisdictional area of the Southern California Association of Governments. The EV charging stations shall be in areas that are generally accessible to the public, such as areas that include, but are not limited to, retail centers, employment centers and office complexes, recreational facilities, schools, and other categories of public facilities.	RMDP/SCP-2-5. If installed off of the RMDP/SCP project site, the parking spaces equipped with an electric vehicle charging station must be in addition to the parking spaces otherwise required to have such infrastructure by Mitigation Measure RMDP/SCP-2-12. Because the parking spaces serviced by the electric vehicle charging stations provided by this measure are in addition to those required by Mitigation Measures RMDP/SCP-2-5 and RMDP/SCP-2-12, a tracking matrix shall be maintained to ensure that this measure's benefits are additive and that the requirements of each measure are independently satisfied.			

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
9. HAZARDS AND HAZARDOUS MATERIALS				
RMDP/SCP-PH-1: During the earthwork phase of construction, all known abandoned oil wells located beneath the Project site shall be exposed to allow DOGGR to examine the well heads, assess any potential for methane, and determine if reabandonment of any wells will be required. Additionally, any unknown (i.e., "wildcat") wells encountered during earthwork shall also be subject to investigation and potential reabandonment requirements of DOGGR as described below: • File Notice of Intent to re-abandon well; • Excavate and expose several feet of well casing; • Perform hot tap—a method of drilling a hole into the casing under control in order to deal with possible pressure; • Install a wellhead and blow out prevention equipment; • Move drill rig into place and drill out any surface cement plug or any other cement plug to reach a minimum clean-out as required by DOGGR; • Place cement plugs of varying lengths as required by DOGGR; • All portions of well not plugged with cement are to be filled with inert mud fluid having a density of 70 pounds per cubic foot and a gel strength of 25 pounds per 100 square feet; • Move out drill rig; • Cut off casing at least five feet below final finished grade;	Submit confirmation that required records were filed with CalGEM	Upon completion of work	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• Weld a steel plate on top of the wellhead; • Backfill and compact excavation and clean up location; • Survey the center point of the buried well using GPS instrumentation; • Place a permanent survey mark at the surface, demarcating a buried, abandoned oil well; and • Submit the re-abandonment record to DOGGR within 60 days upon completion of work. Additionally, proposed development plans shall be evaluated by means of the Construction-Site Plan Review Program and comply with setbacks from oil and gas wells as determined by DOGGR. Recommendations by DOGGR regarding abandonment procedures shall be incorporated into the final development plans for the Project, if applicable. *(Note that DOGGR is now referred to as the California Geologic Energy Management Division or CalGEM.)*				
RMDP/SCP-PH-4: All final school locations are to comply with the California State Board of Education requirement that no schools be sited within 100 feet from the edge of the right-of-way of 100 to 110 kV lines; 150 feet from 220 to 230 kV lines; and 350 feet from 500 to 550 kV lines. *(This mitigation measure applies only to the elementary school potentially located in the central portion of the Entrada South Planning Area.)*	Submit school building plan	Prior to issuance of school building permit	Applicant	• LACDRP
RMDP/SCP-PH-6: All activities associated with pipeline relocation, grading in the vicinity of gas mains, and development with the SCGC easements would be conducted in conformance with the requirements of	Submit grading plans	Prior to issuance of grading permit(s) within any SoCalGas easement	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
SCGC. These requirements would be explicitly defined by SCGC prior to implementation of the Newhall Ranch Specific Plan. (*SCGC refers to the Southern California Gas Company, or SoCalGas. No structures are proposed within the SoCalGas easements along the southern boundary of the Entrada South Planning Area. Nonetheless, this measure applies to any SoCalGas pipeline relocation and nearby grading.)*				
RMDP/SCP-PH-8: To reduce potentially hazardous conditions and minimize the impacts from handling potentially hazardous materials, the owner shall include the following in its construction contract documents prior to the initiation of construction activities: • The Contractor(s) shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains per the County's NPDES guidelines and as outlined in the Stormwater Pollution and Prevention Plan; and • The Contractor(s) shall prepare a Health and Safety Plan. The plan shall include measures to be taken in the event of an accidental spill. In addition, the Contractor(s) shall store all reserve fuel supplies only within the confines of a designated construction staging area, refuel equipment only within the designated construction staging area, and regularly inspect all construction equipment for leaks.	Provide confirmation of construction contract documentation	During grading/ construction	Applicant	• LACDRP
RMDP/SCP-PH-10: Prior to initiation of construction activities, the applicant shall prepare a Chemical Inventory for construction and maintenance of the Project. The	Submit Chemical Inventory; if required by LACFD, prepare and	During construction, prior to start of work by each contractor	Applicant	• LACFD

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Chemical Inventory shall be submitted to the Los Angeles County Fire Department Health Hazardous Materials Division for evaluation to determine whether a Hazardous Materials Business Plan is required. If a Hazardous Materials Business Plan is required, the plan shall address handling and potential releases of hazardous materials from the sites. It shall also include: (1) an inventory of all hazardous material and waste handled on site; (2) emergency response plans; (3) procedures in the event of a reportable or threatened release of a hazardous material; and (4) safety procedure training for all employees in the event of a release or threatened release of a hazardous material.	submit a Hazardous Materials Business Plan	necessitating chemical use		
RMDP/SCP-PH-11: In the event that previously unidentified, obvious, or suspected hazardous materials, contamination, debris, or other features or materials that could present a threat to human health or the environment are discovered during construction, construction activities shall cease immediately until the affected area is evaluated by a qualified professional. A remediation plan shall be developed in consultation with the appropriate regulatory authorities and the remediation identified shall be completed. Work shall not resume in the affected area until appropriate actions have been implemented in accordance with the remediation plan. The remediation action plan shall include the following: • Remediation goals and cleanup criteria that could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment, and/or removal of contaminated soil and/or groundwater;	Submit documentation of Remedial Action Plan in the Applicant's annual MMRP compliance report, if a Remedial Action Plan is required	Prior to issuance of building permit(s) in areas where remediation is performed	Applicant	• LACFD

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• A detailed description of the access points and haul-out routes for remedial activities; remediation methods and procedures; mitigation of dust; minimization or avoidance of disturbance to sensitive ecosystems; and verification soil sampling and analysis. Included in the discussion shall be information on disposal sites, transport and disposal methods, as well as recordkeeping methods for documenting remediation, regulatory compliance, and health and safety programs for on-site workers; and • Removal of oil development equipment and debris. *(The remedial action plan for the Entrada South Planning Area is included as **Appendix 5.4e** of the SEIR.)*				
RMDP/SCP-PH-12: A Soil Management Plan for the residential development envelopes and recreational construction areas shall be developed and implemented, as appropriate. The objective of the Soil Management Plan is to provide guidance for the proper handling, on-site management, and disposal of impacted soil that may be encountered during construction activities (i.e., excavation and grading). The plan shall include practices that are consistent with the California Division of Occupational Safety and Health regulations, California Code of Regulations, title 8, as well as Certified Unified Program Agency remediation standards that are protective of the planned use. Appropriately trained professionals will be on site during preparation, grading, and related earthwork activities to monitor soil conditions encountered. In order to confirm the absence or presence of hazardous substances associated with former land use, a sampling strategy shall be implemented. The sampling strategy	Document in log demonstrating compliance	Prior to issuance of building permit(s) in areas of impacted soils	Applicant	• LACFD

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
shall include procedures regarding logging/sampling and laboratory analyses. The Soil Management Plan will outline guidelines for the following: • Identifying impacted soil; • Assessing impacted soil; • Soil excavation; • Impacted soil storage; • Verification sampling; and • Impacted soil characterization and disposal. In the event that potentially contaminated soils are encountered within the footprint of construction, soils will be tested and stockpiled. The Certified Unified Program Agency will determine whether further assessment is warranted. The Certified Unified Program Agency shall determine and oversee the handling and disposal of impacted soils. (*The soil management plan for the Entrada South Planning Area is included as **Appendix 5.4e** of the SEIR.)*				
RMDP/SCP-PH-13: All potential buyers or tenants of property in the vicinity of SCGC transmission lines are to be made aware of the line's presence in order to assure that no permanent construction or grading occurs over, or within the vicinity of, the high-pressure gas mains.	Provide form of disclosure regarding SoCalGas transmission lines	Prior to occupancy	Applicant	• LACDRP
RMDP/SCP-PH-14: At the time of final subdivision maps permitting construction in development areas that are adjacent to Open Area and the High Country SMAs, a Wildfire Fuel Modification plan shall be prepared in accordance with the fuel modification ordinance standards	Submit Wildfire Fuel Modification plan	Prior to issuance of building permit(s)	Applicant	• LACFD • LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
in effect at that time and shall be submitted for approval to the Los Angeles County Fire Department. The Wildfire Fuel Modification plan shall depict a fuel modification zone, the size of which shall be consistent with the Los Angeles County fuel modification ordinance requirements. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the fuel modification ordinance. The Wildfire Fuel Modification plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d) water availability pursuant to the Los Angeles County Fire Department requirements. The fuel modification zone will not extend onto any spineflower preserve. *(Construction period requirements (a) through (d) are superseded by ES/VCC-PDF-WF-1 listed below in Section 17, Wildfire.)*				
10. HYDROLOGY AND WATER QUALITY—WATER QUALITY				
RMDP/SCP-WQ-1: Prior to the recordation of any final subdivision map (except those maps for financing or conveyance purposes only) or the issuance of any grading or building permit (whichever comes first), a final SUSMP shall be prepared consistent with the terms and content of both the Newhall Ranch Specific Plan Sub-Regional Stormwater Mitigation Plan and Project Water Quality Technical Report that specifically identifies the BMPs to be used on site. The SUSMP shall be submitted to the DPW for review. The SUSMP shall identify, at a minimum: (1) site design BMPS (as appropriate);	Submit LID Plan	Prior to final tract map or issuance of any grading or building permit (whichever comes first)	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(2) the source control BMPs; (3) treatment control BMPs; (4) hydromodification control BMPs; and (5) the mechanism(s) by which long-term operation and maintenance of all structural BMPs would be provided. The BMPs identified in the SUSMP shall include, as applicable, but not be limited to, the PDFs set forth in Table 4.4-12 this EIS/SEIR. *(SUSMP requirements have been superseded by the requirements of the County's Low Impact Development [LID] Ordinance and LID Manual. The final SUSMP is now referred to as the LID Plan per the County LID Manual. Prior to the issuance of any rough grading or building permit (whichever comes first) and as part of the design level hydrology study and facilities plan, a final LID Plan will be prepared consistent with the terms and contents of the Water Quality Technical Report (**Appendix 5.6** of the SEIR), including applicable requirements in the MS4 Permit and LID Ordinance. The BMPs identified in the LID Plan will include, as applicable, but not be limited to, the BMPs set forth in Table 7.4.1-1 of the Water Quality Technical Report. The BMPs set forth in Table 7.4.1-1 therein supersede the PDFs set forth in Table 4.4-12 of the State-certified EIR.)*				
RMDP/SCP-WQ-2: Prior to issuance of a building permit, and as a part of the design level hydrology study and facilities plan, the project applicant shall submit to the Department of Regional Planning a Landscape and Integrated Pest Management Plan, identified in this Section 4.4, which shall be designed to meet the standards set forth below. A Landscape and Integrated Pest Management Plan shall be developed and implemented for common area landscaping within the	Submit Landscape and Integrated Pest Management Plan	Prior to issuance of building permit(s)	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Specific Plan, Entrada, and VCC Project that addresses integrated pest management (IPM) and pesticide and fertilizer application guidelines. IPM is a strategy that focuses on long-term prevention or suppression of pest problems (i.e., insects, diseases and weeds) through a combination of techniques including: using pest-resistant plants; biological controls; cultural practices; habitat modification (Techniques 1–6 below); and the limited use of pesticides according to treatment thresholds, when monitoring indicates pesticides are needed because pest populations exceed established thresholds (Technique 7). The Landscape and Integrated Pest Management Plan will address the following components: 1. Pest identification. 2. Practices to prevent pest incidence and reduce pest buildup. 3. Monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed. 4. Establishment of action thresholds that trigger control actions. 5. Pest control methods—cultural, mechanical, environmental, biological, and appropriate pesticides. 6. Fertilizer management—soil assessment, fertilizer types, application methods, and storage and handling. 7. Pesticide management—safety (e.g., Material Safety Data Sheets, precautionary statements, protective equipment); regulatory requirements; spill mitigation; groundwater and surface water protection measures associated with pesticide use; and pesticide applicator certifications, licenses, and training (i.e., all pesticide				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
applicators must be certified by the California Department of Pesticide Regulation). (*Reference to Section 4.4 refers to the Water Quality Section of the State-certified EIR.)*				
11. NOISE				
ES/VCC-MM-NOI-1: For all construction-related activities, the Applicant shall implement the following: • The Applicant shall utilize construction equipment equipped with optimal exhaust muffler systems consistent with FHWA guidance to achieve a noise reduction of 10 dBA or more. • All equipment shall be properly maintained in accordance with manufacturers' specifications to assure that no additional noise due to worn or improperly maintained parts is generated consistent with FHWA guidance. • The Applicant shall utilize construction equipment that incorporates features to dampen metal surfaces and minimize metal-to-metal contact, consistent with FHWA guidance.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-MM-NOI-2: When construction operations occur adjacent to off-site occupied residential uses, the construction contractor(s) shall: (1) locate stationary construction equipment as far away as feasible from nearby receptors; (2) prohibit the idling of construction equipment; (3) notify adjacent residences in advance of construction work; and (4) install temporary acoustic barriers or noise blankets around stationary construction noise sources. These barriers shall be made featuring	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
weather-protected, sound-absorptive material on the construction-activity side of the noise barrier and must be installed in a location that completely blocks line-of-sight between the construction noise source and adjacent sensitive receptors.				
ES/VCC-MM-NOI-4: Prior to the start of construction and maintained for the duration of construction, the Applicant shall clearly post construction hours, allowable workdays, and the phone number of the job superintendent at all construction entrances to allow for surrounding owners to contact the job superintendent. The superintendent shall ensure that all complaints received are logged noting the date, time, complainant's name, nature of the complaint, and any corrective action taken.	Maintain log demonstrating compliance	Prior to the start of construction	Applicant	• LACDRP
12. PALEONTOLOGICAL RESOURCES				
RMDP/SCP-PR-1: A qualified paleontologist shall be retained to monitor and salvage scientifically significant fossil remains. The duration of these inspections depends on the potential for the discovery of fossils, the rate of excavation, and the abundance of fossils. (a) The Saugus and Pico Formations have a high potential to yield paleontological resources and will require continuous monitoring during all grading activities. This may require use of multiple paleontologists working on the site at the same time if simultaneous ground disturbing activities are occurring over an extensive area to assure all areas of excavation are being fully monitored for the presence of paleontological resources. The number of required monitors shall be determined by Project's	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
monitoring paleontologist. (b) The older dissected Pleistocene formations have a moderate potential to yield paleontological resources and will require halftime monitoring during all grading activities by a qualified paleontologist(s). Because of the large size and long duration of this Project, it will be necessary to periodically review the paleontological potential assigned to each rock unit. This shall be done at the end of each phase of grading. This reassessment of potential will be used to develop mitigation plans for future phases of development. If fossil production is lower than expected, the duration of the monitoring efforts should be reduced to less than continuous monitoring during all grading activities.				
RMDP/SCP-PR-2: The paleontologist, in consultation with the grading contractor, developer, and Los Angeles County inspector, shall have the power to divert temporarily or direct grading efforts in the area of an exposed fossil to allow evaluation and, if necessary, salvage of exposed fossils.	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP
RMDP/SCP-PR-3: Microinvertebrates are known to exist in the Saugus Formation within the Project area. Samples of the Saugus Formation rock units shall be collected periodically as directed by the Project paleontologist. Appropriate materials for collection are samples of at least 2,000 pounds of rock from likely horizons identified by the Project paleontologist. These samples can be stockpiled (to allow for processing at a later time) to avoid delays in grading activities. The representative rock samples shall be analyzed by a qualified paleontologist for data	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
collection purposes. Based on the results of initial evaluations, the number of collection samples in subsequent grading phases may be increased or decreased as deemed appropriate by the Project paleontologist.				
RMDP/SCP-PR-4: Because fossils were discovered during the course of the 1994 field survey, pre-grading salvage is necessary in localities 13, 13A, 14, and 23, as presented in the 1994 Paleontological Technical Report prepared by RMW. This report provides specific details pertaining to the existing conditions as they relate to paleontological resources of the Specific Plan portion of the RMDP and was presented in the Newhall Ranch Specific Plan Program EIR, and is available for public review at the Los Angeles County Department of Regional Planning, 320 W. Temple Street, Los Angeles, California, 90012. These locations represent significant fossil discoveries. A minimum of 2,000 pounds of rock should be collected at each site, stockpiled, and screen washed before grading begins at these locations. The representative rock samples shall be analyzed by a qualified paleontologist for data collection purposes. Based on the results of initial evaluations, the number of collection samples in subsequent grading phases may be increased or decreased as deemed appropriate by the Project paleontologist.	Maintain log demonstrating compliance	Prior to grading	Applicant	• LACDRP
RMDP/SCP-PR-5: Scientific specimens are to become the property of a public, nonprofit educational institution, such as the Los Angeles County Museum of Natural History (or similar institution). Most institutions are now requiring, as conditions for accepting the materials, that significant fossils be prepared, identified to a reasonable	Submit copy of curation agreement to LACDRP	Prior to grading	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
level, and catalogued before donation. Therefore, to meet these requirements, prior to the start of Project-related grading, an agreement shall be reached with a suitable scientific repository regarding acceptance of the fossil collection.				
RMDP/SCP-PR-6: Locations of recorded fossil deposits shall remain confidential and shall be disclosed to qualified paleontologists or other qualified individuals on a "need to know" basis.	Maintain log demonstrating compliance	During grading/ following completion of grading	Applicant	• LACDRP
RMDP/SCP-PR-7: To assure compliance with the Los Angeles County guidelines and CEQA, a final report summarizing the results of the mitigation efforts is necessary. To adequately report the results of the mitigation efforts, the report shall include: (1) an itemized inventory of the fossils; (2) pertinent geologic and stratigraphic data; (3) field notes of the collectors; and (4) indication of the repository. Because the Newhall Ranch Specific Plan and the VCC and Entrada planning areas will be developed in phases, a final report shall be prepared at the end of the grading activities associated with each phase of development. This report shall provide the information necessary to reassess the paleontological potential of each rock unit graded and shall include recommendations for future monitoring efforts in those rock units.	Submit final report regarding paleontological monitoring	Following completion of grading	Applicant	• LACDRP
13. PUBLIC SERVICES—SHERIFF PROTECTION AND SCHOOLS				
ES/VCC-PDF-PS-1: Any gated entrances to the Project Site subareas shall incorporate a Knox-Box entry system or equivalent.	Submit building plan(s) showing gate entry systems	Prior to installation of gates	Applicant	• LACFD

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
ES/VCC-PDF-PS-2: The Project Applicant, its successors or designees shall notify the Los Angeles County Sheriff's Department and California Highway Patrol prior to any Project-related lane closures or other road construction and ensure emergency access remains clear and unobstructed.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-PS-3: During construction, construction signs shall be posted with a reduced construction zone speed limit per guidance from the California Highway Patrol.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-PS-4: Upon completion, the Applicant shall provide the Santa Clarita Valley Station Commander with a diagram of each portion of the Project Site, including building entries and access routes.	Submit as-built site plans with access routes	Upon completion of development within each planning area of the site	Applicant/ Residential and/or Commercial Developer(s)	• LACSD
ES/VCC-PDF-PS-5: Prior to commencement of construction, the Project Applicant shall retain the services of a private security company to patrol the construction site(s), as necessary, to minimize the potential for trespass, theft, and other unlawful activity.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-PS-6: The developer of future subdivisions which allow construction shall comply with the terms and conditions of the School Facilities Funding Agreement between The Newhall Land and Farming Company and the Newhall School District.	Provide verification of compliance from School District	Prior to building permit issuance	Applicant	• LACDPW
ES/VCC-PDF-PS-7: The developer of future subdivisions which allow construction shall comply with the terms and conditions of the School Facilities Funding Agreement between The Newhall Land and Farming Company and the William S. Hart Union High School District.	Provide verification of compliance from School District	Prior to building permit issuance	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
ES/VCC-PDF-PS-9: The developer of future subdivisions which allow construction shall comply with the terms and conditions of the School Facilities Funding Agreement between The Newhall Land & Farming Company and the Saugus Union School District.	Provide verification of compliance from School District	Prior to building permit issuance	Applicant	• LACDPW
14. TRANSPORTATION/TRAFFIC				
ES/VCC-PDF-TR-1: Prior to any construction activities and/or issuance of required encroachment permits from the County of Los Angeles, the City of Santa Clarita, and/or Caltrans, a detailed Construction Traffic Management Plan shall be submitted to the relevant agency or agencies for review and approval, consistent with each agency's established codes and procedures. The Construction Traffic Management Plan shall include the following, as required by the applicable agency or agencies: • Provisions for traffic control during all phases of construction activities to improve traffic flow on public roadways (e.g., flag persons), as needed; • Scheduling construction activities to reduce the effect on traffic flow on arterial streets, including limiting construction worker arrivals immediately prior to opening hours at Six Flags Magic Mountain; • Provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers on streets impacted by Project construction; • Detour signs, as needed; • Provisions to configure construction parking to minimize	Submit Construction Traffic Management Plan	Prior to construction and/or issuance of encroachment permit(s)	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
traffic interference; • Provision of adequate emergency access to all residences and businesses adjacent to the roadways impacted by the roadway construction (mitigation) activities during all phases of construction activities; • Provisions to maintain emergency access at all times in the event temporary lane closures are necessary for the installation of utilities; and • With the exception of off-site infrastructure improvements, prohibition against parking of construction-related vehicles on streets in predominantly residentially zoned areas.				
RMDP/SCP-TR-5: The Project applicant shall contribute its fair-share of the costs to add additional capacity to The Old Road north of Magic Mountain Parkway by increasing the planned six-lane roadway to a six-lane augmented roadway. (This mitigation measure is applicable to [State Certified EIR] Alternatives 2, 3, and 7 only.)	Satisfy applicable Westside Bridge and Thoroughfare fees	Prior to issuance of building permit(s)	Applicant	• LACDPW
RMDP/SCP-TR-7: The Project applicant shall contribute its fair-share of the costs to add additional capacity to Rye Canyon Road east of The Old Road by increasing the existing six-lane roadway to a six-lane augmented roadway. (This mitigation measure is applicable to [State Certified EIR] Alternatives 2 through 7.)	Satisfy applicable Westside Bridge and Thoroughfare fees	Prior to issuance of building permit(s)	Applicant	• LACDPW
RMDP/SCP-TR-8: The Project applicant shall contribute its fair-share of the costs to add additional capacity to Via Princessa east of Santa Clarita Road by increasing the planned six-lane roadway to a six-lane roadway. (This mitigation measure is applicable to [State Certified EIR] Alternatives 2, 3, 4 and 5 only.)	Satisfy applicable Westside Bridge and Thoroughfare fees	Prior to issuance of building permit(s)	Applicant	• LACDPW

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(As a clarification, Via Princessa, would be increased from a planned six-lane roadway to an eight-lane roadway. The Entrada South Project's fair share of the cost of this improvement is 0.3%.)				
15. TRIBAL CULTURAL RESOURCES				
Refer to Section 5, Cultural Resources, above.				
16. WILDFIRE				
ES/VCC-PDF-WF-1: Prior to any construction activities, a detailed Construction Fire Prevention Plan (CFPP) shall be prepared for the Modified Project and submitted to the Los Angeles County Fire Department (County Fire) for review and approval. The CFPP shall designate fire safety measures to reduce the possibility of fires during construction activities, including fire watch during hot works and heavy machinery activities (e.g., welding), spark arresters on all equipment, water supply via hose lines attached to hydrants, or a water tender pursuant to County Fire requirements, red flag period restrictions, and mandatory on-site fire resources. Employees would be presented with basic prevention fire training upon employment and the on-site safety officer and/or supervisor/foreman shall maintain documentation of training. Training shall include reviewing the Modified Project's Fire Protection Plan, and Occupation Safety and Health Administration (OSHA) Fire Protection and Prevention guidance on the proper response and notification of a fire and the use of fire extinguishing equipment. A site safety officer shall be responsible for the implementation of the CFPP, ensuring fire control equipment are maintained in good working conditions,	Submit Construction Fire Prevention Plan	Prior to commencement of construction	Applicant	• LACFD

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
monitoring combustibles onsite, conducting fire safety surveys, posting fire rules in an area visible to employees, stopping work activities that pose a fire hazard or are not in compliance with the CFPP, and reporting all fire ignited on site to County Fire.				
ES/VCC-PDF-WF-2: Prior to bringing lumber or combustible materials related to building construction onto the Modified Project Site, site improvements within the active development area shall be in place, including utilities, operable fire hydrants, and an approved, temporary roadway surface and fuel modification zones shall be established. Combustible materials may be utilized on-site prior to stated site improvements as needed for providing the improvements (e.g., wood forms for cast-in-place concrete). The applicant shall submit site improvement plans to County Fire prior to the issuance of the building permits.	Submittal of site improvement plans	Prior to issuance of building permits	Applicant	• LACFD
ES/VCC-PDF-WF-3: All vegetation management with the Fuel Modification Zones (FMZs) and common areas shall be completed annually by May 1 of each year. Vegetation management may be completed more often for fire safety if determined necessary by County Fire. The Modified Project Homeowners' Association (HOA) or equivalent entity shall be responsible for the annual maintenance of all vegetation management within the FMZs in the common areas ensuring compliance with Los Angeles County Fire Department (County Fire) fuel modification guidelines. Property owners will be responsible for maintaining the Ember Resistant Zone (ERZ) and any fuel modification within their property. The annual maintenance would be managed and maintained	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
by the Modified Project HOA through a qualified contractor that shall be required to meet fire safety requirements regarding equipment, the timing of maintenance, and fire suppression capabilities. Maintenance activities would include but not be limited to removing dead and dying material, removing undesirable plant species, and conducting thinning activities to maintain adequate spacing requirements. The Modified Project HOA or similar entity shall be responsible for ensuring the long-term funding and ongoing compliance with all provisions of the FPP including, vegetation planting, fuel modification of the perimeter areas, vegetation management on all common areas including roadsides, and open space areas under their control (if not considered Entrada Spineflower Preserve). The Modified Project HOA shall be responsible for the implementation of the annual FMZ maintenance subject to ongoing enforcement by County Fire.				
ES/VCC-PDF-WF-4: By June 1 of each year, a third-party inspector shall be hired by the Modified Project HOA or equivalent entity to conduct an annual inspection of the Fuel Modification Zones (FMZs), including the Ember Resistant Zone (ERZ) and FMZs that are within private property. The inspector would evaluate the FMZs for compliance with regulations and that they are operating accordingly. The inspector shall notify the HOA of any non-compliant FMZs, recommend measures for remediation, and a timeframe for reinspection. The Modified Project HOA shall be responsible for the long-term funding of the inspections. An inspection report shall be submitted to County Fire each year documenting inspection results and compliance with County FMZ	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
requirements.				
ES/VCC-PDF-WF-5: The Modified Project residents and occupants shall be provided with ongoing education regarding wildfire, the FPP, and the Wildland Fire Evacuation Plan. The education program would support fire safety, evacuation practices, and fire safety features designed for the community. The Wildfire Education Program would provide target outreach to residents and occupants living in a fire risk area and would be a layered approach to maintaining high wildfire risk awareness that includes active and passive features. Contents of the educational program would be reviewed and approved by Los Angeles County Fire Department (County Fire) before printing and distribution. The Modified Project HOA or similar entity shall be responsible for the ongoing funding and maintenance of the wildfire education program. The educational program shall consist of the following: 1. Bi-annual email and mailers: Residents and occupants will be provided with bi-annual emails and mailers in April and in August. Mailers would be sent to each property address and property owners would receive digital copies. Property owners would be highly encouraged to share this information with tenants should they choose to rent their property. The mailers and emails would include information such as reminders about annual defensible space inspections, maintaining the Ember Resistant Zone (ERZ), how to prepare for wildfire season, evacuation information, and how to prevent wildfires. There would also be links to various resources on where to get trusted information such as County Fire, 211 LA County, and	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Ready LA County. 2. Website: There shall be a dedicated community website with more detailed information and resources about wildfire awareness and prevention. The website would serve as a centralized resource for the fire education program and include information from the FPP. The website will also have fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents will also be able to use the website to sign up for an annual residential defensible space inspection from the HOA Fire Committee. 3. Community workshops and webinars: Two times a year there shall be either in-person or virtual community workshops. The goal of the workshops would be to cover various fire topics more in-depth. For example, this could include having a County Fire representative come to meet the community, a workshop on how to make a go-bag, a workshop on how to make a residential evacuation plan, or how to maintain the home ignition zone. 4. New resident packet: All residents and new residents in the future shall also be presented with a wildfire awareness and safety package upon purchase or rental of a home. This would also be given to businesses as part of their employee training program. Within the package will be a memory stick with the evacuation plan, a list of fire protection features, information on the regional fire hazard, prohibited activities in fire risk areas, how to build a go-bag, and a list of agencies and resources for receiving trusted information.				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
5. Emergency alert campaign: Residents and businesses would be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, State, and Federal agencies alerts, health notifications, building alerts, and other updates from County, State, and Federal agencies. The campaign shall occur annually and encourage residents to sign up for Alert La County. Reminders would also be sent out in the bi-annual mailers and emails, on the community website, in the workshops, and the new resident package. 6. Fire watch groups: Within the community, there shall also be volunteer fire watch groups. These would be residents or businesses who volunteer to participate in a fire watch group for the community. During red flag warning days, this group would be responsible for reminding businesses and residents of fire-safe practices and restrictions. During red flag warning days, the fire watch group would also maintain vigilance of potential fires and would be trained on procedures for alerting County Fire in the event of a fire. 7. HOA fire safety committee: The fire safety committee shall be responsible for overseeing the maintenance of community-wide fire protection features. Residents would be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee will be responsible for the coordination of the 3rd party Fuel Modification Zone (FMZ) inspections and the volunteer residential defensible space				

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
inspections. The committee shall also be responsible for organizing and coordinating an annual education workshop on how to maintain the ERZ. The committee shall also be responsible for the creation and distribution of the educational program for the Modified Project. The committee would serve as a communication link between County Fire and the community.				
ES/VCC-PDF-WF-6: The Modified Project shall formally adopt, practice, and implement a "Ready!, Set!, Go!" approach to evacuation through the creation of a Wildland Fire Evacuation Plan (WFEP) for the Modified Project. The WFEP would be based on standard evacuation planning used by the Los Angeles County Office of Emergency Services and provide residents and occupants with potential egress route information and procedures. The WFEP would be provided to the Entrada South and VCC residents and commercial tenants and posted on the community website. The WFEP would be reviewed by residents at least annually through organized meetings and educational outreach by the HOA, Community Services District, or other means.	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP
RMDP/SCP- PH-7: All development of the Newhall Ranch Specific Plan site and the VCC and Entrada Planning Areas shall be in compliance with the provisions of Los Angeles County Code, Title 21, Chapter 21.24, for secondary evacuation access. (This mitigation measure would be achieved through compliance with the referenced County Code regulatory provisions, which establish secondary evacuation access standards. Because the Modified Project is required to	Submit plans indicating compliance	Prior to issuance of building permits	Applicant	• LACDRP

Table 1 (Continued)
Draft Mitigation Monitoring And Reporting Program Entrada South Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
comply with the County Code provisions referenced in this measure, no further action on this measure is required.)				
RMDP/SCP- PH-14: At the time of final subdivision maps permitting construction in development areas that are adjacent to Open Area and the High Country SMAs, a Wildfire Fuel Modification plan shall be prepared in accordance with the fuel modification ordinance standards in effect at that time and shall be submitted for approval to the Los Angeles County Fire Department. The Wildfire Fuel Modification plan shall depict a fuel modification zone, the size of which shall be consistent with the Los Angeles County fuel modification ordinance requirements. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the fuel modification ordinance. The Wildfire Fuel Modification plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d) water availability pursuant to the Los Angeles County Fire Department requirements. The fuel modification zone will not extend onto any spineflower preserve.	Submit Wildfire Fuel Modification Plan	Prior to issuance of building permits	Applicant	• LACFD • LACDRP

[a] *As indicated below, the Project Applicant will, as appropriate, maintain an implementation log to document compliance with various mitigation measures and PDFs identified in this MMRP. Results contained in the implementation log will be submitted to the County in the Project Applicant's annual report to the extent applicable. Depending on the nature of the measure, compliance may be documented in a single occurrence (i.e., once the action is completed) or on an ongoing or periodic basis, as appropriate, based on the specific requirements of each measure.*

Table 14
Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA and Tributaries

Trees	
red willow	*Salix laevigata*
arroyo willow	*Salix lasiolepis*
Fremont cottonwood	*Populus fremontii*
black cottonwood	*Populus balsamifera* ssp. *trichocarpa*
western sycamore	*Platanus racemosa*
Shrubs	
mulefat	*Baccharis salicifolia*
sandbar willow	*Salix exigua*
arrow weed	*Pluchea sericea*
Herbs	
mugwort	*Artemisia douglasiana*
western ragweed	*Ambrosia psilostachya*
cattail	*Typha latifolia*
bulrush	*Scirpus americanus*
prairie bulrush	*Scirpus maritimus*

This is a recommended list. Other species may be found suitable based on site conditions and state and federal permits.

Table 15
Additional RMDP/SCP BIO-22c Oak Tree Replacement Ratios

Trunk Diameter*	Mitigation Ratio
8–35	0.5:1
36+	2.5:1

** Trunk diameter measured at 4.5 feet above mean natural grade. Mitigation required for single-stem oaks with a minimum 8-inch diameter and multi-stem oaks with a combined diameter of 12 inches.*

Table 16
Optimal Woodland Densities and Acorn Planting Quantities, by Oak Woodland Type

Woodland Type	Average Existing Woodland Density (trees per acre)	Target Density for Newhall Land (trees per acre)
Coast live oak woodland	22	50
Mixed oak woodland	19	40
Valley oak woodland	16	25

APPENDIX 2

MITIGATION MONITORING AND REPORTING PROGRAM— ACRONYMS, SHORTENED TERMS, AND ABBREVIATIONS

ACOE	Army Corps of Engineers
AEA	Additional Environmental Analysis
AG	Agriculture and Forest Resources
APLIC	Avian Power Line Interaction Committee
AQ	Air Quality
BACT	Best Available Control Technology
BIO	Biological Resources
BMP	Best Management Practices
Cal/OSHA	California Division of Occupational Safety and Health
CalGEM	California Geologic Energy Management Division
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAM	Cismontane alkali marsh
CARB	California Air Resources Board
CBC	California Building Code
CC&R	Covenants, Conditions, and Restrictions
CDFG	California Department of Fish and Game (became CDFW)
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife (formerly CDFG)

CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFPP	Construction Fire Prevention Plan
CGS	California Geological Survey
CHP	California Highway Patrol
CLAOTO	County of Los Angeles Oak Tree Ordinance
CMIP	Comprehensive Mitigation Implementation Plan
CNLM	Center for Natural Lands Management
Corps	Army Corps of Engineers
County Fire	Los Angeles County Fire Department
CR	Cultural Resources
CRHR	California Register of Historic Resources
CVN	Compliance Verification Notice
dbh	diameter at breast height
DOGGR	Department of Conservation, Division of Oil, Gas and Geothermal Resources (now CalGEM)
DPW	Department of Public Works
E-Bike	Electric Bike
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ERZ	Ember Resistant Zone
ES/VCC	Entrada South/Valencia Commerce Center
EV	Electric Vehicle
FHWA	Federal Highway Administration

FMZ	Fuel Modification Zone
FPP	Fire Prevention Plan
GEO	Geology and Soils
GHG	Greenhouse Gas
GPS	Global Positioning System
GRR	Geomorphology and Riparian Resources
HARC	Hybrid Assessment of Riparian Communities
HOA	Home Owners' Association
IPM	Integrated Pest Management
ITP	Incidental Take Permit
JPA	Joint Powers Authority
LACDAC	Los Angeles County Department of Arts and Culture
LACDPW	Los Angeles County Department of Public Works
LACDRP	Los Angeles County Department of Regional Planning
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LID	Low Impact Development
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
Modified Project	Project
MOU	Memorandum of Understanding
MTCO2e	Metric Tons Carbon Dioxide Equivalent
NEV	Neighborhood Electric Vehicle
NLMO	Natural Lands Management Organization

NOI	Noise
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OSHA	Occupation Safety and Health Administration
PDF	Project Design Feature
PH	Potentially Hazardous
PR	Paleontological Resources
PS	Public Services
Retrofit Program	Building Retrofit Program
RMDP/SCP	Resource Management and Development Plan and Spineflower Conservation Plan
RMP	Resource Management Plan
RMW	RMW Paleo Associates, Inc.
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SCGC	Southern California Gas Company
SCH	State Clearinghouse
SCP	Spineflower Conservation Plan
SEA	Significant Ecological Area
SEIR	Supplemental Environmental Impact Report
SMA	Special Management Area
SoCalGas	Southern California Gas Company
SOON	Surplus Off-Road Opt-In for NO_X
SP	Specific Plan

Spineflower Preserve	Spineflower Conservation Area
sq. ft.	square feet
SUSMP	Standard Urban Stormwater Mitigation Plan
SW	Jurisdictional Waters and Streams
SWPPP	Stormwater Pollution Prevention Plan
TDM	Transportation Demand Management
TMO	Transportation Management Organization
TR	Transportation/Traffic
TSF	Thousand Square Feet
USFWS	United States Fish and Wildlife Service
VCC	Valencia Commerce Center
VMT	Vehicle Miles Traveled
VR	Visual Resources
WEAP	Worker Environmental Awareness Program
WF	Wildfire
WFEP	Wildland Fire Evacuation Plan
WQ	Water Quality
ZEV	Zero Emission Vehicle
ZNE Report	Zero Net Energy Confirmation Report
ZNE	Zero Net Energy

Table 2
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
1. AESTHETICS, VIEWS, AND LIGHT AND GLARE				
RMDP/SCP-PDF-VR-1: During construction, temporary green screen construction fencing 6 feet tall shall be placed on-site adjacent to public roadways to screen much of the construction activity from view at street level.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-PDF-VR-2: During construction, all security lighting shall be properly shielded and projected downwards such that light is focused on construction equipment or materials and not on adjacent roadways or off-site areas.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-PDF-VR-3: Prior to issuance of a building permit, the Project Applicant shall submit Design Guidelines to the County of Los Angeles Department of Regional Planning. The Design Guidelines shall address such issues as site planning, architecture, walls and fencing, landscape design, lighting, signage, and general design themes for each of the major land use categories in the community. In particular, the Design Guidelines shall establish the following: • Major utility systems, including potable water, recycled water, wastewater, electricity, natural gas, and cable/internet, shall be placed underground. • Utility/service areas shall be treated (i.e., through the use of color, landscaping, screening, etc.) to minimize visual impact. • Rooftop equipment shall be screened from view from public streets. • Outdoor lighting within the Project Site shall be projected downwards to illuminate the intended surface	Submit Design Guidelines	Prior to issuance of first building permit	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and minimize light spillover and glare generation; and shall consist of low-intensity downlights or be equipped with louvers, shields, hoods, or other screening devices, as appropriate. • Only non-reflective or low-reflective building materials, or those treated with a standard non-reflective or low-reflective glazing, shall be used on building exteriors.				
VCC-PDF-VR-1:[b] Development of the proposed project will be in accordance with design concepts specified in CUP 87-360. Guidelines have been developed to preserve key views and open space. Significant ridgetop areas totaling nearly 300 acres will be permanently allocated as natural open space.	Approval of VTPM	Prior to approval of VTPM	Applicant	• LACDRP
VCC-PDF-VR-2: Over 40% of the site will be open space and include large areas of coastal sage scrub/chaparral vegetation, flood control channels, and the SCE easement.	Maintain log documenting compliance	Prior to issuance of first building permit	Applicant	• LACDRP
VCC-PDF-VR-3: Graded areas that are not developed will be replanted with drought tolerant, fire resistant native and non-native species.	Depict on landscape plans	Prior to landscape plan approval	Applicant	• LACDRP
VCC-PDF-VR-4: Temporarily removed riparian vegetation will be replaced, so that there is no net loss of habitat.	Depict on habitat restoration plan	Prior to issuance of first building permit	Applicant	• LACDRP
VCC-PDF-VR-10: The design concept for the proposed project employs architecture reflecting contemporary styles and materials. All roof equipment including heating, air conditioning and ventilation equipment, will be located or screened so as not to be visible from neighboring sites or adjacent streets.	Depict on building plans	Prior to issuance of building permit	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
VCC-PDF-VR-11: Landscaping will be used extensively to provide visual cohesiveness for the entire development, and to provide, where applicable, transitions between manmade features and native terrain.	Depict on landscape plans	Prior to landscape plan approval	Applicant	• LACDRP
VCC-PDF-VR-12: Outdoor lighting within the proposed project area will be placed and shielded so that it will not cause excessive glare or light spillage onto neighboring areas.	Depict on building plans	Prior to issuance of building permit	Applicant	• LACDRP
VCC-PDF-VR-18: The SCE Easement shall remain as shown on Exhibit B of the Conditional Use Permit, with the exception that (i) the Permittee shall construct a paved access road in accordance with SCE standards, and (ii) SCE may make changes to the easement areas which are beyond the control of the Permittee.	Depict on VTPM 18108	Prior to approval of VTPM 18108	Applicant	• LACDRP
RMDP/SCP-VR-1: Riprap shall be ungrouted and shall contain material with colors and textures that are harmonious with the surrounding natural riverbed and bank materials. The same or similar type, color, and size of riprap shall be used throughout the Project area.	Depict on grading and/or drainage plans	Prior to issuance of grading permit(s)	Applicant	• LACDPW
RMDP/SCP-VR-2: Necessary grouted riprap and bridges shall contain materials with colors and textures that are harmonious with the surrounding natural riverbed and bank materials. The same or similar type, color, and size of riprap shall be used throughout the Project area.	Depict on grading and/or drainage plans	Prior to issuance of grading permit(s)	Applicant	• LACDPW
2. AGRICULTURE AND FOREST RESOURCES				
RMDP/SCP-AG-1: In order to minimize the premature conversion of agricultural lands and to track that conversion, prior to issuance of the first grading permit in	Maintain log demonstrating compliance	Prior to issuance of grading permit(s)	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
the Project area where agricultural soils are designated as prime farmland, unique farmland, and/or farmland of statewide importance exist (Pub. Resources Code section 21060.1), the applicant or its designee shall prepare a phasing map to document the phased discontinuation of existing agricultural activities located within the Project area over the course of its development.				
RMDP/SCP-AG-2: Newhall Land shall dedicate a permanent agricultural conservation easement for 138 acres of agricultural land located in the Salt Creek conservation area and on adjoining agricultural lands.	Maintain log demonstrating compliance	In conjunction with the dedication of the Salt Creek conservation area	Applicant	• LACDRP
3. AIR QUALITY				
ES/VCC-PDF-AQ-1: During the Project's grading phase, 2010 or newer diesel haul trucks shall be used to transport on-site soil to the extent available.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-2: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 4 emission standards, where available. At a minimum, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 3 emission standards for non-road diesel engines promulgated by the U.S. Environmental Protection Agency. In addition, all off-road diesel-powered construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB), provided those devices are commercially available and: (1) achieve the standards of the California Division of Occupational Safety and Health	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(also known as Cal/OSHA); (2) are consistent with the construction equipment warranty requirements; (3) are compatible with equipment specifications of the construction equipment manufacturer; and (4) do not otherwise interfere with the proper functioning of the construction equipment. Any BACT devices used shall achieve emissions reductions that are equal to or greater than a Level 3 diesel emissions control strategy for a similarly-sized engine, as defined by CARB regulations, provided that the devices are commercially available and satisfy the four requirements enumerated above.				
ES/VCC-PDF-AQ-3: During the Project's construction contract bidding phase, each construction contractor shall be provided with informational materials regarding the South Coast Air Quality Management District's Surplus Off-Road Opt-In for NO_X (SOON) Program.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-4: During the Project's construction phase, only street sweepers that are certified under Rule 1186 and Rule 1186.1 of the South Coast Air Quality Management District shall be used.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-5: During the Project's construction phase, electricity from on-site power poles shall be utilized where available (i.e., where accessible relative to the area of construction activity). In the event of an emergency or during a power outage, the use of generators shall be permissible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-AQ-6: The Project shall install high-efficiency public street and area lighting. Area lighting is defined to include any private common space lighting (e.g., within or along parks, sidewalks, and landscaping)	Submit building plans	Prior to issuance of building permits	Applicant	• LACDPW

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
that is not otherwise regulated by the California Building Energy Efficiency Standards (Title 24). For purposes of this measure, the Project also may use solar-powered lighting in lieu of high-efficiency lighting.				
ES/VCC-PDF-AQ-7: When residential appliances are offered by homebuilders, the Project shall install Energy Star appliances (specifically, clothes washers, clothes dryers, dish washers, fans, and refrigerators) in the single-family and multi-family residences.	Maintain log demonstrating compliance	During Construction	Applicant/ Residential Developer	• LACDPW
RMDP/SCP-AQ-3: Suspend the use of all construction equipment during first-stage smog alerts.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-4: Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment, to the extent feasible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-5: Maintain construction equipment by conducting regular tune-ups according to the manufacturers' recommendations.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-6: Use electric welders to avoid emissions from gas or diesel welders, to the extent feasible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-7: Use on-site electricity or alternative fuels rather than diesel powered or gasoline-powered generators, to the extent feasible.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
RMDP/SCP-AQ-12a. Construction shall be planned in such a way as to minimize heavy construction activity involving the use of diesel-fueled construction equipment within 500 meters of an occupied residence to the extent	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
practical. Heavy construction activity that occurs within 500 meters of an occupied residence that involves the use of diesel-fueled construction equipment shall prohibit non-essential idling and shall utilize equipment certified to the Tier 2 or newer emission standard. Equipment shall be routed in such a way as to minimize travel within 500 meters of an occupied residence to the extent practical. *(This measure remains applicable to the VCC Planning Area; however, Tier 3 and Tier 4 is now required per Mitigation Measure ES/VCC-MM-AQ-2, which exceeds the requirements for Tier 2 equipment described in this measure.)*				
4. BIOLOGICAL RESOURCES				
RMDP/SCP-AEA-PDF-3-1: To avoid impacts on the unarmored threespine stickleback, as well as other sensitive fish in the Santa Clara River, no construction activities shall take place in the wetted channel of the Santa Clara River. *(Although the VCC Planning Area does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to the wetted channel of Castaic Creek within the VCC Planning Area.)*	Applicant shall prepare and submit mitigation monitoring reports to CDFW and the County identifying where construction activities in Castaic Creek have occurred and demonstrating that such activities have not taken place in the wetted channel of the River.	Prior to construction	Applicant	• CDFW • LACDPW
RMDP/SCP-AEA-PDF-3-8: With respect to the temporary haul route bridges, all steel pile supports shall be installed and removed when the column and pile locations are outside of the wetted portion of the Santa	Applicant shall prepare and submit mitigation monitoring reports to CDFW and the County	Prior to construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Clara River and when there is a clear weather window as predicted by NOAA weather data. A clear weather forecast is defined for this project as a 40 percent or less chance of a 0.1 inch or greater precipitation event within the next 48 hours. Modular bridge decks, and all travel surface materials above the deck, shall be removed from the river prior to November 30 and shall not be installed until after May 1 of each year they are in use, consistent with NOAA weather data. *(Although the VCC Planning Area does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to the wetted portion of Castaic Creek within the VCC Planning Area. To reflect hydrologic conditions specific to Castaic Creek, any modular bridge decks and travel surface materials shall not be installed until after April 1 of each year they are in use. To incorporate this design feature in the event a temporary at-grade crossing is used in lieu of a temporary haul route bridge, a functionally equivalent PDF, VCC-PDF-BIO-2, has been added to the MMRP for the Project.)*	confirming that such bridge construction activities adhere to this Project Design Feature.			
RMDP/SCP-AEA-PDF-3-11: All construction dewatering of seepage water, associated with bank stabilization shall be conducted in a manner that does not create a risk of fish stranding, either through draw down (zone of influence) or by flow discharge creating temporary habitat suitable for unarmored threespine stickleback. *(Although the VCC Planning Area does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic*	Applicant shall prepare and submit mitigation monitoring reports to CDFW and the County confirming that such bridge construction activities adhere to this Project Design Feature.	Prior to construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Creek under certain conditions, this PDF will also be applied to bank stabilization construction within Castaic Creek in the VCC Planning Area.)				
RMDP/SCP-AEA-PDF-3-12: All long-term maintenance of project facilities on the Santa Clara River shall adhere to timing and work zone restrictions, specifically: (1) maintenance activities shall not take place in the wetted channel of the Santa Clara River; (2) maintenance, repair or replacement of bridge structures requiring access to the riverbed shall be restricted to the period from June 1 to September 30; (3) any dewatering necessary during any maintenance activities shall not create a risk of fish stranding, either through draw down (zone of influence) or by flow discharge creating temporary habitat suitable for unarmored threespine stickleback, nor shall it involve direct removal of surface water from, or discharge to, the wetted channel of the Santa Clara River. *(Although the VCC Planning Area does not contain any part of the Santa Clara River, to avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this PDF will also be applied to the wetted channel of Castaic Creek within the VCC Planning Area. However, item (2) is not applicable to the VCC Planning Area, as the Project will not construct any permanent bridge structure across the Santa Clara River or Castaic Creek that would require maintenance, repair, or replacement.)*	Applicant/LA County Dept. of Public Works shall prepare and submit maintenance activity reports to CDFW confirming that such bridge maintenance activities adhere to this Project Design Feature.	During bridge maintenance	Applicant	• CDFW • LACDPW
VCC-PDF-BIO-1: Within six months following completion of development within the VCC Planning Area, the Applicant shall offer a conservation easement (as defined	Offer Conservation Easement	During Operation	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
in Civil Code Section 815.1) over preserved streambeds and riparian areas within Castaic Creek and Hasley Canyon that are subject to the California Department of Fish and Wildlife's jurisdiction under Fish and Game Code Sections 1602 et seq. to ensure those areas are maintained in an undeveloped, open space condition in perpetuity. The conservation easement shall be offered to a qualified natural lands management organization or other entity qualified to hold conservation easements under Civil Code Section 815.3.				
VCC-PDF-BIO-2: With respect to any at-grade temporary haul route crossing of Castaic Creek, such crossing shall be installed and removed when the crossing location is outside any wetted portion of Castaic Creek and when there is a clear weather window as predicted by NOAA weather data. A clear weather forecast is defined for this project as a 40 percent or less chance of a 0.1 inch or greater precipitation event within the next 48 hours. Upon removal of any at-grade crossing, the bed and banks of Castaic Creek shall be restored to pre-construction elevations and contours and revegetated with native vegetation cover. *(This design feature, addressing at-grade temporary haul route crossings, is functionally equivalent to RMDP/SCP-AEA-PDF-3-8, which applies to temporary haul route bridges.)*	Applicant shall prepare and submit mitigation monitoring reports to CDFW and the County confirming that such ~~bridge~~ crossing construction activities adhere to this Project Design Feature.	Prior to construction	Applicant	• CDFW • LACDRP
SP-4.6-1: The restoration mitigation areas located within the River Corridor SMA shall be in areas that have been disturbed by previous uses or activities. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat.	Mitigation Measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3 and RMDP/SCP-BIO-12 ensure compliance with	Prior to approval of revegetation plans	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
First priority will be given to those restorable areas that occur adjacent to existing patches (areas) of native habitat that support sensitive species, particularly Endangered or Threatened species. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.	this measure by requiring mitigation plan approval, mitigation site approval and mitigation reporting. No additional reporting is required pursuant to this measure.			
SP-4.6-2: A qualified biologist shall prepare or review revegetation plans. The biologist shall also monitor the restoration effort from its inception through the establishment phase.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-12 ensure compliance with this measure by requiring mitigation plan approval and mitigation implementation reporting. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plans and Monitor During Restoration Effort	Applicant	• Corps • CDFW • LACDRP
SP-4.6-3: Revegetation Plans may be prepared as part of a California Department of Fish and Game 1603 Streambed Alteration Agreement and/or a U.S. Army Corps of Engineers Section 404 Permit, and shall include: • Input from both the Project proponent and resource agencies to assure that the Project objectives applicable to the River Corridor SMA and the criteria of this RMP are met. • The identification of restoration/mitigation sites to be used. This effort shall involve an analysis of the	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-3 ensure compliance with this measure by requiring mitigation plan approval and mitigation site approval. No additional reporting is required pursuant to this	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
suitability of potential sites to support the desired habitat, including a description of the existing conditions at the site(s) and such base line data information deemed necessary by the permitting agency.	measure.			
SP-4.6-4: The revegetation effort shall involve an analysis of the site conditions such as soils and hydrology so that site preparation needs can be evaluated. The revegetation plan shall include the details and procedures required to prepare the restoration site for planting (i.e., grading, soil preparation, soil stockpiling, soil amendments, etc.), including the need for a supplemental irrigation system, if any.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-5: Restoration of riparian habitats within the River Corridor SMA shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within the River Corridor SMA or purchased from nurseries with local supplies to provide good genetic stock for the replacement habitats. Plant species used in the restoration of riparian habitat shall be listed on the approved project plant palette (Specific Plan Table 2.6-1, Recommended Plant Species for Habitat Restoration in the River Corridor SMA) or as approved by the permitting State and Federal agencies.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval. The recommended plant species specified in Specific Plan Table 2.6-1 are superseded by the CDFW-approved plant species specified in Mitigation Measure RMDP/SCP-BIO-4, Table 14. No additional reporting is required pursuant to this	Prior to Approval of Revegetation Plans and Monitor During Restoration Effort	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	measure.			
SP-4.6-6: The final revegetation plans shall include notes that outline the methods and procedures for the installation of the plant materials. Plant protection measures identified by the project biologist shall be incorporated into the planting design/layout.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-7: The revegetation plan shall include guidelines for the maintenance of the mitigation site during the establishment phase of the plantings. The maintenance program shall contain guidelines for the control of non-native plant species, the maintenance of the irrigation system, and the replacement of plant species.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-8: The revegetation plan shall provide for monitoring to evaluate the growth of the developing habitat. Specific performance goals for the restored habitat shall be defined by qualitative and quantitative characteristics of similar habitats on the River (e.g., density, cover, species composition, structural development). The monitoring effort shall include an evaluation of not only the plant material installed, but the use of the site by wildlife. The length of the monitoring period shall be determined by the permitting state and/or	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
federal agency.	measure.			
SP-4.6-9: Monitoring reports for the mitigation site shall be reviewed by the permitting State and/or Federal agency.	Mitigation Measure RMDP/SCP-BIO-12 ensures compliance with this measure by requiring reporting of mitigation implementation (see note above). No additional reporting is required pursuant to this measure.	During Revegetation Activities	Applicant	• Corps • CDFW • LACDRP
SP-4.6-10: Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-11: Habitat enhancement as referred to in this document means the rehabilitation of areas of native habitat that have been moderately disturbed by past activities (e.g., grazing, roads, oil and natural gas operations, etc.) or have been invaded by non-native plant species such as giant cane (Arundo donax) and tamarisk (Tamarix sp.).	This measure provides a definition of "habitat enhancement" and does not impose any substantive requirements. No reporting is required	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	pursuant to this measure.			
SP-4.6-13: To provide guidelines for the installation of supplemental plantings of native species within enhancement areas, a revegetation plan shall be prepared prior to implementation of mitigation (see guidelines for revegetation plans above). These supplemental plantings will be composed of plant species similar to those growing in the existing habitat patch (see Specific Plan Table 2.6-1).	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). The recommended plant species specified in Specific Plan Table 2.6-1 are superseded by the CDFW-approved plant species specified in Mitigation Measure RMDP/SCP-BIO-4, Table 14. No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-14: Not all enhancement areas will necessarily require supplemental plantings of native species. Some areas may support conditions conducive for rapid "natural" reestablishment of native species. The revegetation plan may incorporate means of enhancement to areas of compacted soils, poor soil fertility, trash or flood debris, and roads as a way of enhancing riparian habitat values.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
SP-4.6-15: Removal of non-native species such as giant cane (*Arundo donax*), salt cedar or tamarisk (*Tamarix* sp.), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), if included in a revegetation plan to mitigate impacts, shall be subject to the following standards: • First priority shall be given to those habitat patches that support or have a high potential for supporting sensitive species, particularly Endangered or Threatened species. • All non-native species removals shall be conducted according to a resource agency approved exotics removal program. • Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native riparian plant species.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No additional reporting is required pursuant to this measure.	Prior to Approval of Revegetation Plan	Applicant	• Corps • CDFW • LACDRP
SP-4.6-16: Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources shall be conducted pursuant to the Oak Resources Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.	This measure applies only to the extent mitigation banking is conducted as part of Project activities. If mitigation banking is conducted, Mitigation Measure RMDP/SCP-BIO-12 (for riparian habitats) or BIO-22 (for oak trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No further	Prior to Approval of Mitigation Banking Program	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	action or reporting is required pursuant to the measure.			
SP-4.6-26a: Two types of habitat restoration may occur in the High Country SMA: (1) riparian revegetation activities principally in Salt Creek Canyon; and (2) oak tree replacement in, or adjacent to, existing oak woodlands and savannahs. • Mitigation requirements for riparian revegetation activities within the High Country SMA are the same as those for the River Corridor SMA and are set forth in Mitigation Measures 4.6-1 through -4.6-11 and 4.6-13 through 4.6-16, above. • Mitigation requirements for oak tree replacement are set forth in Mitigation Measure 4.6-48, below.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-22 ensure compliance with this measure by requiring mitigation plan approval and Oak Resource Management Plan approval (see note above). No further reporting is required pursuant to this measure.	Approval of Revegetation Plans	Landowner	• Corps • CDFW • LACDRP
SP-4.6-27: Removal of grazing from the High Country SMA except for those grazing activities associated with long-term resource management programs, is a principal means of enhancing habitat values in the creeks, brushland and woodland areas of the SMA. The removal of grazing in the High Country SMA is discussed below under (b) 4. Long Term Management. All enhancement activities for riparian habitat within the High Country SMA shall be governed by the same provisions as set forth for enhancement in the River Corridor SMA. Specific Plan Table 2.6-3 of the Resource Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA.	Mitigation Measure RMDP/SCP-BIO-1 ensures compliance with this measure by requiring mitigation plan approval (see note above). No further reporting is required pursuant to this measure.	During Enhancement Activities	Landowner/CNLM	• CNLM • LACDRP
SP-4.6-28: Mitigation banking activities for riparian habitats will be subject to State and Federal regulations	This measure applies only to the extent	Prior to Approval of Mitigation Banking	Applicant	• Corps

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.	mitigation banking is conducted as part of Project activities. If mitigation banking is conducted, Mitigation Measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP/SCP-BIO-22 (for oak trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No additional reporting is required pursuant to this measure.	Program		• CDFW • LACDRP
SP-4.6-43: Suitable portions of Open Area may be used for mitigation of riparian, oak resources, or elderberry scrub. Mitigation activities within Open Area shall be subject to the following requirements, as applicable. • River Corridor SMA Mitigation Requirements, including: Mitigation Measures 4.6-1 through 4.6-11 and 4.6-13 through 4.6-16; and • High Country SMA Mitigation Requirements, including: Mitigation Measures 4.6-27, 4.6-29 through 4.6-42, and • Mitigation Banking—Mitigation Measure 4.6-16.	To the extent the Project provides mitigation located in designated Open Area, measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3 and RMDP/SCP-BIO-12 will ensure compliance with this measure by requiring mitigation plan approval, mitigation site approval and reporting of mitigation implementation. If mitigation banking is	During Mitigation	Manager of Open Area	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	conducted, measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP/SCP-BIO-22 (for oak trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No additional reporting is required pursuant to this measure.			
SP-4.6-47a: Mitigation Banking will be permitted within the River Corridor SMA, the High Country SMA, and the Open Area land use designations, subject to the following requirements: • Mitigation banking activities for riparian habitats will be subject to State and Federal regulations, and shall be conducted pursuant to the mitigation requirements set forth in Mitigation Measure 4.6-1 through 4.6-15 above. • Mitigation banking for oak resources shall be conducted pursuant to 4.6-48, below. • Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester	This measure applies only to the extent mitigation banking is conducted as part of Project activities. If mitigation banking is conducted, Mitigation Measure RMDP/SCP-BIO-12 (for riparian habitats) or RMDP/SCP-BIO-22 (for oak trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No additional reporting is required pursuant to this measure.	Prior to Approval of Mitigation Banking Program	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
SP-4.6-48: Standards for the restoration and enhancement of oak resources within the High Country SMA and the Open Area include the following (oak resources include oak trees of the sizes regulated under the County Oak Tree Ordinance, southern California black walnut trees, Mainland cherry trees, and Mainland cherry shrubs): • To mitigate the impacts to oak resources that may be removed as development occurs in the Specific Plan Area, replacement trees shall be planted in conformance with the oak tree ordinance in effect at that time. • Oak resource species obtained from the local gene pool shall be used in restoration or enhancement. • Prior to recordation of construction-level final subdivision maps, an oak resource replacement plan shall be prepared that provides the guidelines for the oak tree planting and/or replanting. The Plan shall be reviewed by the Los Angeles Department of Regional Planning and the County Forester and shall include the following: site selection and preparation, selection of proper species including sizes and planting densities, protection from herbivores, site maintenance, performance standards, remedial actions, and a monitoring program. • All plans and specifications shall follow County oak tree guidelines, as specified in the County Oak Tree Ordinance.	To the extent the Project provides oak resource mitigation located in designated Open Area or the High Country SMA, measures RMDP/SCP-BIO-22 (for oak trees) or RMDP/SCP-BIO-88 (for mainland cherry or black walnut trees) will ensure compliance with this measure by requiring mitigation reporting and accounting. No additional reporting is required pursuant to this measure.	Prior to Final Subdivision Map Recordation	Applicant	• LA County Forester
SP-4.6-55: Prior to development or disturbance within wetlands or other sensitive habitats, permits shall be obtained from pertinent Federal and State agencies and	Compliance with the requirement to obtain permits will be	Prior to Grading	Applicant	• Corps • CDFW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
the Specific Plan shall conform to the specific provisions of said permits. Performance criteria shall include that described in Mitigation Measures 4.6-1 through 4.6-16 and 4.6-42 through 4.6-47 for wetlands, and Mitigation Measures 4.6-27, 4.6-28, and 4.6-42 through 4.6-48 for other sensitive habitats. *(This measure applies to the VCC Planning Area except that the requirement for the Specific Plan to conform does not apply.)*	documented by providing copies of permits authorizing impacts to jurisdictional waters. Compliance with the performance criteria required by this measure will be ensured through Mitigation Measures RMDP/ SCP-BIO-1, RMDP/ SCP-BIO-3 and RMDP/ SCP-BIO-12, which require mitigation plan approval, mitigation site approval and reporting of mitigation implementation (see note above). No additional reporting is required pursuant to this measure.			• LACDRP
SP-4.6-56: All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.	Building Permit Plot Plan Review	Prior to Issuance of Building Permit(s)	Applicant	• LACDRP
SP-4.6-58: To limit impacts to water quality the Specific Plan shall conform with all provisions of required NPDES permits and water quality permits that would be required by the State of California Regional Water Quality Control Board. *(This measure applies to the VCC Planning Area, except*	Compliance with this measure will be documented by providing the County with copies of annual reports required by any	Prior to Issuance of Grading Permit(s)	Project Engineer	• LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
that the reference to the Specific Plan does not apply.)	Regional Board NPDES permit and/or waste discharge requirements obtained for the VCC Planning Area.			
SP-4.6-62: When a map revision or Substantial Conformance determination on any subdivision map or Conditional Use Permit would result in changes to an approved oak tree permit, then the oak tree report for that oak tree permit must be amended for the area of change, and the addendum must be approved by the County Forester prior to issuance of grading permits for the area of the map or CUP being changed.	Compliance with this measure will be documented by providing copies of any required approvals for changes to an approved oak tree permit.	Prior to Issuance of Grading Permit(s)	Applicant	• LA County Forester
SP-4.6-63: Riparian resources that are impacted by buildout of the Newhall Ranch Specific Plan shall be restored with similar habitat at the rate of one acre replaced for each acre lost.	Mitigation Measures RMDP/SCP-BIO-1 and RMDP/SCP-BIO-12 ensure compliance with this measure by requiring mitigation plan approval and reporting of mitigation implementation (see note above). No additional reporting is required pursuant to this measure.	As specified in Mitigation Measure BIO-1	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-1: Mitigation Measures SP-4.6-1 through SP-4.6-16 specify requirements for riparian mitigation conducted in the High Country SMA, Salt Creek area, and Open Area. The RMDP includes requirements for mitigation of both riparian and upland habitats (such as	The mitigation plans required by this measure will be reviewed and approved by natural resource	Mitigation plan approval by Corps/CDFW prior to jurisdictional impacts	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
riparian adjacent big sagebrush scrub), and incorporates these Mitigation Measures (SP-4.6-1 through SP-4.6-16). A Comprehensive Mitigation Implementation Plan (CMIP) has been developed by Newhall Land that provides an outline of mitigation to offset impacts described in the RMDP. The CMIP demonstrates the feasibility of creating the required mitigation acreage from RMDP project impacts (see RMDP/SCP BIO-2). However, the CMIP does not identify mitigation actions specifically for impacts to waters of the United States. But since these waters are a subset of CDFG jurisdiction, the necessary Corps mitigation requirements would be met or exceeded.[c] Detailed riparian/wetland mitigation plans, in accordance with the CMIP, shall be submitted to, and are subject to the approval of, the Corps and CDFG as part of the subnotification letters for individual projects. Individual project submittals shall include applicable CMIP elements, complying with the requirements outlined below. The detailed wetlands mitigation plan shall specify, at a minimum, the following: (1) the location of mitigation sites; (2) site preparation, including grading, soils preparation, irrigation installation, (2a) the quantity (seed or nursery stock) and species of plants to be planted (all species to be native to region); (3) detailed procedures for creating additional vegetation communities; (4) methods for the removal of non-native plants; (5) a schedule and action plan to maintain and monitor the enhancement/ restoration area; (6) a list of criteria by which to measure success of the mitigation sites (e.g., percent cover and richness of native species, percent survivorship, establishment of self-sustaining native of plantings, maximum allowable percent of non-native species);	agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(7) measures to exclude unauthorized entry into the creation/enhancement areas; and (8) contingency measures in the event that mitigation efforts are not successful. The detailed wetlands mitigation plans shall also classify the biological value (as "high," "moderate," or "low") of the vegetation communities to be disturbed as defined in these conditions, or may be based on an agency-approved method (e.g., Hybrid Assessment of Riparian Communities (HARC)). The biological value shall be used to determine mitigation replacement ratios required under BIO-2 and BIO-10. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of CDFG and the Corps and approved prior to the impact to riparian resources. BIO-4 describes that the functions and values will be assessed for the riparian areas that will be removed, and BIO-2 and BIO-10 describe the replacement ratios for the habitats that will be impacted. *(This measure applies to the VCC Planning Area with the following exceptions and/or changes: approval of mitigation plans will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. Newhall shall record a conservation easement or declaration of restrictive covenants, in a form approved by CDFW, over all areas within the RMDP identified in the CMIP as providing mitigation for Project impacts prior to Project ground-disturbing activities, if not already recorded pursuant to the State-certified EIR and related approvals.)*				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-2: The permanent removal of existing habitats in Corps and/or CDFG jurisdictional areas in the Santa Clara River and tributaries shall be replaced by creating habitats of similar functions and values/services (see BIO-4 and Mitigation Measure SW-3 of Section 4.6 of the Final EIS/EIR) on the Project Site, or as allowed under Mitigation Measure BIO-10. a. Permanent impacts to Corps jurisdiction (which is a subset of CDFG jurisdiction) are to be mitigated by initiating mitigation site creation and/or restoration in advance of impacts, to replace the combined loss of acreage, functions, and services at a minimum 1:1 ratio. Initiation of a Corps mitigation site is defined as: (1) completion of site preparation; (2) installation of temporary irrigation; and (3) seeding and/or planting of the mitigation site. For detailed information, please refer to the Mitigation Plan for Impacts to Waters of the United States included in the Draft 404(b)(1) Alternatives Analysis in Appendix F1.0 of the Final EIS/EIR. The Potrero Canyon CAM creation and restoration site and the Mayo Crossing restoration site (i.e., an existing agricultural field) are considered the initial sites to be implemented prior to Corps jurisdictional impacts by development, thereby establishing upfront mitigation credits. As individual Project components are proposed for construction, consistent with the construction notification, quantities of mitigation acreage required to offset permanent impact acreages shall be calculated and compared to pre-mitigation area credits remaining. A project would not proceed unless adequate mitigation capacity is demonstrated. Temporary impact areas shall be	The mitigation ratios required by this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Prior to impacts within Corps jurisdiction. Following approval of detailed riparian/wetland mitigation plans	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mitigated in place in a manner that restores impacted functions and services as described in the mitigation plan noted above. If upfront compensatory mitigation cannot be achieved, a Corps-approved method would be utilized to determine the additional compensatory mitigation to offset the temporal loss of functions and services not included in the 1:1 mitigation ratio for permanent impacts. These measures satisfy the Corps mitigation requirements for impacts to Corps jurisdictional areas. However, impacts to jurisdictional areas (which include all areas subject to Corps and/or CDFG jurisdiction) are also subject to all of the mitigation requirements for impacts to CDFG jurisdiction, including BIO-2b. b. For permanent and temporary impacts to CDFG jurisdiction, consistent with the subnotification, quantities of mitigation acreage required shall be calculated in accordance with the criteria below: If suitable mitigation sites have met success criteria (BIO-6) prior to disturbance at the impact site, the mitigation sites shall replace the permanently impacted habitats in kind at a 1:1 ratio. If a suitable mitigation site has not met success criteria prior to disturbance of the impact site, habitat shall be replaced in kind (tributary for tributary impacts, river for river impacts) according to the replacement ratios specified in Table 13. These ratios provide compensatory mitigation for temporal losses of riparian function by considering the existing functional condition of the resources to be impacted, as well as time required for different vegetation types to become				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
established and mature. If a suitable mitigation site has not been initiated within two years following disturbance of the impact site, but is initiated within five years following such disturbance, the permanently impacted habitats shall be replaced in kind at a replacement ratio equal to the ratio required by Table 13 plus 0.5:1. (For example, if mitigation for impacts to high-quality mulefat scrub were initiated three years after disturbance, the required replacement ratio would be 2.5:1.) If a suitable mitigation site has not been initiated within five years following disturbance of the impact site, the permanently impacted habitats shall be replaced in kind at a replacement ratio equal to the ratio required by Table 13 plus 1:1. (For example, if mitigation for impacts to high-quality mulefat scrub were initiated six years after disturbance, the required replacement ratio would be 3:1.) Where temporary impacts to CDFG-jurisdictional areas are proposed, the mitigation acreage required shall be determined based upon the duration of the proposed construction disturbance and the type of vegetation to be impacted. As individual Project components are proposed for construction, consistent with the subnotification process, the quantities of mitigation acreage required for temporary impacts to CDFG jurisdictional areas shall be calculated according to the following criteria: If suitable mitigation sites have met success criteria prior to temporary disturbance at the impact site, the mitigation sites shall replace the temporarily impacted				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
habitats in kind at a 1:1 ratio regardless of the duration of the temporary disturbance. If the duration of temporary disturbance is less than two years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 1:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality. If the duration of temporary disturbance is between two and five years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 1.5:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality. If the duration of temporary disturbance exceeds five years, and no suitable mitigation sites have met success criteria prior to the disturbance, temporarily impacted habitats shall be replaced in kind at a 2:1 ratio, except for southern cottonwood/willow riparian forest and oak woodland habitats, which shall be replaced in kind at a ratio of 1:1 if low quality, 1.5:1 if medium quality, and 2:1 if high quality. In lieu of the habitat replacement described above and subject to CDFG approval, removal of invasive, exotic plant species from existing CDFG jurisdictional areas, followed by restoration/revegetation, may also be used to offset impacts. If this method is employed,				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mitigation shall be credited at an acreage equivalent to the percentage of exotic vegetation present at the restoration site. For example, if a 10-acre jurisdictional area is occupied by 10% exotic species, restoration shall be credited for one acre of impact. If appropriate, as authorized by CDFG, reduced percentage credits may be applied for invasive removal with passive restoration (weeding and documentation of natural recruitment only).				
RMDP/SCP-BIO-3: Creation of new vegetation communities and restoration of impacted vegetation communities shall occur at suitable sites in or adjacent to jurisdictional areas or in areas where bank stabilization would occur. Locations where the excavation of uplands for bank protection/stabilization results in creation of new, unvegetated creek bed or other disturbance shall receive the highest level of priority for vegetation community restoration. Restoration sites may occur at locations outside the riverbed where there are appropriate hydrologic conditions to create a self-sustaining riparian vegetation community and where upland and riparian vegetation community values are absent or very low. All sites shall contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian vegetation community. Candidate restoration sites shall be described in the annual mitigation status report (see BIO-12). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the subnotification letters submitted for individual projects. Status of the sites will be addressed through agency review of the annual mitigation status report and	The mitigation plans required by this measure will be reviewed and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Mitigation plan approval by Corps/ CDFW prior to jurisdictional impacts	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mitigation accounting form agency review. Each mitigation plan will include acreages, maps and site-specific descriptions of the proposed revegetation site, including analysis of soils, hydrologic suitability, and present and future adjacent land uses. *(This measure applies to the VCC Planning Area with the following exceptions and/or changes: mitigation site approval will occur when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. The mitigation accounting form referenced in the measure is not required.)*				
RMDP/SCP-BIO-4: Replacement vegetation communities shall be designed to replace the functions and values of the vegetation communities being removed. The replacement vegetation communities shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected vegetation communities (see Table 14 for example of recommended plant species for the River Corridor SMA and tributaries). In addition, the replacement vegetation communities shall be designed to replicate the density and structure of the affected vegetation communities once the replacement vegetation communities have met the mitigation success criteria. *(Table number corresponds to the numbering in the VCC Bio Report. **Table 14**, Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA and Tributaries, is provided on page 325 of this MMRP.)*	The requirements of this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Mitigation plan approval by Corps/CDFW prior to jurisdictional impacts Until success criteria are met.	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-5: Average plant spacing shall be determined based on an analysis of vegetation communities to be replaced. The applicant shall develop plant spacing specifications for all riparian vegetation communities to be restored. Plant spacing specifications shall be reviewed and approved by the Corps and CDFG when restoration plans are submitted to the agencies as part of the subnotification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form. *(This measure applies to the VCC Planning Area with the following exceptions and/or changes: restoration plans will be reviewed and approved when the Applicant obtains permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure.)*	The requirements of this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable.	Mitigation plan approval by Corps/CDFW prior to jurisdictional impacts Until success criteria are met.	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-6: The revegetation site will be considered "complete" upon meeting all of the following success criteria. In a subnotification letter, the applicant may request modification of success criteria on a project by project basis. Acceptance of such request will be at the discretion of CDFG and the Corps. 1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion. 2. The percent cover and species richness of native vegetation shall be evaluated based on local reference	The criteria required by this measure will be reflected in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by	From plan implementation through Corps/CDFW acceptance as complete	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
sites established by CDFG and the Corps for the plant communities in the impacted areas. 3. Native shrubs and trees shall have at least 80% survivorship after two years beyond the beginning of the success evaluation start date. This may include natural recruitment. 4. Non-native species cover will be no more than 5% absolute cover through the term of the restoration. 5. Giant reed (Arundo donax), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissimus*), pampas grass (*Cortaderia selloana*) and any species listed on the California State Agricultural list, or Cal-IPC list of noxious weeds will not be present on the revegetation site as of the date of completion approval. 6. Using the HARC assessment methodology, the compensatory mitigation site shall meet or exceed the baseline functional scores of the impact area in Corps' jurisdictional waters, as described in the Conceptual Mitigation Plan for Waters of the United States. *(This measure applies to the VCC Planning Area with the following exceptions and/or changes: modification of success criteria may occur when the Applicant obtain permits for impacts to waters subject to Corps and/or CDFW jurisdiction, in lieu of the subnotification process referenced in the measure. In addition, the HARC assessment may be replaced by another agency-approved method.)*	submitting copies of agency permits or approval of mitigation plans, as applicable.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-7: If at any time prior to Agency approval of the restoration area, the site is subject to an act of God (flood, fires, or drought) the applicant shall be responsible for replanting the damaged area. The site will be subject to the same success criteria provided for in BIO-6. Should a second act of God occur prior to Agency approval of the restoration area, the applicant shall coordinate with the Agencies and develop an alternative restoration strategy(ies) to meet success requirements. This may include restoration elsewhere in the River Corridor or tributaries.	Status of mitigation sites and any replanting required pursuant to this measure will be reported in the annual mitigation monitoring reports required by Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-8: Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self sustaining regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.	Temporary irrigation will be described in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable, and through annual reports as required by Mitigation Measure	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	RMDP/SCP-BIO-12			
RMDP/SCP-BIO-9: In areas where invasive exotic plant species control is authorized by CDFG in lieu of other riparian habitat mitigation (BIO-2), removal areas shall be kept free of exotic plant species for five years after initial treatment. In areas where extensive exotic removal occurs, revegetation with native plants or natural recruitment shall be documented.	If exotic plant control is performed as mitigation, it will be described in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of agency permits or approval of mitigation plans, as applicable, and through annual reports as required by Mitigation Measure RMDP/SCP-BIO-12.	Continuing for five years after initial treatment	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-10: The exotics control program may utilize methods and procedures in accordance with the provisions in the Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan Final Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval. Exotic plant species control will be credited at an acreage equivalent to the	Compliance with this measure will be documented through annual mitigation monitoring reports submitted pursuant to Mitigation Measure RMDP/SCP-BIO-12. No	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
percentage of exotic vegetation at the restoration site. By example: a 10-acre site occupied by 10% exotic species will be credited for one acre of mitigation. The exotic weed control location will be documented on the annual mitigation status report and mitigation accounting form. If "in lieu fees" are paid, it will be documented on the annual mitigation status report and mitigation accounting form, along with a reporting of the status of exotic vegetation treatment.	additional reporting is required pursuant to this measure.			
RMDP/SCP-BIO-12: An annual monitoring report shall be submitted to the Corps and CDFG by April 1 of each year until satisfaction of success criteria identified in BIO-6. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed "in lieu fees," restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation account form (see BIO-11), which outlines account information related to species planted or exotics control and mitigation credit remaining. The annual mitigation and monitoring report shall document the current	Compliance with this measure will be documented by submitting copies of the annual mitigation monitoring reports to the County.	By April 1st each year beginning with approval of detailed riparian/wetland mitigation plans and continuing for the life of the permit or until all credits have been used up for individual projects and success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
functional capacity of the compensatory mitigation site using the HARC assessment methodology, as well as documenting the baseline functional scores of the impact site in jurisdictional waters of the United States. *(This mitigation measure applies to the VCC Planning Area with the following exceptions and/or changes: The functional assessment of the compensatory mitigation site may use a method other than the HARC assessment methodology, subject to the approval of the Corps and CDFW. The mitigation account form referenced in the measure is not required because the VCC Planning Area will not utilize or require any permits issued for the RMDP.)*				
RMDP/SCP-BIO-13: The mitigation program shall incorporate applicable principles in the interagency Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (60 FR 58605–58614) to the extent feasible and appropriate, particularly the guidance on administration and accounting. Nothing in the Section 404 or Section 2081 Permit or Section 1605 agreement shall preclude the Applicant from selling mitigation credits to other parties wishing to use those permits or that agreement for a project and/or maintenance activity included in the permits/agreement.	This measure applies only if the applicant sells mitigation credits to other parties. If credits are sold, CDFW and/or the Corps will approve the accounting and administration procedures at the time of mitigation approval. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP
RMDP/SCP-BIO-15: All native riparian trees with a three-inch diameter at breast height (dbh) or greater in temporary construction areas shall be replaced using one- or five-gallon container plants, containered trees, or pole cuttings in the temporary construction areas in the	Compliance with this measure will be documented through annual mitigation monitoring reports	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
winter following the construction disturbance. The mitigation ratios for temporary impacts to vegetation communities are described in BIO-2. The growth and survival of the replacement trees shall meet the performance standards specified in BIO-6. In addition, the growth and survival of the planted trees shall be monitored until they meet the self sustaining success criteria in accordance with the methods and reporting procedures specified in BIO-6, BIO-11, and BIO-12. *(This mitigation measure applies to the VCC Planning Area with the following exceptions and/or changes: mitigation accounting in accordance with RMDP/SCP-BIO-11 is not required, because the VCC Planning Area will not utilize or require any permits issued for the RMDP.)*	submitted pursuant to Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.			
RMDP/SCP-BIO-16: Vegetation communities temporarily impacted by the proposed Project shall be revegetated as described in BIO-2. Large trunks of removed trees may also remain on site to provide habitat for invertebrates, reptiles, and small mammals or may be anchored on the Project site for erosion control. To facilitate restoration, mulch, or native topsoil (the top six- to 12-inch-deep layer containing organic material), may be salvaged from the work area prior to construction. Following construction, salvaged topsoil shall be returned to the work area and placed in the restoration site. Within one year, the Project biologist will evaluate the progress of restoration activities in the temporary impact areas to determine if natural recruitment has been sufficient for the site to reach performance goals. In the event that native plant recruitment is determined by the Project biologist to be	Compliance with this measure will be documented through annual mitigation monitoring reports submitted pursuant to Mitigation Measure RMDP/SCP-BIO-12. No additional reporting is required pursuant to this measure.	Until success criteria are met	Applicant	• Corps • CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
inadequate for successful habitat establishment, the site shall be revegetated in accordance with the methods designed for permanent impacts (i.e., seeding, container plants, and/or a temporary irrigation system may be recommended). This will help ensure the success of mitigation areas. The Applicant shall restore the temporary construction area per the success criteria and ratios described in BIO-1, BIO-2, and BIO-6. Annual monitoring reports on the status of the recovery or temporarily impacted areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (BIO-11 and BIO-12). *(This mitigation measure applies to the VCC Planning Area with the following exceptions and/or changes: mitigation accounting in accordance with Mitigation Measure RMDP/SCP-BIO-11 is not required, because the VCC Planning Area will not utilize or require any permits issued for the RMDP.)*				
RMDP/SCP-BIO-17: Focused surveys for arroyo toad shall be conducted. Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 1,000 feet of construction sites and access roads shall be surveyed at the appropriate season for arroyo toad. The applicant shall contract with a qualified biologist to conduct focused surveys for arroyo toad. If detected in or adjacent to the Project area, no work will be authorized within 500 feet of occupied habitat until the applicant provides concurrence from the USFWS to CDFG and the Corps. The applicant	Compliance with the measure will be documented through pre-construction survey reports and, if applicable, construction monitoring reports submitted to CDFW.	Prior to and throughout construction of specified structures.	Applicant	• CDFW • USFWS • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
shall implement measures required by the USFWS Biological Opinion that either supplement or supersede these measures. If arroyo toads are determined to be present, the applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG: 1. The applicant shall retain a qualified biologist with demonstrated expertise with arroyo toads to monitor all construction activities in potential arroyo toad habitat and assist the applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of arroyo toad. 2. Prior to the onset of construction activities, the applicant shall provide all personnel who will be present on work areas within or adjacent to the Project area the following information: a. A detailed description of the arroyo toad, including color photographs; b. The protection the arroyo toad receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act; c. The protective measures being implemented to conserve the arroyo toad and other species during construction activities associated with the				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
proposed Project; and d. A point of contact if arroyo toads are observed. 3. All trash that may attract predators of the arroyo toad will be removed from work sites or completely secured at the end of each work day. 4. Prior to the onset of any construction activities, the applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the arroyo toad and the actions taken to reduce impacts to this species. Because arroyo toads may occur in various locations during different seasons of the year, the applicant, USFWS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on arroyo toads. The goal of this effort is to reduce the level of mortality of arroyo toads during construction. The parties realize that, if arroyo toads are present, complete prevention of all mortality is likely not possible because some arroyo toads may occur anywhere within suitable habitat during any given season; the detection of every individual over large areas is impossible because of the small size, fossorial habits, and cryptic coloration of the arroyo toad. 5. Where construction can occur in habitat where arroyo toads are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas. 6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any arroyo toads from within the fenced area to suitable habitat outside of the fence. If arroyo toads are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG. 7. Fencing to exclude arroyo toads will be at least 24 inches in height. 8. The type of fencing must be approved by the authorized biologist and the USFWS/CDFG. 9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of arroyo toads may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the applicant in scheduling its work activities accordingly. 10. If arroyo toads are found within an area that has been fenced to exclude arroyo toads, activities will cease until the authorized biologist moves the arroyo toads. 11. If arroyo toads are found in a construction area where fencing was deemed unnecessary, work will cease				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
until the authorized biologist moves the arroyo toads. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS. 12. Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area. 13. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. 14. Staging areas for all construction activities will be located on previously disturbed upland areas designated for this purpose. All staging areas will be fenced within potential toad habitat. 15. To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times. 16. Drift fence/pitfall trap surveys will be implemented in toad sensitive areas prior to construction in an effort to reduce potential mortality to this species. Prior to any construction activities in the Project area, silt				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
fence shall be installed completely around the proposed work area and a qualified biologist should conduct a preconstruction/clearance survey of the work area for arroyo toads. Any toads found in the work area should be relocated to suitable habitat. The silt fence shall be maintained for the duration of the work activity. 17. The applicant shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when arroyo toads may be present on the access road. Traffic speed should be maintained at 15 mph or less in the work area. *(As written, this measure applies to the Santa Clara River, which does not exist within the VCC Planning Area. To protect resources that may have the potential to occur within Castaic Creek under certain conditions, this measure also applies to VCC Planning Area activities within Castaic Creek, with the following exceptions and/or changes: The USFWS Biological Opinion for the RMDP does not apply to the VCC Planning Area, but if the USFWS issues a biological opinion or other approval for the VCC Planning Area that addresses arroyo toad, the applicant shall implement any measures from such biological opinion or approval that either supplement or supersede this measure.)*				
RMDP/SCP-BIO-18: Conduct focused surveys for California red-legged frogs. Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 1,000 feet	Compliance with the measure will be documented through pre-construction survey reports and, if applicable, construction	Prior to and throughout construction of specified structures.	Applicant/Qualified Biologist	• CDFW • USFWS • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
of construction sites and access roads shall be surveyed at the appropriate season for California red-legged frogs. The Applicant shall contract with a qualified biologist to conduct focused surveys for California red-legged frogs. If detected in or adjacent to the Project area, no work will be authorized within 500 feet of occupied habitat until the Applicant provides concurrence from the USFWS to CDFG and Corps. If present, the Applicant shall implement measures required by the USFWS Biological Opinion for California red-legged frog that either supplement or supersede these measures. If present, the Applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG: 1. The Applicant shall retain a qualified biologist with demonstrated expertise with California red-legged frogs to monitor all construction activities in potential red-legged frog habitat and assist the Applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of California red-legged frogs. 2. Prior to the onset of construction activities, the Applicant shall provide all personnel who will be present on work areas within or adjacent to the Project area the following information: a. A detailed description of the California red-legged	monitoring reports submitted to CDFW.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
frogs, including color photographs; b. The protection the California red-legged frog receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act; c. The protective measures being implemented to conserve the California red-legged frogs and other species during construction activities associated with the proposed Project; and d. A point of contact if California red-legged frogs are observed. 3. All trash that may attract predators of the California red-legged frogs will be removed from work sites or completely secured at the end of each work day. 4. Prior to the onset of any construction activities, the Applicant shall meet on-site with staff from the USFWS and the authorized biologist. The Applicant shall provide information on the general location of construction activities within habitat of the California red-legged frogs and the actions taken to reduce impacts to this species. Because California red-legged frogs may occur in various locations during different seasons of the year, the Applicant, USFWS, and authorized biologist will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on California red-legged frogs. The goal of this effort is to reduce the level of mortality of California red-legged frogs during construction.				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
5. Work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas. 6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any California red-legged frogs from within the fenced area to suitable habitat outside of the fence. If California red-legged frogs are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG. 7. Fencing to exclude California red-legged frogs will be at least 24 inches in height. 8. The type of fencing must be approved by the authorized biologist and the USFWS/CDFG. 9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of California red-legged frogs may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the Applicant in scheduling its work activities accordingly. 10. If California red-legged frogs are found within an area that has been fenced to exclude California red-legged				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
frogs, activities will cease until the authorized biologist moves the California red-legged frog(s). 11. If California red-legged frogs are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the California red-legged frogs. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS. 12. Any California red-legged frogs found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, access to deep perennial pools, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area. 13. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. 14. Staging areas for all construction activities will be located on previously disturbed upland areas, if possible, designated for this purpose. All staging areas will be fenced. 15. To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times. *(As written, this measure applies to the Santa Clara River, which does not exist within the VCC Planning Area. To protect resources that may have the potential to occur within Castaic Creek under certain conditions, this measure also applies to VCC Planning Area activities within Castaic Creek, with the following exceptions and/or changes: The USFWS Biological Opinion for the RMDP does not apply to the VCC Planning Area, but if the USFWS issues a biological opinion or other approval for the VCC Planning Area that addresses California red-legged frog, the applicant shall implement any measures from such biological opinion or approval that either supplement or supersede this measure.)*				
RMDP/SCP-BIO-20: Approximately 1,900 acres of coastal scrub shall be preserved on The Project Site. The preservation of this vegetation type shall occur on site within the High Country SMA, the Salt Creek area, and the River Corridor SMA within the Specific Plan site. Irrevocable offers of dedication will be provided to CDFG for identified impact offsets in accordance with the Plan (BIO-1) using a "rough step" land dedication approach. Some of this habitat is recovering from wildfire and the expectation is that it will recover without active intervention. The functional values of any burned dedicated land areas shall be evaluated annually until such time that conditions are commensurate with the quality of the impacted habitat being mitigated. In the event that the functional value of this burned habitat has not recovered within five years of the dedication due to	The 66.5 acres of coastal scrub required to be preserved by this measure may be preserved initially through a stand-alone offer of dedication or as part of a larger offer of dedication that includes lands preserved to offset RMDP impacts.	Upon recordation of tract map, unless previously recorded as part of another Newhall Ranch RMDP/SCP-related project or land dedication	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
invasive species, to fire ecology, erosion, drought, or unforeseen events, then adaptive management pursuant to BIO-21 will be implemented for coastal scrub restoration. *(This mitigation measure applies to the VCC Planning Area, with the following exceptions and/or changes: approximately 66.5 acres of coastal scrub shall be preserved on lands identified in the CMIP to offset impacts to coastal scrub associated with the VCC Planning Area. The preserved lands may include areas of the VCC Planning Area not subject to development, if identified in the CMIP as appropriate.)*				
RMDP/SCP-BIO-21: Supplemental restoration of coastal scrub shall be conducted as an adaptive management measure pursuant to BIO-20. Eight areas were identified in the Draft Newhall Ranch Mitigation Feasibility Report in the High Country SMA, Salt Creek area, and River Corridor SMA (Dudek 2007A) for coastal scrub restoration. In the event that coastal scrub restoration is required pursuant to BIO-20, the applicant shall develop a Coastal Scrub Restoration Plan, subject to the approval of CDFG. The plan shall specify, at a minimum, the following: (1) the location of mitigation sites to be selected from suitable mitigation land in the High Country and Salt Creek areas identified in the Feasibility Study; (2) a description of "target" vegetation (native shrubland) to include estimated cover and abundance of native shrubs; (3) site preparation measures to include topsoil treatment, soil decompaction, erosion control, temporary irrigation systems, or other measures as appropriate; (4) methods for the removal of non native plants (e.g.,	If coastal scrub restoration is required pursuant to Mitigation Measure RMDP/ SCP-BIO-20 for all or part of the 66.5 acres of coastal scrub preserved as mitigation for VCC Planning Area impacts, the Coastal Scrub Restoration Plan and annual reports required by this measure will be submitted to CDFW. If coastal scrub restoration is not required pursuant to Mitigation Measure RMDP/SCP-BIO-20, no further action will be	Beginning five years after dedication, if functional value of burned habitat has not recovered by that time, and continuing until success criteria are met.	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mowing, weeding, raking, herbicide application, or burning); (5) the source of all plant propagules (e.g., seed, potted nursery stock, etc. collected from within five miles of the restoration site), the quantity and species of seed or potted stock of all plants to be introduced or planted into the restoration/enhancement areas; (6) a schedule and action plan to maintain and monitor the enhancement/ restoration areas, to include at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no less than two years; (7) as needed where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the restoration/enhancement areas; and (8) contingency measures such as replanting, weed control, or erosion control to be implemented if habitat improvement/restoration efforts are not successful. Habitat restoration/enhancement will be judged successful when: (1) percent cover and species richness of native species reach 50% of cover and species richness at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation. Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning. Monitoring reports will describe all restoration/ enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe vegetation survival or establishment in quantitative terms.	required pursuant to this measure.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-BIO-22: a. Newhall Land shall prepare an Oak Resource Management Plan, to be submitted for approval to CDFG and County of Los Angeles, and implemented upon approval. The Plan shall identify areas suitable for oak woodland enhancement and creation. The Plan shall distinguish between oaks to be planted in compliance with CLAOTO (BIO-22b) and the additional measures required by this EIS/EIR (BIO-2 for woodlands in jurisdictional streambeds and BIO-22c and BIO-22d for upland areas). The Oak Resource Management Plan shall include measures to create or enhance woodlands as follows (1) locations and acreages of mitigation sites where woodland creation or enhancement will occur; (2) a description of proposed cover and number of native trees, shrubs, and grasses per acre to be established. This description shall be based on comparable intact woodlands in the area of impact or elsewhere within the RMDP planning area, consistent with conditions of the proposed mitigation site; (3) site preparation measures to include (as appropriate) topsoil treatment, soil decompaction, erosion control, weed grow/kill cycle, or as otherwise approved by the agencies; (4) methods for the removal of non-native plants (e.g., mowing, weeding, raking, herbicide application, or burning); (5) a plant palette listing all species, including sizes, planting densities, or seeding rates, to be based on target vegetation; (6) the source of all plant propagules (e.g., seed, potted nursery stock) and the quantity and species of seed or potted stock of all plants to be introduced or planted into the mitigation	The Oak Resource Management Plan required by this measure has been prepared and approved by CDFW and the County of Los Angeles. No further action is required regarding the Plan. The applicant will implement oak tree mitigation as required by the Plan and this measure to offset impacts to oak trees within the VCC Planning Area.	Prior to final map recordation	Applicant	• LACDRP • CDFW • LACFD

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
areas; (7) temporary irrigation, protection from herbivores, fertilizer, weeding, *etc.*; (8) a schedule and action plan to maintain and monitor the enhancement/ restoration areas to include, at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no less than five years total and no less than two years after removal of irrigation (if any); (9) where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the mitigation areas shall be implemented as needed; (10) tree protection standards to be implemented for individual trees or woodlands adjacent to development activity; (11) success criteria as stated in BIO-22b and BIO-22d; and (12) contingency measures, such as replanting, erosion control, irrigation system repair, or understory re-seeding, to be implemented if habitat improvement/restoration efforts do not meet the success criteria stated in the plan.				
b. To meet the minimum mitigation criteria set forth in CLAOTO, Newhall Land will replace impacted oaks (measuring eight inches in diameter, or greater, or with a combined diameter of 12 inches for multi-stem oaks) at a ratio of 2:1. Additionally, oaks meeting the criteria for classification as a Heritage Tree (defined by CLAOTO as "any oak tree measuring 36 inches or more in diameter") will be replaced at a ratio of 10:1. Whether they are planted in dedicated open space areas or developed areas, replacement oak trees planted in conformance with CLAOTO shall adhere to				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
the following standards: 1. Replacement oak trees shall be exclusively indigenous species, shall be at least a 15-gallon size specimen, and measure at least one inch in diameter one foot above the base, unless otherwise approved by the County Forester. 2. Replacement trees shall be properly cared for and maintained for a period of two years and replaced by Newhall Land if mortality occurs within that period. 3. Replacement planting shall be conducted in phases as impacts occur. Alternatively, Newhall Land may choose to plant replacement trees in open space areas prior to realization of Project-related impacts (pre-mitigation). Any pre-mitigation shall adhere to the standards outlined herein. 4. Following completion of the two-year maintenance period, the County Forester shall provide final authorization that CLAOTO standards have been met. c. In addition to the CLAOTO requirements (BIO-22b), this EIS/EIR requires replacement of oak trees at the ratios in the table below for trees lost or impacted in uplands. These trees are in addition to the CLAOTO requirement described above. These additional trees may also be incorporated into woodland habitat enhancement or creation, as described above. Additional replacement ratios are provided in Table 15. d. Newhall will mitigate lost oak woodlands occurring on				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
upland sites (i.e., outside CDFG/Corps jurisdictional stream channels) by creating or enhancing oak woodlands in the Salt Creek area and High Country SMA. At minimum, Newhall Land will mitigate woodland habitat at a 1:1 ratio through creation of new oak woodlands. As an alternative, Newhall Land may choose to enhance, improve, and manage existing degraded woodland areas at a minimum 2:1 ratio for lost woodland acreage. For woodland enhancement or replacement, dominant species (coast live oak or valley oak) and planting densities will be based on mitigation site suitability. All plant propagules, including acorns or tree cuttings and all seed or potted nursery stock of oaks or other species, shall be collected within a five-mile radius and within 1,000 feet elevation of the restoration site. The woodland creation or enhancement sites shall be monitored for oak tree survival and vigor and other habitat values, including species diversity and wildlife use. The replacement or enhancement sites will be considered "complete" upon meeting all of the following success criteria, or as otherwise approved by CDFG. Any replacement oak trees planted in woodlands for conformance with CLAOTO will also be subject to CLAOTO performance criteria (BIO-22b). General performance standards for woodland creation or enhancement sites include the following: 1. Regardless of the date of initial woodland creation or enhancement, each site must have been without active manipulation by irrigation, planting, or re-seeding for a minimum of three years prior to				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
evaluation for successful completion. 2. The percent cover and species richness of restored or enhanced native vegetation shall be evaluated based on target vegetation described in the woodland creation or enhancement plan. 3. Densities (numbers/acre) of surviving, healthy oak trees shall be within 5% of the plan target density. Cover and species richness of other native shrubs shall reach 50% of the cover and species richness described for the "target" woodland. Optimal woodland densities and acorn planting quantities, by oak woodland type, are presented in Table 16. 4. Non-native grass cover shall not exceed the "target" woodland non-native grass cover, and other non-native species shall not exceed 10% cover at any time. Any species listed on the California State Agricultural list (CDFA 2009) or Cal-IPC invasive plant inventory (Cal-IPC 2006, 2007) will not be present on the revegetation site at the time that project success is determined. *(Table number corresponds to the numbering in the VCC Bio Report.* [**Table 15**, Additional BIO-22c Oak Tree Replacement Ratios, and **Table 16**, Optimal Woodland Densities and Acorn Planting Quantities, by Oak Woodland Type, are provided on page 326 of this MMRP.])				
RMDP/SCP-BIO-23: A final Spineflower Conservation Plan (SCP) shall be adopted and implemented after approval by CDFG, including the permanent dedication of	CDFW approval and adoption of the SCP and permanent protection of	Prior to spineflower impact on-site resulting from Project	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
preserves (see draft in Appendix 1.0). The proposed spineflower preserve areas shall be offered to CDFG as a permanent conservation easement within one year after issuance of the requested 2081 Permit to ensure long term protection. The conservation easement shall be to CDFG and contain appropriate funding and restrictions to help ensure that the spineflower preserve lands are protected in perpetuity. *(This measure applies to the VCC Planning Area without change in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)*	the spineflower preserves, have been completed. Reporting requirements of the SCP and associated permits will ensure implementation of SCP requirements associated with take of spineflower within the VCC Planning Area. No additional reporting is required pursuant to this measure.	activities until management responsibility transferred to NLMO		
RMDP/SCP-BIO-24: The spineflower preserves shall be managed by Newhall Land and their preserve manager(s) and/or natural lands management organization(s) (NLMO). Newhall Land shall submit a statement of qualifications for their proposed preserve manager(s)/ NLMO(s) for approval by CDFG. Newhall Land will fund in full all implementation of spineflower preserve management as described in the SCP and all mitigation measures listed in this document. *(This mitigation measure applies to the VCC Planning Area in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)*	Reporting requirements of the SCP and associated permits will ensure funding and management of the spineflower preserves in accordance with the SCP. No additional reporting is required pursuant to this measure.	In conjunction with the Compliance Verification Notice (CVN) reviewed and approved by CDFW	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-25: Disturbed portions (i.e., agricultural lands, disturbed lands, and developed lands) of the spineflower preserves, including buffers, will be restored	Reporting requirements of the SCP and associated permits will	In conjunction with the CVN reviewed and approved by	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
through revegetation with native plant communities. In summary, areas that have greater than 30% relative cover by weeds will be restored to have relative cover comparable to that of existing occupied spineflower habitat. Habitat restoration and enhancement plans (including restoration plans) for areas within the preserves shall be prepared at the direction of the preserve manager by a qualified biologist and submitted to the County and CDFG for approval prior to implementation. In addition, Cal IPC List A and B plants that are present within the spineflower preserve will be controlled. Restoration and enhancement efforts within the spineflower preserve areas shall be in conformance with the Spineflower Conservation Plan. *(This mitigation measure applies to the VCC Planning Area in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)*	ensure restoration and enhancement of disturbed areas in the spineflower preserves in accordance with the SCP. No additional reporting is required pursuant to this measure.	CDFW		
RMDP/SCP-BIO-26: In the event that a spineflower preserve, or buffer, or a portion of a spineflower preserve, or buffer burns in a wildfire or suffers from mass movements (e.g., landslides, slope sloughing, or other geologic events), the spineflower preserve manager and Newhall Land shall promptly review the site and determine what action, if any, should be taken. The primary anticipated post fire spineflower preserve management activity involves monitoring the site and controlling annual weeds that may invade burned areas following a fire event, especially when such weeds (that were not previously present or not present in similar	Reporting requirements of the SCP and associated permits will ensure appropriate management action in response to any wildfire or mass earth movement in spineflower preserves in accordance with the SCP. No additional reporting is required	In conjunction with the CVN reviewed and approved by CDFW	Applicant	• CDFW • LACFD • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
densities) exceed the 30% maximum threshold (see BIO-25). If fire control lines or other forms of bulldozer damage occur in the spineflower preserves, these areas will be repaired and revegetated to pre burn conditions or better. An emergency fire response plan will be prepared (in accordance with Mitigation Measure SP-4.6-72) prior to the establishment of the spineflower preserves and approved by CDFG and Los Angeles County Fire Department. The preserve manager will contact the LACFD at least once every five years to review the plan and consult with them on implementation of the plan. The same methods will be applied to mass movement, landslide, or slope sloughing types of events. This measure shall be implemented in conformance with the Spineflower Conservation Plan. *(This mitigation measure applies to the VCC Planning Area in regard to preserve management and funding requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)*	pursuant to this measure.			
RMDP/SCP-BIO-35: All portions of the spineflower preserves shall be closed, with the exception of pre identified existing dirt roads and utility easements. The pre identified existing dirt roads and utility easement access roads shall function as access routes for the spineflower preserve manager, spineflower preserve maintenance personnel, utility personnel, and emergency services vehicles only (e.g., police, fire, and medical). No other vehicle or foot traffic, including nature or recreational trails, will be permitted in the preserve, including the buffer. The dirt roads shall be gated and locked at the	Reporting requirements of the SCP and associated permits will ensure access to the preserves is restricted in accordance with the SCP and this measure. No additional reporting is required pursuant to this measure.	Prior to issuance of first certificate of occupancy	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
outside edges of the buffer zone. Signs discouraging unauthorized access shall be posted. The only persons or entities issued gate keys shall be the spineflower preserve managers and their employees, easement holding utility companies, emergency services, Newhall Land, and CDFG. *(This mitigation measure applies to the VCC Planning Area in regard to preserve management requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)*				
RMDP/SCP-BIO-36: Fencing shall be installed along the outside edge of the spineflower preserve and buffer areas adjacent to proposed developments, parks, golf courses, or other "active land uses" to prevent unauthorized access. Specific areas that are adequately protected by steep terrain (1.5:1 or steeper) and/or dense vegetation may not require fencing but would require signage. The determination of the need for fencing in these areas shall be subject to the approval of the spineflower preserve manager or qualified biologist. If monitoring determines that slope and/or vegetation is not effective at deterring unauthorized access, additional fencing may be required by the spineflower preserve manager or qualified biologist. Fencing is not required in areas bordered by large parcels of conserved natural open space areas or the Santa Clara River riparian corridor, as installing fencing in these areas would be unnecessary and damaging to existing vegetation and wildlife corridors. Fencing must extend a minimum of four feet above grade and include wood doweled split rail fencing, exterior grade	Reporting requirements of the SCP and associated permits will ensure permanent fencing is installed along preserve boundaries in accordance with the SCP and this measure. No additional reporting is required pursuant to this measure.	Prior to issuance of first certificate of occupancy	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
heavy duty vinyl three railed fencing, three strand non barbed wire, or similar. Fencing installed adjacent to native vegetation communities and natural open space areas will allow for the passage of animals. *(This mitigation measure applies to the VCC Planning Area in regard to preserve management requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)*				
RMDP/SCP-BIO-37: Outdoor all weather signs measuring approximately 12 by 16 inches shall be posted on all spineflower preserve access gates and along spineflower preserve fencing at approximately 800 feet on center, except adjacent to road crossings, where signs will be posted. The placement will take topography into account, emphasizing placement on ridgelines where signs will be visible to emergency fire personnel and others. Signs shall state in English and Spanish that the area is a biological preserve that hosts a state listed endangered and federal candidate plant species and that trespassing is prohibited (in accordance Mitigation Measure SP-4.6 68). Signs shall indicate that fuel modification and management work is not allowed within the spineflower preserve (including buffer areas). The signage shall state that people who do not abide by these rules or who damage the protected species will be subject to prosecution, including fines and/or imprisonment. All signage shall include emergency contact information and shall be reviewed and approved by the spineflower preserve manager or qualified biologist. *(This mitigation measure applies to the VCC Planning*	Reporting requirements of the SCP and associated permits will ensure signage is installed along preserve boundaries in accordance with the SCP and this measure. No additional reporting is required pursuant to this measure.	Prior to issuance of first certificate of occupancy	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Area in regard to preserve management requirements of the approved SCP and spineflower ITP that are associated with take of spineflower within the VCC Planning Area.)				
RMDP/SCP-BIO-40: The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007c) shall be revised and submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The revised plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space (i.e., the Salt Creek area or High Country SMA, spineflower preserves, or River Corridor SMA) without conflicting with other resource management objectives. Habitat replacement/ enhancement will be at a 1:1 ratio (acres restored/enhanced to acres impacted). The revised plan will describe habitat improvement/ restoration measures to be completed prior to introducing slender mariposa lily. Habitat improvement/ restoration will be based on native occupied slender mariposa lily habitat. The revised plan will specify: (1) the location of mitigation sites (may be selected from among 559 acres of suitable mitigation land in the High Country SMA and Salt Creek area identified in the Draft Newhall Ranch Mitigation Feasibility Study (Dudek 2007a); (2) a description of "target" vegetation (native shrubland or grassland) to include estimated cover and abundance of native shrubs and grasses in occupied slender mariposa lily habitat on Newhall Ranch land (either at sites to be destroyed by construction or at sites to be preserved);	Revision and approval of the RMDP Slender Mariposa Lily Mitigation and Monitoring Plan has been completed. Implementation of the Plan is documented in the annual monitoring reports prepared and submitted to CDFW pursuant to the measure. No additional reporting is required pursuant to this measure.	Prior to ground disturbance to occupied habitat	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(3) site preparation measures to include topsoil treatment, soil decompaction, erosion control, temporary irrigation systems, or other measures as appropriate; (4) methods for the removal of non native plants (e.g., mowing, weeding, raking, herbicide application, or burning); (5) the source of all plant propagules (seed, potted nursery stock, etc.), the quantity and species of seed or potted stock of all plants to be introduced or planted into the restoration/enhancement areas; (6) a schedule and action plan to maintain and monitor the enhancement/ restoration areas, to include at minimum, qualitative annual monitoring for revegetation success and site degradation due to erosion, trespass, or animal damage for a period no less than two years; (7) as needed where sites are near trails or other access points, measures such as fencing, signage, or security patrols to exclude unauthorized entry into the restoration/enhancement areas; and (8) contingency measures such as replanting, weed control, or erosion control to be implemented if habitat improvement/restoration efforts are not successful. Habitat restoration/enhancement will be judged successful when (1) percent cover and species richness of native species reach 50% of their cover and species richness at undisturbed occupied slender mariposa lily habitat at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation. At that point slender mariposa lily propagules (seed or bulbs) will be introduced onto the site. The revised plan will specify methods to collect propagules and introduce slender mariposa lily into these mitigation sites. Introductions will use source material (seeds or bulbs) from no more than 1.0 mile distant,				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
similar slope exposures, and no more than 500 feet elevational difference from the mitigation site, unless otherwise approved by CDFG. Bulbs may be salvaged and transplanted from slender mariposa lily occurrences to be lost; alternately, seed may be collected from protected occurrences, following CDFG-approved seed collection guidelines (i.e., MOU for rare plant seed collection). No bulbs will be translocated into areas within 300 feet of proposed or existing development. Newhall Land or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate slender mariposa lily survivorship (for bulbs) or seedling establishment (for seeded sites). Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning for slender mariposa lily. Monitoring reports will describe all restoration/ enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe mariposa lily survival or establishment in quantitative terms. A minimum of 133 acres of slender mariposa lily cumulative occupied area will be conserved and managed in the RMDP and SCP Project boundaries. Of these 133 acres, approximately 103 acres of slender mariposa lily cumulative occupied area will be conserved and managed in the RMDP and SCP Project boundary in the High Country SMA and Salt Creek area, and two acres occur within the River Corridor SMA and/or proposed spineflower preserves. Additional cumulative occupied area will be conserved and managed in the San Martinez				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Grande Canyon area at a 1:1 ratio (acres conserved and managed to acres impacted) based on impacts to cumulative occupied area within the Entrada planning area, as a means to ensure regional biodiversity of the species. Up to an additional 28 acres of slender mariposa lily cumulative occupied area can be conserved and managed in the San Martinez Grande Canyon area for this purpose., as a means to ensure regional biodiversity of the species.				
RMDP/SCP-BIO-41: Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for American badger. If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200 foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFG. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than four inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers	Submittal of pre-construction survey reports and construction monitoring and/or relocation reports, as applicable	Prior to ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
shall occur only after consultation with CDFG. A written report documenting the badger removal shall be provided to CDFG within 30 days of relocation. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.				
RMDP/SCP-BIO-42: All oaks that will not be removed that are regulated under CLAOTO with driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed in a temporary fenced zone for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (i.e., the area at least 15 feet from the trunk or five feet beyond the drip line, whichever distance is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Removal of the fence shall occur only after the Project arborist or qualified biologist confirms the health of preserved trees.	Submittal of construction monitoring reports	Prior to and during clearing and grading	Applicant	• LACDRP
RMDP/SCP-BIO-43: Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities that result in any disturbance to the banks or wetted channel, aquatic habitats within construction sites and access roads, as well as all aquatic habitats within 300 feet of construction sites and access roads, shall be surveyed by a qualified biologist for the presence of the unarmored threespine stickleback, arroyo chub, and Santa Ana sucker. The Corps and CDFG shall be notified at least 14 days prior to the survey and shall have the option of attending. The biologist shall file a written report of the survey with both agencies within 14 days of the	Compliance with this measure will be documented through submittal of pre-construction survey reports to CDFW.	Prior to construction of specified structures	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
survey and no later than 10 days prior to any construction work in the riverbed. If there is evidence that fish spawn has occurred in the survey area, then surveys shall cease unless otherwise authorized by USFWS. If surveys determine that gravid fish are present, that spawning has recently occurred, or that juvenile fish are present in the proposed construction areas, all activities within aquatic habitat will be suspended. Construction within aquatic habitats shall only occur when it is determined that juvenile fish are not present within the Project area. (*As written, this mitigation measure applies to the Santa Clara River, which does not exist within the VCC Planning Area. To avoid potential impacts to the identified fish species that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the VCC Planning Area. However, to the extent this measure conflicts with PDFs RMDP/SCP-AEA-PDF-3-1, 3-8, or 3-11 or applicable requirements of mitigation measures RMDP/ SCP-AEA-3-1 through 3-3, and VCC-MM-BIO-1, or with requirements imposed on the VCC Planning Area by CDFW or any other regulatory agency with jurisdiction over the VCC Planning Area, the latter shall control over this measure.)*				
RMDP/SCP-BIO-45: **a. Stream diversion bypass channels:** Stream diversion bypass channels will be constructed when the active wetted channel is within the work zone. Diversion bypass channels will be built in accordance with BIO-44 and in consultation with	Compliance with this measure would be documented through records of consultation with CDFW and/or USFWS, if required, and construction monitoring	Prior to the start of creek crossing or bridge construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
CDFG/USFWS. Equipment shall not be operated in areas of ponded or flowing water unless authorized by CDFG/USFWS. The diversion channel shall be of a width and depth comparable to the natural river channel. In all cases where flowing water is diverted from a segment of the stream channel, the bypass channel will be constructed prior to the diversion of the active stream. The bypass channel will be constructed prior to diverting the stream, beginning in the downstream area and continuing in an upstream direction. Where feasible and in consultation with CDFG/USFWS, the configuration of the diversion channel will be curved (sinuous) with multiple sets of obstructions (i.e., boulders, large logs, or other CDFG/USFWS-approved materials) placed in the channel at the point of each curve (i.e., on alternating sides of the channel). If emergent aquatic vegetation is present in the original channel, the applicant will transplant suitable vegetation into the diversion channel and on the banks prior to or at the time of the water diversion. A qualified restoration ecologist will supervise the construction of the diversion channels on site. The integrity of the channel and diversion shall be maintained throughout the intended diversion period. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Construction of diversion channels shall not occur if surveys determine that gravid fish are present, spawning has recently occurred, or juvenile fish are present in the proposed construction areas.	reports submitted to CDFW.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
At the conclusion of the diversion, either at the commencement of the winter season, or the completion of construction, the applicant will coordinate with CDFG/USFWS to determine if the diversion should be left in place or the stream returned to the original channel. If CDFG/USFWS determine the stream should be diverted to the original channel, the original channel will be modified prior to re-diversion (i.e., while dry) to construct curves (sinuosity) into that channel, including the placement of obstructions (i.e., boulders, large logs, or other CDFG/USFWS-approved materials). The original channel will be replanted with emergent vegetation as the diversion channel was planted. If the diversion channel is abandoned, the boulders will remain in place.				
b. Dewatering:				
Construction dewatering in close proximity to stream flow shall implement the following:				
– Assess local stream and groundwater conditions, including flow depths, groundwater elevations, and anticipated dewatering cone of influence (radius of draw down).				
– Assess surface water elevations upstream, adjacent to, and downstream of the extraction points, to assess any critical flow regimes susceptible to excessive draw down and therefore fish stranding issues.				
– Assess surface water elevations downstream of the discharge locations (if discharge is proposed to the				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
flowing stream) to assess any flow regimes and overbank areas that may be susceptible to flooding and therefore fish stranding at the cessation of discharge. Discharge locations shall also be assessed for potential channel bed erosion from dewatering discharge, and appropriate BMPs must be implemented to prevent excessive erosion or turbidity in the discharge. – The information above shall be summarized and provided in a plan approved by CDFG and Corps. – Fish shall be excluded from any artificial flowing channels from dewatering discharge. Methods to ensure separation may include, but are not limited to: block netting at the confluence; creation of a physical drop greater than four inches at the confluence; or maintaining a velocity range unsuitable for fish passage, such as a berm at the confluence with small diameter pipes for discharge. (*As written, this mitigation measure applies to the Santa Clara River, which does not exist within the VCC Planning Area. To avoid potential impacts to special-status fish species that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the VCC Planning Area. However, to the extent this measure conflicts with PDFs RMDP/SCP-AEA-PDF-3-1, 3-8, or 3-11 or applicable requirements of mitigation measures RMDP/ SCP-AEA-3-1 through 3-3, and VCC-MM-BIO-1, or with requirements imposed on the VCC Planning Area by CDFW or any other regulatory agency with jurisdiction over the VCC Planning Area, the latter shall control over*				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
this measure.)				
RMDP/SCP-BIO-48: Installation of bridges, culverts, or other structures shall not impair the movement of fish and aquatic life. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be placed below channel grade. Culvert crossings shall include provisions for a low flow channel where velocities are less than two feet per second to allow fish passage.	Compliance with this measure will be documented through submittal of grading/construction plans for in-stream structures covered by the measure.	Prior to the start of construction	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-49: Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can reasonably be expected to occur.	Compliance with this measure will be ensured through preparation and implementation of a SWPPP for the VCC Planning Area. No further reporting is required pursuant to this measure.	During clearing and grading	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-50: Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 500 feet of construction sites and access roads shall be surveyed at the appropriate season for southwestern pond turtle. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between April 1 and June 1. The survey schedule may be adjusted in consultation with CDFG to reflect the existing weather or stream conditions. The applicant shall develop a Plan to address the relocation of southwestern pond turtle. The	Compliance with this measure will be documented through pre-construction survey and construction monitoring reports submitted to CDFW, submittal of the required relocation plan to CDFW, and submittal of relocation reports pursuant to the plan, if	60 days prior to construction and submit resume of biologist prior to implementation.	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Plan shall include but not be limited to the timing and location of the surveys that would be conducted for this species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating individuals; and provide for the documentation/ recordation of the numbers of animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground-disturbing activities within potentially occupied habitat. If southwestern pond turtles are detected in or adjacent to the Project, nesting surveys shall be conducted. Focused surveys for evidence of southwestern pond turtle nesting shall be conducted in, or adjacent to, the Project when suitable nesting habitat exists within 1,300 feet of occupied habitat in an area where Project-related ground disturbance will occur (e.g., development, ground disturbance). If both of those conditions are met, a qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat within 1,300 feet of occupied habitat in which Project-related ground disturbance will occur. This area may be adjusted based on the existing topographical features on a case-by-case basis with the approval of CDFG. Surveys will entail searching for evidence of pond turtle nesting, including remnant eggshell fragments, which may be found on the ground following nest depredation. If a southwestern pond turtle nesting area would be adversely impacted by construction activities, the applicant shall avoid the nesting area. If avoidance of the	applicable.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFG to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without written authorization from CDFG. The qualified biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of southwestern pond turtle. Clearance surveys for pond turtles shall be conducted within 500 feet of potential habitat by the authorized biologist prior to the initiation of construction each day. The resume of the proposed biologist will be provided to CDFG for approval prior to conducting the surveys. (*As written, this mitigation measure applies to the Santa Clara River, which does not exist within the VCC Planning Area. To avoid potential impacts to southwestern pond turtle that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to Castaic Creek within the VCC Planning Area. Note that southwestern pond turtle is referred to as western pond turtle in this document.*)				
RMDP/SCP-BIO-52: Prior to grading and construction activities, a qualified biologist shall be retained to conduct a Worker Environmental Awareness Program (WEAP) for all construction/contractor personnel. A list of construction personnel who have completed training prior to the start of construction shall be maintained on site and this list shall be updated as required when new personnel start work. No construction worker may work in the field for more than five days without participating in the WEAP. Night work and use of lights on equipment shall not be	Submittal of a WEAP training log and construction monitoring reports	Prior to grading and construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
allowed unless CDFG approves of the night work and use of lights. Lighting shall not be used where threatened or endangered species occur. Lights shall be directed from natural areas and remain 200 feet away from natural areas unless otherwise approved by CDFG. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following: • Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements. • A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts; • Attend the pre construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts); • Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance. This applies to preconstruction activities, such as site surveying and staking, natural resources surveying or reconnaissance, establishment of water quality BMPs, and geotechnical or hydrological investigations; • Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife; • Review/designate the construction area in the field with the contractor in accordance with the final grading plan; • Ensure that haul roads, access roads, and on site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special status species habitats will be affected); • Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity; • Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas; • Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented; • To reduce the potential for the spread of exotic invasive invertebrates (e.g. New Zealand mud snails) and				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
weeds (including weed seeds) during Project clearing and construction, all heavy equipment proposed for use on the Project site shall be verified cleaned (including wheels, tracks, undercarriages, and bumpers, as applicable) before delivery to the Project site. Equipment must be documented as exotic invasive invertebrate (e.g. mud snail) and weed free upon delivery to the Project site initial staging area, including: (1) vegetation clearing equipment (skid steer loaders, loaders, dozers, backhoes, excavators, chippers, grinders, and any hauling equipment, such as off-road haul trucks, flat bed, or other vehicles); (2) earth-moving equipment (scrapers, dozers, excavators, loaders, motor-graders, compactors, backhoes, off-road water trucks, and off-road haul trucks); and (3) all Project-associated vehicles (including personal vehicles) that, upon inspection by the monitoring biologist, are deemed to present a risk for spreading exotic invasive invertebrates (e.g. mud snails) or weeds. Equipment shall be cleaned at existing construction yards or at a wash station. The biological monitor shall document that all construction equipment (as described above) has been cleaned prior to working within the Project work site. Any equipment/vehicles determined to not be free of exotic invasive invertebrates (e.g. mud snails) and weeds shall immediately be sent back to the originating construction yard for washing, or wash station where rinse water is collected and disposed of in either a sanitary sewer or other legal point of disposal. Equipment/vehicles moved from the site must be inspected, and re-washed as necessary, prior to re-engaging in construction activities in the Project				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
work area. A written daily log shall be kept for all vehicle/equipment washing that states the date, time, location, type of equipment washed, methods used, and location of work; • Be present during initial vegetation clearing and grading; and • Submit to CDFG an immediate report (within 72 hours) of any conflicts or errors resulting in impacts to special status biological resources.				
RMDP/SCP-BIO-52a: The WEAP required by Mitigation Measure RMDP/SCP-BIO-52 shall instruct workers to ensure that all pipes, tubing, or similar items staged or stored at the Project site for one or more overnight periods shall be capped, screened, covered, or filled with material. All pipes, tubing, or similar items shall be thoroughly inspected for wildlife by the qualified biologist or biological monitor, prior to capping or use in Project activities.	Submittal of a WEAP training log and construction monitoring reports	Prior to grading and construction	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-53: Prior to the issuance of a grading permit for ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the Project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (e.g., the presence of rain pools). If western spadefoot toad is identified on the Project site, the following measures will be implemented. 1. Under the direct supervision of the qualified biologist,	Submit pre-construction survey reports and, if applicable, monitoring reports for relocation sites	Prior to ground disturbance in suitable habitat	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
western spadefoot toad habitat shall be created within suitable natural sites on the Specific Plan site outside the proposed development envelope. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a 2:1 ratio. The actual relocation site design and location shall be approved by CDFG. The location shall be in suitable habitat as far away as feasible from any of the homes and roads to be built. The relocation ponds shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic predators (e.g., fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing ponds as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adults, tadpoles, and egg masses detected are moved to the created pool habitat.				
2. Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in the				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
identified/created relocation ponds described above. 3. The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFG by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFG at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site. *(This measure applies to the VCC Planning Area with the following exceptions or changes: replacement habitat also may be created within areas of the VCC Planning Area not subject to development, where approved by CDFW.)*				
RMDP/SCP-BIO-54: Prior to construction the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch nosed snake. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and provide for the documentation/recordation of the species and number of the animals relocated. The Plan shall be submitted to	Compliance with the relocation plan requirement of this measure will be demonstrated by CDFW approval of the submitted plan. Compliance with the survey and relocation requirements of the measure, if applicable, will be documented through pre-construction	Prior to ground disturbance within potentially occupied habitat as specified	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
CDFG for approval 60 days prior to any ground disturbing activities within potentially occupied habitat. The Plan shall include the specific survey and relocation efforts that would occur for construction activities that occur both during the activity period of the special status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, oak woodland, riparian habitats, or other areas supporting these species qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch nosed snake in order to avoid or minimize take of these special status species. The plan shall require a minimum of three (3) surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low activity period (generally December through February) the surveys shall be conducted prior to this period if possible and exclusion fencing shall be placed to limit the potential for re-colonization of the site prior to construction. The qualified biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Clearance surveys for special-status reptiles shall be conducted by a qualified biologist prior to the initiation of construction each day. Results of the surveys and relocation efforts shall be provided to CDFG in the annual	survey reports and, if applicable, relocation reports submitted to CDFW.			

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mitigation status report. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits. *(Coast horned lizard and coastal western whiptail are referred to as Blainville's horned lizard and San Diegan tiger whiptail, respectively, in this document.)*				
RMDP/SCP-BIO-55: a. As a supplement to BIO-1 through BIO-16, additional habitat mitigation through replacement or enhancement of nesting/foraging habitat for least Bell's vireo will be provided for certain key habitat zones at higher ratios (identified as "key population areas" in Figure 4.5-86, Alternative 2 Impacts to Least Bell's Vireo Habitat. Southern willow scrub, southern cottonwood–willow riparian, arrow weed scrub, mulefat scrub, and Mexican elderberry scrub and woodland that provide nesting/foraging habitat for least Bell's vireo in "key population areas" shall be replaced or enhanced. All permanent loss to nesting/foraging habitat in key population areas shall be mitigated at a 5:1 ratio unless otherwise authorized by CDFG or USFWS. Temporary habitat loss of foraging/nesting habitat in key population areas shall be mitigated at a 2:1 ratio. The requirements for replacing habitat by either creating new habitat or removing exotic species from existing habitat shall follow the procedures outlined in BIO-1 through BIO-16. To replace the lost functions of habitat located adjacent to the Santa Clara River due to noise impacts, all nesting/foraging habitat within the 60 dBA sound contour (associated with development site roadway improvements) shall be	If mitigation for habitat of least Bell's vireo or California gnatcatcher is required, submit mitigation reports annually to CDFW.	Prior to impacts to jurisdictional resources	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
considered degraded. Nesting/foraging habitat within this area shall be mitigated at a ratio of 2:1. b. The loss of documented occupied nesting habitat for coastal California gnatcatcher shall be mitigated. If the coastal California gnatcatcher is identified nesting on-site, the Applicant will acquire or preserve nesting coastal California gnatcatcher habitat at a 3:1 ratio for impacts to documented occupied habitat, or by the ratio specified in BIO-2, whichever is greater. Mitigation acquisition shall occur at an agreed-upon location as approved by the USFWS upon consultation. The Applicant shall enter into a binding legal agreement regarding the preservation of occupied habitat describing the terms of the acquisition, enhancement, and management of those lands. *(Figure 4.5-86, Alternative 2 Impacts to Least Bell's Vireo Habitat, is provided in the State-certified EIR.)*				
RMDP/SCP-BIO-56: Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the Project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. Pre-construction surveys shall include nighttime surveys to identify active rookery sites. The surveys shall continue	Submit pre-construction survey reports and, if applicable, construction monitoring reports to CDFW.	Within 30 days of ground disturbance in suitable habitat during nesting/ breeding season and ending no more than 7 days prior to initiation of work	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground disturbing activities are delayed, then additional pre disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbing activities. If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. In the event that golden eagles establish an active nest in the River Corridor SMA, the buffers will be established in consultation with CDFG. Potential golden eagle nesting will be reported to CDFG within 24 hours. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFG in the annual mitigation status report. For listed riparian songbirds (least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo) USFWS protocol surveys shall be conducted. If active nests are found, clearing and construction within 300 feet of the nest shall be postponed or halted, at the discretion of the biologist in consultation with CDFG and USFWS, until the nest is vacated and juveniles have fledged, as				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
determined by the biologist, and there is no evidence of a second attempt at nesting. If no active nests are observed, construction may proceed. If active nests are found, work may proceed provided that construction activity is located at least 300 feet from active nests (or as authorized through the context of the Biological Opinion and 2081b Incidental Take Permit). This buffer may be adjusted provided noise levels do not exceed 60 dBA hourly Leq at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician. If the noise meets or exceeds the 60 dBA Leq threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dBA Leq hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFG and USFWS. For coastal California gnatcatcher, the applicant shall conduct USFWS protocol surveys in suitable habitat				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
within the Project area and all areas within 500 feet of access or construction-related disturbance areas. Suitable habitats, according to the protocol, include "coastal sage scrub, alluvial fan, chaparral, or intermixed or adjacent areas of grassland and riparian habitats." A permitted biologist shall perform these surveys according to the USFWS' (1997a) Coastal California Gnatcatcher Presence/Absence Survey Guidelines. If a territory or nest is confirmed, the USFWS and CDFG shall be notified immediately. If present, a 500-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. No Project activities may occur in these areas unless otherwise authorized by USFWS and CDFG. Construction activities in suitable gnatcatcher habitat will be monitored by a full-time qualified biologist. The monitoring shall be of a sufficient intensity to ensure that the biologist could detect the presence of a bird in the construction area.				
RMDP/SCP-BIO-57a: ~~Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether the western burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by field crops, disturbed habitat, grasslands, and along levee locations, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of~~	Submit pre-construction survey reports and, if applicable, Burrowing Owl Plan, and construction monitoring reports to CDFW	Prior to and during ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
~~independent survival. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).~~ ~~Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between Project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.~~ ~~Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report.~~ Prior to Project activities, and within 120 days of Project commencement, focused surveys by a CDFW-approved qualified biologist shall be conducted to determine presence of western burrowing owl. Surveys shall include four site visits conducted from as many fixed points as necessary to provide visual coverage of the site using spotting scopes or binoculars. Disturbance shall be minimized around potential occupied burrows during all seasons. Site visits shall be repeated on four separate days. Visits shall be conducted two hours before to one hour after sunset, or from one hour before to two hours after sunrise. Surveys shall be conducted during weather that is conducive to observing owls outside their burrows. Surveys shall be avoided during heavy rain, high winds (> 20 mph), or dense fog.				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Results of all surveys shall be provided to CDFW after surveys are complete, 30 days prior to Project commencement. If a burrowing owl is observed during the focused surveys, the qualified biologist shall notify CDFW immediately and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval 30 days prior to commencing Project activities. The Burrowing Owl Plan shall describe survey results, proposed avoidance measures, and monitoring plan. In the event of any conflict between this mitigation measure and the terms of an incidental take permit or other instrument authorizing take of western burrowing owl under applicable law, the terms of the incidental take permit or other authorization shall control. *(This measure replaces mitigation measure RMDP/SCP-BIO-57 and applies to the Entrada South Planning Area without change.)*				
RMDP/SCP-BIO-58: Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black tailed jackrabbit and San Diego desert woodrat. If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This	Submit pre-construction survey reports and, if applicable, relocation reports and/or construction monitoring reports to CDFW	Prior to ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
buffer may be reduced based on the location of the den upon consultation with CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to CDFG within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits. If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone or within 100 feet of the disturbance zone, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist in consultation with CDFG. Clearing and construction within the fenced area will be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. If avoidance is not possible, the applicant will take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off site, and (3) the nest sticks shall be removed from the Project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. The applicant shall document all woodrat nests moved and provide a written report to CDFG. All woodrat relocation shall be conducted by a qualified biologist in possession of a scientific collecting permit.				
RMDP/SCP-BIO-60: Thirty days prior to construction activities, a qualified biologist shall conduct a pre-construction survey for mountain lion natal dens. The survey area shall include the construction footprint and the area within 2,000 feet of the Project disturbance boundaries. Should an active natal den be located, the applicant shall cease work within 2000 feet and inform CDFG with 24 hours. No construction activities shall occur in the 2000 foot buffer until a qualified biologist in consultation with CDFG establishes an appropriate setback from the den that would not adversely affect the successful rearing of the cubs. No construction activities or human intrusion shall occur within the established setback until the cubs have been successfully reared or the cats have left the area. *(The mountain lion is referred to as cougar in this SEIR.)*	Submit pre-construction survey reports and, if applicable, construction monitoring reports to CDFW	Prior to and during ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-61: No earlier than 30 days prior to the commencement of construction activities, a pre-construction survey shall be conducted by a qualified biologist to determine if active roosts of bats are present on or within 300 feet of the Project disturbance boundaries. Should an active maternity roost be identified	Submit pre-construction survey reports and, if applicable, construction monitoring reports to CDFW.	Prior to ground disturbance in suitable habitat as specified	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(in California, the breeding season of native bat species is generally from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, until the roost is vacated and juveniles have fledged. Surveys shall include rocky outcrops, caves, structures, and large trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). Trees and rocky outcrops shall be surveyed by a qualified bat biologist (i.e., a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (i.e., not removed) by the Project. If avoidance of the maternity roost must occur, the bat biologist shall survey (through the use of radio telemetry or other CDFG approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of CDFG that there are alternative roost sites used by the maternity colony and young are not present then no further action is required. If a maternity roost will be impacted by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the Project site no less than three months prior to the eviction of the colony. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative potential roosting habitat appropriate for maternity colonies. Alternative roost sites must be of				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
comparable size and proximal in location to the impacted colony. CDFG shall also be notified of any hibernacula or active nurseries within the construction zone. If non-breeding bat hibernacula are found in trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist in consultation with CDFG shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal). These actions should allow bats to leave during nighttime hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. If an active maternity roost is located on the Project site, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to March 1) or after young are				

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
flying (i.e., after July 31) using the exclusion techniques described above.				
RMDP/SCP-BIO-64: An integrated pest management (IPM) plan that addresses the use of pesticides (including rodenticides and insecticides) on site will be prepared prior to the issuance of building permits for the initial tract map. The IPM will implement appropriate Best Management Practices to avoid and minimize adverse effects on the natural environment, including vegetation communities, special-status species, species without special status, and associated habitats, including prey and food resources (e.g., insects, small mammals, seeds). Potential management practices include cultural (e.g., planting pest-free stock plants), mechanical (e.g., weeding, trapping), and biological controls (e.g., natural predators or competitors of pest species, insect growth regulators, natural pheromones, or biopesticides), and the judicious use of chemical controls, as appropriate (e.g., targeted spraying versus broadcast applications). The IPM will establish management thresholds (i.e., not all incidences of a pest require management); prescribe monitoring to determine when management thresholds have been exceeded; and identify the most appropriate and efficient control method that avoids and minimizes risks to natural resources. Preparation of the CC&Rs for each tract map shall include language that prohibits the use of anticoagulant rodenticides in the Project site.	An IPM Plan has been prepared pursuant to the measure and provided to CDFW. The recorded CC&Rs for the VCC Planning Area will prohibit anti-coagulant rodenticides. No further action is required pursuant to the measure.	Prior to issuance of building permit(s)	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-65: Pre-construction surveys for San Emigdio blue butterfly shall occur in all areas containing host plants in sufficient density to support this species. A qualified Lepidoptera biologist shall conduct focused	Submittal of pre-construction surveys to CDFW, if required	Prior to construction activities	Applicant	• CDFW • LACDRP

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
surveys at a time of year and during weather conditions when the detection of eggs, larvae, or adults is possible. All occupied habitat shall be mapped and the locations provided to CDFG. Should the removal of quail brush or other documented host plants from occupied San Emigdio blue butterfly habitat in Potrero Canyon or other areas be required, the plants shall be removed when eggs and larvae are not present (i.e., mid-September to March). Removal of quail brush plants from the documented habitat in Potrero Canyon may only be conducted from April through early September if it is determined by a qualified biologist that eggs and/or larvae are not present on the plants to be removed. *(Quail brush and saltbush refer to Atriplex lentiformis and A. canescens, respectively.)*				
RMDP/SCP-BIO-66: The removal of quail brush or other documented host plants from any occupied San Emigdio blue butterfly habitat in Potrero Canyon or other areas shall be replaced at a minimum of a 1.5:1 ratio. The replacement plants shall be planted contiguous to the existing quail brush plants associated with the San Emigdio blue butterfly habitat. The success of the replanting shall be monitored for survival and vigor consistent with survivorship requirements of BIO-6 and BIO-7. *(Quail brush and saltbush refer to Atriplex lentiformis and A. canescens, respectively. Note that the Potrero Canyon area referenced in the measure is not within the VCC Planning Area.)*	If impacts occur to occupied San Emigdio blue butterfly habitat, compliance with this measure will be documented through submittal of mitigation reports pursuant to Mitigation Measure RMDP/SCP-BIO-12.	Until success criteria are met	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-67: Prior to any construction activities	Submittal of grading	Prior to any	Applicant	• CDFW

Table 2 (Continued)
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Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
occurring within 200 feet of any occupied San Emigdio blue butterfly habitat in Potrero Canyon or other areas, the boundaries of preserved areas of the habitat shall be clearly marked with flagging. The flagging would serve to identify the boundaries of the habitat to construction personnel and to prevent the inadvertent construction-related loss of quail brush or other host plants associated with the habitat. Construction personnel working in the area shall be informed that the removal of or damage to any flagged quail brush or other host plants located outside the disturbance footprint is prohibited. *(Quail brush and saltbush refer to Atriplex lentiformis and A. canescens, respectively.)*	plans showing the required flagging and construction monitoring reports submitted to CDFW.	construction activities		• LACDRP
RMDP/SCP-BIO-68: Any common or special status species bat day roost sites found by a qualified biologist during pre construction surveys conducted per BIO-61, to be directly (within project disturbance footprint) or indirectly (within 300 feet of project disturbance footprint) impacted are to be mitigated with creation of artificial roost sites. The Project applicant shall establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance.	Submit pre-construction survey reports and, if applicable, mitigation implementation reports submitted to CDFW.	As required by approved roosting habitat replacement plan	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-70: Construction plans shall include necessary design features and construction notes to ensure protection of vegetation communities and special status plant and aquatic wildlife species adjacent to construction. In addition to applicable erosion control plans and performance under SCAQMD Rule 403d dust control (SCAQMD 2005), the Project stormwater pollution	Submit construction plans and a SWPPP containing the required BMPs.	Prior to issuance of grading permit	Applicant	• LACDPW • LACDRP • CDFW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
prevention plan (SWPPP) shall include the following minimum BMPs. Together, the implementation of these requirements shall ensure protection of adjacent habitats and wildlife species during construction. At a minimum, the following measures/restrictions shall be incorporated into the SWPPP, and noted on construction plans where appropriate, to avoid impacting special status species during construction: • Avoid planting or seeding invasive species in development areas within 200 feet of native vegetation communities. • Provide location and details for any dust control fencing along Project boundaries (BIO-71). • Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the 404 Permit or 1603 Agreement. • Silt settling basins installed during the construction process shall be located away from areas of ponded or flowing water to prevent discolored, silt bearing water from reaching areas of ponded or flowing water during normal flow regimes. • If a stream channel has been altered during the construction and/or maintenance operations, its low flow channel shall be returned as nearly as practical to pre Project topographic conditions without creating a possible future bank erosion problem or a flat, wide channel or sluice like area. The gradient of the streambed shall be returned to pre Project grade, to the extent practical, unless it represents a wetland				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
restoration area. • Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur. • Staging/storage areas for construction equipment and materials shall be located outside of the ordinary high water mark. • Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily, to prevent leaks of materials that could be deleterious to aquatic life if introduced to water. • Stationary equipment such as motors, pumps, generators, and welders which may be located within the riverbed construction zone shall be positioned over drip pans. No fuel storage tanks shall be allowed in the riverbed. • No debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, watercourses included in the permit. When construction operations are completed, any excess materials or debris shall be removed from the work area. • No equipment maintenance shall be done within or near any stream where petroleum products or other pollutants from the equipment may enter these areas				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
with stream flow. • The operator shall install and use fully covered trash receptacles to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. • The operator shall not permit pets on or adjacent to the construction site. • No guns or other weapons are allowed on the construction site during construction, with the exception of the security personnel and only for security functions. No hunting shall be authorized/permitted during construction.				
RMDP/SCP-BIO-71: Development areas shall have dust control measures implemented and maintained to prevent dust from impacting vegetation communities and special status plant and aquatic wildlife species. Dust control shall comply with SCAQMD Rule 403d (SCAQMD 2005). Where construction activities occur within 100 feet of known special status plant species locations, chemical dust suppression shall not be utilized. Where determined necessary by a qualified biologist, a screening fence (i.e., a six foot high chain link fence with green fabric up to a height of five feet) shall be installed to protect special status species locations. See BIO 32 for dust control requirements related to spineflower preserves.	Submittal to the County of construction plans containing the required BMPs and submittal of construction monitoring reports to CDFW	During construction	Applicant	• CDFW • LACDRP
RMDP/SCP-BIO-72: Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and FMZ areas within 200 feet of native vegetation communities shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require	Approval of landscape plans and/or submittal of plant inspection reports, as applicable	Prior to installation of landscaping	Applicant	• LACDRP • CDFW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
maintenance or cause vegetation community degradation in the open space areas (River Corridor SMA, High Country SMA, Salt Creek area, and natural portions of the Open Area). Container plants to be installed within public areas within 200 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 200 feet of native vegetation communities shall not be on the Cal IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal IPC list can be obtained from the Cal IPC web site (http:// www.cal ipc.org/ip/inventory/index.php). Landscape plans will include a plant palette composed of native or non native, non invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (i.e., until plants become established). *(The current Cal-IPC website is https://www.cal-ipc.org/ plants/inventory/.)*				
RMDP/SCP-BIO-73: Permanent fencing shall be installed along all Santa Clara River SMA/SEA trails adjacent to the Santa Clara River, or other sensitive resources, in order to minimize impacts associated with increased human presence on protected vegetation communities and special-status plant and wildlife species. The fencing will be split rail to avoid inhibiting wildlife movement. Viewing platforms will be located in land covers currently mapped as agriculture, disturbed land, or developed land.	Submittal of compliant tract map improvement plans to the County	Prior to approval of construction plans	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
(As written, this mitigation measure applies to the Santa Clara River SMA, which is not within the VCC Planning Area. To minimize impacts to protected vegetation communities and special status plant and wildlife species that may be present in Hasley Canyon and Castaic Creek, the measure will also be applied to require installation of permanent fencing along trails adjacent to those areas within the VCC Planning Area.)				
RMDP/SCP-BIO-75: Focused surveys for the undescribed species of everlasting (a special-status plant species) shall be conducted by a qualified botanist prior to the commencement of grading/construction activities wherever suitable habitat (primarily river terraces) could be affected by direct, indirect, or secondary construction impacts. The surveys shall be conducted no more than one year prior to commencement of construction activities within suitable habitat, and the surveys shall be conducted at a time of year when the plants can be located and identified. Should the species be documented within the Project boundary, avoidance measures shall be implemented to minimize impacts to individual plants wherever feasible. These measures shall include minor adjustments to the boundaries/location of haul routes and other Project features. If, due to Project design constraints, avoidance of all plants is not possible, then further measures, described in BIO-76, shall be implemented to salvage seeds and/or transplant individual plants. All seed collection and/or transplantation methods, as well as the location of the receptor site for seeds/plants (assumed to be within preserved open space areas of Newhall Ranch along the Santa Clara River), shall be coordinated with CDFG prior to impacting known	Submit pre-construction survey reports and, if applicable, mitigation implementation reports to CDFW.	Until success criteria are met	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
occurrences of the undescribed everlasting. *(The previously undescribed everlasting species has since been described as white rabbit-tobacco.)*				
RMDP/SCP-BIO-76: For any individual project, or any phase of an individual project, to be located where undescribed everlasting plants may occur (i.e., the sites identified in this EIS/EIR and any new sites discovered by preconstruction surveys, per BIO-75, or other future field surveys), Newhall Land shall prepare and implement an Undescribed Everlasting Mitigation and Monitoring Plan prior to the issuance of grading permits. The Plan shall provide for replacement of individual plants to be removed at a minimum 1:1 ratio, within suitable habitat at a site where no future construction-related disturbance will occur. The plan shall specify the following: (1) the location of the mitigation site in protected/preserved areas within the Specific Plan site; (2) methods for harvesting seeds or salvaging and transplantation of individual plants to be impacted; (3) measures for propagating plants (from seed or cuttings) or transferring living specimens from the salvage site to the introduction site; (4) site preparation procedures for the mitigation site; (5) a schedule and action plan to maintain and monitor the mitigation area; (6) the list of criteria and performance standards by which to measure the success of the mitigation site (below); (7) measures to exclude unauthorized entry into the mitigation areas; and (8) contingency measures such as erosion control, replanting, or weeding to implement in the event that mitigation efforts are not successful. The performance standards for the Undescribed Everlasting	Submittal of an Undescribed Everlasting Mitigation and Monitoring Plan, if required, and monitoring reports pursuant to the Plan submitted to CDFW	Until success criteria are met	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Mitigation and Monitoring Plan shall be the following: a. Within four years after reintroducing the undescribed everlasting to the mitigation site, the extent of occupied acreage and the number of established, reproductive plants will be no smaller than at the site lost for project construction. b. Non-native species cover will be no more than 5% absolute cover through the term of the restoration. c. Giant reed (Arundo donax), tamarisk (Tamarix ramosissima), perennial pepperweed (Lepidium latifolium), tree of heaven (Ailanthus altissimus), pampas grass (Cortaderia selloana), and any species listed on the California State Agricultural list (CDFA 2009) or Cal-IPC invasive plant inventory (Cal-IPC 2006, 2007) will not be present on the revegetation site as of the date of completion approval. *(This measure applies to the VCC Planning Area without change. Note that the previously undescribed everlasting species has since been described as white rabbit-tobacco. More recent versions of the California State Agricultural List and Cal-IPC invasive plant inventory will be used.)*				
RMDP/SCP-BIO-78: A cowbird trapping program shall be implemented once vegetation clearing begins and maintained throughout the construction, maintenance, and monitoring period of the riparian restoration sites. A minimum of five traps shall be utilized, with at least one trap adjacent to the project site and one or two traps located at feeding areas or other CDFG-approved location. The trapping contractor may consult with CDFG	This measure applies to riparian restoration sites that provide compensatory mitigation for VCC Planning Area impacts. Compliance is documented in annual cowbird trapping reports	At the start of vegetation clearing and throughout monitoring of riparian restoration sites	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
to request modification of the trap location(s). CDFG must approve any relocation of the traps. Traps will be maintained beginning each year on April 1 and concluding on/or about November 1 (may conclude earlier, depending upon weather conditions and results of capture). The trapping contractor may also consult CDFG on a modified, CDFG-approved trapping schedule modification. The applicant shall follow CDFG and USFWS protocol. In the event that trapping is terminated after the first few years, subsequent phases of the RMDP development will require initiation of trapping surveys to determine whether re-establishment of the trapping program is necessary.	provided with the annual mitigation report required by Mitigation Measure RMDP/SCP-BIO-12.			
RMDP/SCP-BIO-80: The Project applicant will retain a qualified biologist to develop an Exotic Wildlife Species Control Plan and implement a control program for bullfrog, African clawed frog, and crayfish. The program will require the control of these species during construction within the River corridor and modified tributaries (bridges, diversions, bank stabilization, drop structures). The Plan shall include a description of the species targeted for eradication, the methods of harvest that will be employed, the disposal methods, and the measures that would be employed to avoid impacts to sensitive wildlife (e.g., stickleback, arroyo toad, nesting birds) during removal activities (i.e., timing, avoidance of specific areas). Annual monitoring shall occur for the first five years after construction of Project facilities. After five years, bi-annual monitoring shall occur in perpetuity to determine if additional control is necessary. The Project applicant will fund an endowment, approved by CDFG, for monitoring in perpetuity. Monitoring will be conducted	An Exotic Wildlife Species Control Plan has been developed in accordance with the measure. Document in monitoring reports submitted to CDFW.	During construction within specified areas	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
within sentinel locations along the River Corridor SMA and where the Project provides potential habitat for these species (e.g., future ponds and water features). Control shall be conducted within Project facilities where monitoring results indicate that exotic species have colonized an area. *(This measure applies to the VCC Planning Area without change with respect to modified tributaries or other potential habitat for the identified species within the VCC Planning Area.)*				
RMDP/SCP-BIO-82: a. All surfaces on new antennae and phone/utility towers shall be designed and operated with anti perching devices in conformance with APLIC standards to deter California condors and other raptors from perching. During construction the area shall be kept clean of debris, such as cable, trash, and construction materials. The Applicant shall collect all microtrash and litter (anything shiny, such as broken glass), vehicle fluids, and food waste from the Project area on a daily basis. Workers will be trained on the issue of microtrash: what constitutes microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash. b. The Applicant shall retain a qualified biologist with knowledge of California condors to monitor construction activities within the Project area. The resumes of the proposed biologist(s) will be provided to CDFG for concurrence. This biologist(s) will be referred to as the authorized biologist hereafter.	Review of construction plans, where applicable, and submittal of construction monitoring reports to CDFW	Prior to approval of improvement plans	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
During clearing and grubbing of construction areas, the qualified biologist shall be present at all times. During mass grading, construction sites shall be monitored on a daily basis. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. If condors are observed landing in the Project area, the Applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFW and USFWS. All condor sightings in the Project area will be reported to CDFW and USFWS within 24 hours of the sighting. Should condors be found roosting within 0.5 mile of the construction area, no construction activity shall occur between 1 hour before sunset to 1 hour after sunrise, or until the condors leave the area, or as otherwise directed by USFWS. Should condors be found nesting within 1.5 miles of the construction area, no construction activity will occur until further authorization occurs from CDFW and USFWS.				
c. To further protect California condor potentially foraging in the Project area over the long term from negative interactions with humans and/or artificial structures, the Applicant or the JPA or the NLMO shall remove dead cattle that are found or reported within 1,000 feet of a residential or commercial development boundary. Dead cattle shall be relocated to a predetermined location within the High Country SMA/SEA or Salt Creek area. The locations where carcasses shall be placed shall be a minimum of 1,000 feet from a development area boundary. Appropriate locations for transfer of carcasses include open grasslands and				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
oak/grassland areas where condors can readily detect carcasses and easily land and take off without encountering physical obstacles such as powerlines and other utility structures. The proposed locations would be selected and approved by the CDFG and USFWS. Pursuant to this measure, a telephone number for reporting dead cattle shall be provided and actively maintained. Any cattle carcasses transferred to the relocation areas shall be reported to the USFWS Condor group.				
RMDP/SCP-BIO-83: Thirty days prior to construction activities, a qualified biologist shall conduct a preconstruction survey for ringtail. The survey areas all include suitable riparian and woodland habitat (southern coast live oak riparian forest, southern cottonwood–willow riparian forest, southern willow scrub, coast live oak woodland, valley oak woodland, and mixed oak woodland) within the construction disturbance zone and a 300 foot buffer around the construction site. Should the ringtail be observed in the breeding and rearing period of February 1 through August 31, no construction related activities shall occur within 300 feet of the occupied area for the period of February 1 through August 31 or until the ringtail has been determined by a qualified biologist (in consultation with CDFG) to no longer occupy areas within 300 feet of the construction zone and/or that construction activities would not adversely affect the successful rearing of young. If the ringtail is observed within the construction disturbance zone or in the 300 foot buffer around the construction site in the nonbreeding/rearing period of September 1 through January 31, and avoidance is not possible, denning ringtail shall be safely evicted under the	Submit pre-construction survey reports and, if applicable, construction monitoring reports to CDFW	Prior to construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFG). All activities that involve the ringtail shall be documented and reported to CDFG.				
RMDP/SCP-BIO-84: Bridge and culvert designs, where practicable, shall provide roosting habitat for bats. A qualified biologist shall work with the Project engineer in identifying and incorporating structures into the design that provide suitable roosting habitat for bat species occurring in the Project area. The final design of the roosting structures would be chosen in consultation with CDFG.	Approval of bridge and culvert design plans by the County Department of Public Works	Prior to approval of improvement plans	Applicant	• CDFW • LACDRP •
RMDP/SCP-BIO-87: Upon initiating landscaping within a development area, quarterly monitoring shall be initiated for Argentine ants along the urban–open space interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Monitoring and control of Argentine ants would occur in perpetuity. The Project	Submit monitoring reports to CDFW.	During Operation	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
applicant will fund an endowment, approved by CDFG, for monitoring in perpetuity.				
RMDP/SCP-BIO-88: Any southern California black walnut and mainland cherry trees or shrubs outside riparian areas greater than one inch dbh shall be replaced in the ratio of at least 2:1. Multi-trunk trees/shrub dbh shall be calculated based on combined trunk dbh. Mitigation shall be deemed complete when each replacement tree attains at least one inch in diameter one foot above the base.	Compliance with the measure, where applicable, will be documented through annual mitigation status reports to CDFW	Until success criteria are met	Applicant	• CDFW • LACDRP
RMDP/SCP-SW-4: All areas where temporary construction impacts affect Corps or CDFG jurisdictional areas (generally, these are areas where impacts would occur due to the construction of Project facilities, but that are outside the permanent footprint of the actual facility), shall be revegetated with appropriate native vegetation after completion of construction in the area. A revegetation plan shall be prepared and implemented in accordance with the terms set forth in mitigation measures SP-4.6-1 though SP-4.6-15 and SP-4.6-63. *(The process for verifying that revegetation plans comply with the terms set forth in Mitigation Measures SP-4.6-1 though SP-4.6-15 and SP-4.6-63 is implemented through measures Mitigation Measures RMDP/SCP-BIO-1, RMDP/SCP-BIO-3, and RMDP/SCP-BIO-12.)*	Documented through annual mitigation reports required by Mitigation Measure RMDP/SCP-BIO-12	Until success criteria are met	Applicant	• CDFW • Corps • LACDRP
RMDP/SCP-SW-6: To the extent that on-site mitigation for impacts to jurisdictional tributary drainages is insufficient to meet the mitigation ratios required by revised Mitigation Measure BIO-2, then the remaining mitigation obligation shall be met at off-site properties	The mitigation site criteria required by this measure will be reflected in the mitigation plans	Until success criteria are met	Applicant	• CDFW • Corps • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
within the Santa Clara River watershed, via use of one or more of the following mitigation approaches (at applicant's option): (a) creation of additional jurisdictional acreage in tributaries to the Santa Clara River occurring off site such that the mitigation site has an equal or greater value than the impacted site; (b) preservation of property containing jurisdictional tributaries to the Santa Clara River having an equal or greater value than the impacted site via a conservation easement or analogous method; or (c) habitat enhancement activities in jurisdictional tributaries for the necessary acreage (*e.g.*, exotic species removal under the terms and conditions specified in Mitigation Measures BIO-9 and BIO-10).	submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Submit copies of the issued permits and/or copies of mitigation plan approval, as applicable			
RMDP/SCP-AEA-3-1: The project applicant, or its designated general contractor, shall implement the following measures to avoid contact with the wetted channel, which would avoid affecting unarmored threespine stickleback. (*As written, this mitigation measure applies to the wetted channel of the Santa Clara River, which does not exist within the VCC Planning Area. To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Planning Area.*) **RMDP/SCP-AEA-3-1a:** The project applicant, or its designated general contractor, shall implement the PDFs and regulatory measures as incorporated into the project's bridge and bank stabilization designs. (*This mitigation measure also applies to VCC Planning*	Compliance with the measure will be achieved through compliant construction plans for bridge and bank stabilization features, and construction monitoring reports submitted to CDFW.	During Construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Area bank stabilization features.)				
RMDP/SCP-AEA-3-1b: The mandated Worker Environmental Awareness Program (Mitigation Measure BIO-52 from the 2010 Final EIR) shall include a discussion regarding restriction of access to the wetted channel of the Santa Clara River and repercussions if encroachment occurs. (*This mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Planning Area.*)	Submittal of a WEAP training log and construction monitoring reports to CDFW	During Bridge and Bank Stabilization Construction Activities	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-1c: Prior to the commencement of construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river and that no work takes place where fish may be affected. (*This mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Planning Area.*)	Submittal of pre-construction survey reports and construction monitoring reports to CDFW	During Bridge and Bank Stabilization Construction Activities	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-1e: A clear weather window, defined for this project as a 40 percent chance or less of 0.10 inches or greater of precipitation in the next 48 hours as forecasted by NOAA, shall be required for the scheduling of any bridge or bank stabilization-related concrete pours. If a bridge or bank stabilization-related concrete pour is in progress, and an un-forecasted rain event occurs, bridge or bank stabilization-related concrete pours shall be suspended. (*This mitigation measure also applies to VCC Planning Area activities within Castaic Creek.*)	Submittal of construction monitoring reports submitted to CDFW	During Bridge and Bank Stabilization Construction Activities	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-1f: During all storm events (including	Submittal of	During Construction	Applicant	• CDFW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
summer rains), a monitor shall inspect work sites to make sure that site is secure and that flooding does not cause tarps to break or diversion drains to become plugged, potentially allowing construction materials and debris to flow into the river. (*This mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Planning Area.*)	construction monitoring reports to CDFW			• LACDRP
RMDP/SCP-AEA-3-1k: To ascertain that water quality is not being affected by bridge and bank stabilization-related concrete pouring activities, the project applicant or its designee shall monitor the water quality at points, upstream, downstream, and immediately adjacent to the bridge construction work zone daily during concrete pouring operations and report the results monthly, or as directed, to CDFW. Key parameters to be monitored include Ph and turbidity. (*This mitigation measure also applies to VCC Planning Area bank stabilization features within Castaic Creek.*)	Submittal of water quality monitoring reports to the County and CDFW when applicable	During Bridge Construction Activities	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-2: The project applicant, or its designated general contractor, shall implement the following measures to avoid unarmored threespine stickleback. (*As written, this mitigation measure applies to activities within the wetted channel of the Santa Clara River, which does not exist within the VCC Planning Area. To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Planning Area temporary haul route within Castaic Creek.*)	Compliance with this measure, where applicable, will be documented in accordance with reporting for Mitigation Measures RMDP/SCP-AEA-3-1a, 3-1b, and 3-1f	During Bridge Maintenance and Repair Activities	Applicant	• CDFW • LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-AEA-3-2a: Implement Mitigation Measures 3-1a, 3-1b, and 3-1f. (*To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Planning Area temporary haul route within Castaic Creek.*)				
RMDP/SCP-AEA-3-2b: Prior to the commencement of construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river, that the proposed vibratory pile installation locations are at least 10 feet away from the wetted channel, and that no work takes place where unarmored threespine stickleback may be affected. (*To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Planning Area temporary haul route within Castaic Creek.*)	Submittal of construction monitoring reports to CDFW	During Temporary Haul Route Construction	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-2c: Vibratory piles for the temporary haul route bridges shall be installed no closer than 10 feet to the wetted channel of the Santa Clara River, as determined by survey at the time piles are to be installed, and shall only be removed by vibratory methods if the wetted channel is at least 10 feet away. (*To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Planning Area temporary haul route within Castaic*	Submittal of construction monitoring reports to CDFW	During Temporary Haul Route Construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Creek.)				
RMDP/SCP-AEA-3-2d: No construction activities or personnel shall occur near the edge of the wetted channel that would have potential to destabilize low flow channel bank. A set-back from the edge of the top of bank for a horizontal distance that is twice the bank height (2 horizontal: 1 vertical) shall be maintained to prevent collapsing the bank of the low flow channel. (*To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Planning Area temporary haul route within Castaic Creek*.)	Submittal of construction monitoring reports to CDFW	During Temporary Haul Route Construction	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-2e: During temporary haul route bridge construction and demobilization, a qualified biologist shall monitor all activities that are a threat to adjacent natural habitats or nearby species and prevent equipment, personnel, or debris from entering or making contact with the wetted channel of the river. (*To avoid potential impacts to stickleback that could be present in portions of Castaic Creek under certain conditions, this mitigation measure also applies to the VCC Planning Area temporary haul route within Castaic Creek*.)	Submittal of construction monitoring reports to CDFW	During Temporary Haul Route Construction	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-3: The project applicant or its designated contractor shall implement the following measures: *(This mitigation measure also applies to the VCC Planning Area bank stabilization activities within Castaic*	Compliance with this measure, where applicable, will be documented in accordance with reporting for Mitigation	During Temporary Haul Route Construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Creek.) **RMDP/SCP-AEA-3-3a:** Implement Mitigation Measure 3-1a, 3-1b, 3-1e, 3-1f, and 3-1k. (*This mitigation measure also applies to the VCC Planning Area bank stabilization activities within Castaic Creek.*)	Measures RMDP/SCP-AEA-3-1a, 3-1b, and 3-1f.			
RMDP/SCP-AEA-3-3b: Prior to the commencement of bank stabilization construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river, that construction BMPs are installed prior to construction, and that no work takes place where fish may be affected. (*This mitigation measure also applies to the wetted channel of Castaic Creek within the VCC Planning Area.*)	Submittal of construction monitoring reports to CDFW	During Bank Stabilization Construction Activities	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-3d: Bank stabilization construction locations susceptible to winter flood flows shall be conducted from May 1 through November 30, when winter flood flows do not occur on the Santa Clara River. Other bank stabilization areas not at risk of flood flows shall be constructed year-round. (*This mitigation measure also applies to VCC Planning Area bank stabilization activities within Castaic Creek.)*	Submittal of construction monitoring reports to CDFW	During Bank Stabilization Construction Activities	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-AEA-3-3e: Although a late-spring or early fall flood event is not expected to occur, the project applicant or its designated contractor shall implement Perimeter Best Management Practices, as required under the Environmental Protection Agency's Construction National Pollutant Discharge Elimination System permit, which would deflect minor flows (less than 12 inches deep, and less than 8 fps velocities) from entering bank protection construction work zones. (*This mitigation measure also applies to VCC Planning Area bank stabilization activities within Castaic Creek.)*	Submittal of construction monitoring reports to CDFW	During Bank Stabilization Construction Activities	Applicant	• CDFW • LACDRP
RMDP/SCP-AEA-3-3f: The project applicant or its designee shall develop a Construction Groundwater Dewatering Plan for those areas (i.e., bank stabilization areas) in close proximity to stream flow and submit to CDFW for approval. The plan shall include the following measures and be conducted during construction groundwater dewatering activities: • Operational restriction on dewatering addressed in the 2010 Final EIR require that any dewatering be conducted in a manner that does not affect river flow, and these same restrictions shall be observed going forward. Bank stabilization dewatering shall be implemented in a manner that (1) does not create temporary wetted channel habitat suitable for stickleback; (2) does not diminish existing river flow, and therefore does not result in stranding of unarmored threespine stickleback or other fish; and (3) does not introduce pollutants to surface waters. • Dewatering activities shall not involve direct removal of surface water from, or discharge to the Santa Clara	Submittal of a construction groundwater dewatering plan to CDFW, if applicable, and construction monitoring reports submitted to CDFW	Before and During Construction	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
River. Nor shall such activities result in any draw-down of the river's flow such that fish may become stranded. Any groundwater discharges shall be directed to an appropriate and legal disposal site in an upland area that will not affect the surface elevation of the wetted channel of the Santa Clara River. • The project applicant or its designee shall assess local stream and groundwater conditions, including flow depths, groundwater elevations, and anticipated dewatering cone of influence (radius of draw down). • The project applicant or its designee shall monitor daily surface water elevations upstream, adjacent to, and downstream of the extraction points, to assess any critical flow regimes susceptible to excessive draw down before, during, and after groundwater dewatering activities. The designated monitor shall have the authority to halt dewatering activities if water levels decrease in the wetted portion of the Santa Clara River where unarmored threespine stickleback are present. In the event the designated monitor observes an effect on the wetted channel that necessitates halting of dewatering operations, the applicant will be required to consult with CDFW, revise the Construction Groundwater Dewatering Plan as appropriate, and implement whatever additional restrictions may be necessary to preclude impact to the wetted channel (such as limiting the extent of excavation dewatering, implementing other construction methods acceptable to the Los Angeles County Department of Public Works such as launch stone, or suspending construction until such time as regional groundwater conditions are more favorable for the construction to proceed).				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• The project applicant or its designee shall monitor surface water elevations downstream of the project location to assess any flow regimes and overbank areas that may be susceptible to flooding. • The project applicant or its designee shall monitor upland discharge locations for potential channel erosion from dewatering discharge, and appropriate BMPs must be implemented to prevent excessive erosion or turbidity in the discharge. • Monitoring reports shall be summarized and provided to CDFW upon completion of construction activities that required dewatering. (*This mitigation measure also applies to VCC Planning Area bank stabilization activities within Castaic Creek.)*				
VCC-SW-2: The Castaic Creek channel will follow the existing bank contours of the creek and will minimize encroachment into the riparian vegetation community, so that there is no net loss of riparian habitat of acreage of Castaic Creek. In order to minimize potential effects on downstream populations of UTS, the channel will be designed so that the pre and post project flow will be approximately the same in volume and velocity.	Compliance with the channel design requirements of this measure will be demonstrated by County approval of development plans. The restoration plan required by the measure will be incorporated in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to	Prior to approval of 404 Permit and CDFW 1602 Permit		• CDFW • Corps

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of the issued permits, mitigation plan approval, where applicable, and annual mitigation reports as required by Mitigation Measure RMDP/SCP-BIO-12.			
VCC-SW-3: Soft bottom channels will be incorporated into the project design to allow for the retention of existing riparian vegetation.	Compliance with the channel design requirements of this measure will be documented through submittal of compliant grading/construction plans.	Throughout period of channel construction	Applicant	• LACDPW
VCC-SW-4: A vegetation restoration plan will be used to revegetate areas temporarily disturbed by construction in the Creek.	Compliance with this measure will be demonstrated by Department of Public Works approval of construction plans showing bank protection design for Castaic Creek.	Prior to approval of 404 Permit and CDFW 1602 Permit	Applicant	• CDFW • Corps

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
VCC-4.a-2: Approximately 375 acres of native coastal sage scrub vegetation will be retained. (*This measure applies to the Modified Project with the following clarification: the measure requires retention of 375 acres of coastal scrub vegetation within the overall VCC development area approved by the County under the 1990 EIR, including portions that are not part of the Modified Project.)*	Maintain log documenting compliance.	Prior to issuance of first building permit	Applicant	• LACDRP
VCC-4.b-2: The Castaic Creek channel will follow the existing bank countours of the creek and will minimize encroachment into the riparian vegetation community, so that there is no net loss of acreage of Castaic Creek. A detailed revegetation and restoration plan will be provided for review prior to construction.	Compliance with the channel design requirements of this measure will be demonstrated by County approval of development plans. The restoration plan required by the measure will be incorporated in the mitigation plans submitted to and approved by natural resource agencies in connection with issuance of permits authorizing impacts to jurisdictional waters. Compliance with the measure will be demonstrated by submitting copies of the issued permits,	Prior to approval of 404 Permit and CDFW 1602 Permit	Applicant	• CDFW • Corps

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	mitigation plan approval, where applicable, and annual mitigation reports as required by Mitigation Measure RMDP/SCP-BIO-12.			
VCC-4.b-3: Soft bottom channels will be incorporated into the project design to allow for the retention of existing riparian vegetation.	Compliance with the channel design requirements of this measure will be documented through submittal of compliant grading/construction plans.	Throughout period of channel construction	Applicant	• LACDPW
VCC-4.b-4: Castaic Creek will be lined with a bank protection that allows for growth of native herbaceous vegetation. The Army Corps of Engineers has stated a preference for an articulating, concrete, open-cell tile (i.e., Armorflex). The use of Armorflex may not be approved by the Department of Public Works; therefore, the type of lining actually used may change as a potential issue of safety. (*This measure applies to the Modified Project with the following qualification: The reference to Armorflex refers to USACE guidance provided in connection with a 1990 USACE permit that has expired and no longer applies to the Modified Project. The type of bank protection used will be consistent with any requirements imposed under any USACE permit obtained for Modified Project activities within the VCC Planning Area.)*	Compliance with this measure will be demonstrated by Department of Public Works approval of construction plans showing bank protection design for Castaic Creek.	Prior to approval of 404 Permit and CDFW 1602 Permit	Applicant	• CDFW • Corps

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
VCC-4.c-1: Channelization will be conducted under the supervision of a qualified biologist to ensure that construction is carried out with minimal siltation and debris flow into the channel; minimal disturbance to the UTS; and avoidance of preserved riparian habitat.	Maintain log documenting compliance.	During construction in channel	Applicant	• LACDRP
VCC-4.c-2: Industrial users which may use toxic substances wil be required to provide on-site containment systems to protect downstream habitat.	Maintain log documenting compliance.	During construction/ operation	Applicant	• LACDRP
VCC-4.c-3: Parking lots shall have a drainage system to divert non-storm flows to an oil and grease trap.	Submittal of site improvement plans.	Prior to issuance of building permits	Applicant	• LACDRP
ES/VCC-MM-BIO-1: Prior to construction, the Applicant shall develop a relocation plan for California glossy snake, to be incorporated into the relocation plan developed for other special-status reptile species, according to requirements in RMDP/SCP-BIO-54. (*A draft California glossy snake relocation plan is included as Appendix FEIR-~~XX~~3 to the Final SEIR for the Project.*)	Approval of relocation plan pursuant to Mitigation Measure RMDP/SCP-BIO-54	Prior to construction	Applicant	• CDFW • LACDRP
ES/VCC-MM-BIO-2: ~~Should Project ground-disturbing activities be scheduled to occur during the Crotch bumble bee colony active period, a qualified biologist shall conduct a habitat assessment to identify areas containing suitable habitat for Crotch bumble bee. The qualified biologist shall conduct pre-construction surveys for Crotch bumble bee in the areas identified, using a methodology (including number and timing of surveys) accepted by the California Department of Fish and Wildlife (CDFW).~~ ~~If Crotch bumble bee are not detected, no further measures are required. A qualified biologist shall be present during ground-disturbing Project activities that~~	Submit pre-construction survey reports and, if applicable, ~~proof of avoidance~~ Bumble Bee Avoidance Plan.	Prior to ground disturbance in suitable habitat	Applicant	• CDFW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
~~occur during the Crotch bumble bee colony active period.~~ ~~If Crotch bumble bee are detected:~~ ~~1. Ground-disturbing activities shall be prohibited within 100 feet of any known, occupied Crotch bumble bee nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The prohibition will continue for the duration of the Crotch bumble bee colony active period, unless the nest is determined to be inactive by a qualified biologist or is relocated or removed with CDFW authorization.~~ ~~2. The Project proponent shall prepare a Crotch Bumble Bee Avoidance and Minimization Plan for review and approval by CDFW, which shall include additional, site-specific measures to avoid take of Crotch bumble bee during Project ground-disturbing activities during the colony active period.~~ ~~3. If the Crotch bumble bee remains a candidate for listing, or has been listed, as endangered or threatened under the California Endangered Species Act ("CESA"), and Project activities will cause "take" of Crotch bumble bee, as that term is defined for purposes of the CESA, the Project proponent shall obtain authorization for such take pursuant to Fish and Game Code Section 2081 or any other applicable provision of law providing such authorization.~~ Prior to the start of any Project activities during the Queen Flight and Colony Active Periods (February 1 through October 31), a qualified biologist shall conduct a habitat assessment to identify suitable habitat for Crotch's bumble bee within Project activity areas, and then survey				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
prior to construction for Crotch's bumble bee and nests in those areas. Qualified biologist(s) shall be approved by CDFW 14 days prior to survey commencement. Survey protocols shall adhere to CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023) or another methodology approved by CDFW. Survey results, including negative findings or a map of nest location(s), shall be submitted to CDFW for review 14 days prior to starting Project activities. If Crotch's bumble bee nests are found during pre-construction surveys or detected during Project activities, Project activities within 100 feet of a nest shall be suspended until the CDFW-approved qualified biologist, with expertise in bumble bees, receives approval from CDFW for a Bumble Bee Avoidance Plan to avoid impacts to the nest(s). If Crotch's bumble bee nests are not found during the surveys (negative finding) then no further measures are required. A qualified biologist shall be present during initial ground disturbing Project activities (clearing and grubbing) in areas where suitable habitat was identified. The Bumble Bee Avoidance Plan shall include: 1. On-site daily monitoring by CDFW-approved biologist during Project activities, such as ground or vegetation disturbance, during the Queen Flight Period and Colony Active Period. 2. No-impact buffers. Ground-disturbing activities shall be prohibited within 100 feet of any known occupied Crotch's bumble bee nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. If Project activities may result in disturbance or potential take, the qualified				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
biologist, in coordination with CDFW, should expand the buffer zone as necessary to prevent disturbance or take. The prohibition will continue for the duration of the Crotch's bumble bee colony active period, unless the nest is determined to be inactive by a qualified biologist. 3. If a nest is found, Project proponent will provide a survey report to CDFW with a summary of the physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found, within a 10-foot radius. This shall include native plant composition (e.g., density, cover, and abundance) within affected habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species). 4. If the Crotch's bumble bee remains a candidate for listing, or has been listed, as endangered or threatened under the California Endangered Species Act ("CESA"), and Project activities will cause "take" of Crotch's bumble bee, as that term is defined by Fish and Game Code section 86, the Project proponent shall obtain authorization for such take pursuant to Fish and Game Code Section 2081 or any other applicable provision of law providing such authorization. In the event of any conflict between this mitigation measure and the terms of an incidental take permit or other instrument authorizing take of Crotch's bumble bee under applicable law, the terms of the incidental take permit or other authorization shall control.				
5. CULTURAL RESOURCES				
RMDP/SCP-CR-3: Pursuant to the requirements of the Tataviam Agreement, a qualified archaeologist and a	Maintain log demonstrating	During grading within 300 feet of any	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Native American monitor shall monitor all earth disturbances, including scarification and placement of fill, within 300 feet of any known archaeological site. If archaeological discoveries are made, earth disturbing activities will be diverted to other locales while the archaeological resources are exposed, mapped, evaluated, and recovered, as appropriate.	compliance. As determined by the qualified archaeologist, steep slopes or previously graded areas that have no potential for the presence of cultural remains may not require monitoring	known archaeological site		
RMDP/SCP-CR-4: During any earth disturbance within 300 feet of any known archaeological site, the area of the site and a 50-foot buffer shall be temporarily fenced with chain link flagged with color to ensure construction avoidance.	Fence known archaeological site(s) as specified	During grading within 300 feet of any known archaeological site	Applicant	• LACDRP
RMDP/SCP-CR-5: In the event that cultural resources are encountered during grading anywhere in the Project area, work shall be stopped immediately or redirected until a qualified archaeologist and Native American representative pursuant to the requirements of the Tataviam Agreement are retained by the applicant to evaluate the eligibility of the resources pursuant to CRHR and NRHP criteria. If the remains are found to be significant, they shall be subject to a Phase III data recovery mitigation program consistent with federal, state, and county guidelines and funded by the applicant to the extent allowed by law (see, Pub. Resources Code § 21083.2).	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP •
RMDP/SCP-CR-6: If, during any phase of Project construction, there is the discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps, which are based on Public	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Resources Code section 5097.98 and State CEQA Guidelines section 15064.5(e), shall be taken: 1. There will be no further excavation or disturbance of the site or any nearby area reasonably susceptible to overlying adjacent human remains until: a. The Los Angeles County Coroner is contacted to determine that no investigation of the cause of death is required; and b. If the Coroner determines the remains to be Native American: (i) The Coroner shall contact the Native American Heritage Commission within 24 hours; (ii) The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American; and (iii) The most likely descendent may make recommendations to the Project applicant for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or, 2. Where the following conditions occur, the Project applicant, or its designee, shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: a. The Native American Heritage Commission is				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the Commission; b. The descendant identified fails to make a recommendation; or c. The Project applicant, or its designee, rejects the recommendation of the descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the Project applicant.				
6. GEOLOGY AND SOILS				
ES/VCC-MM-GEO-1: Prior to issuance of building permits, to address potential risks related to seismic shaking, all structures shall be designed using sound engineering judgment and the latest California Building Code requirements, as a minimum, which prescribe minimum lateral forces, applied statically to each habitable structure, combined with the gravity forces of dead and live loads, as determined in a report by a registered geotechnical engineer and submitted to the Department of Public Works pursuant to the County of Los Angeles Manual for Preparation of Geotechnical Reports.	Submit building plan	Prior to issuance of building permit(s)	Applicant	• LACDPW
ES/VCC-MM-GEO-2: Prior to issuance of rough grading permits, and in those portions of the Entrada South and VCC planning areas beneath habitable structural improvements where the anticipated seismic differential settlement exceeds the County of Los Angeles' one-inch	Submit grading plan	Prior to issuance of grading permit(s)	Applicant	• LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
seismic differential settlement standard, one or more of the following design requirements will be implemented: a. Alluvium removal to reduce liquefaction-induced settlement to less than 1 inch. b. Ground improvements such as rammed aggregate piers (RAPs), deep soil mixing (DSM), or stone columns to reduce liquefaction-induced settlement to less than 1 inch. c. Ground improvements such as deep dynamic compaction (DDC) or compaction grouting to reduce liquefaction-induced settlement to less than 1 inch. d. Sufficiently stiff foundations or deep foundations. e. An approved alternative design requirement capable of reducing liquefaction induced settlement to less than 1 inch. The above design requirements shall be performed by removing and/or improving enough liquefiable alluvium to achieve a less than 1-inch seismic differential settlement, pursuant to the County of Los Angeles Manual for Preparation of Geotechnical Reports, or by specific foundation design. Geotechnical recommendations and design requirements shall be presented and approved as a conceptual design at the 100-scale grading plan stage and as a detailed design at the 40-scale grading plan stage.				
ES/VCC-MM-GEO-3: Prior to issuance of rough grading permit, in order to address landslides, unstable soil, liquefaction, expansive soil and dry-sand settlement, a Corrective Grading Plan delineating the areas where such geotechnical conditions exist shall be prepared by a	Submit grading plan	Prior to issuance of grading permit(s)	Applicant	• LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
registered geotechnical engineer and submitted to the Department of Public Works pursuant to the County of Los Angeles Manual for Preparation of Geotechnical Reports. The Corrective Grading Plan shall address the following: a. Project grading shall include a combination of ground modification and/or structural mitigation in areas subject to liquefaction to reduce the risk to an acceptable level (as defined by CGS in Special Publication 117a, Chapter 2, or as superseded by CGS guidance in effect at the time of implementation of this measure). Ground modification shall consist of the removal of some of the soil material subject to liquefaction. The recommended depth of removal for mitigation of liquefaction ranges from 5 to 30 feet. Structures shall be designed to resist the anticipated static and seismic total and differential settlements. b. Landslides shall be stabilized and/or removed, and/or building setbacks shall be used to protect structural integrity. c. Grading and engineering design requirements shall address the removal of unstable soil, stabilization of potential landslide areas, and compaction of engineered fill to meet County of Los Angeles soil compaction requirements (County of Los Angeles Grading Guidelines, 2017). d. Areas where expansive soil is encountered shall include grading measures designed to reduce hazard of construction in expansive soil including but not limited to removing expansive soil and replacing with engineered fill, installing drainage systems, using				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
stiffened foundations systems, or conducting engineered preparation of building pads**.**				
ES/VCC-MM-GEO-4: Prior to the issue of building permits, and after the site has been mass graded, soil corrosion testing shall be completed and appropriate design requirements shall be implemented in accordance with the latest California Building Code (CBC) as a minimum, to reduce the hazard of construction in corrosive soil.	Submit building plan	Prior to issuance of building permit(s)	Applicant	• LACDPW
7. GREENHOUSE GAS EMISSIONS				
RMDP/SCP-2-2: Prior to the issuance of building permits for commercial development and private recreation centers, and prior to the commencement of construction for the public facilities, respectively, for the project or a portion of the project, the project applicant or its designee shall submit one or more Zero Net Energy Confirmation Reports (ZNE Report) prepared by a qualified building energy efficiency and design consultant to Los Angeles County for review and confirmation that the commercial development, private recreation centers, and/or public facilities covered by the ZNE Report achieve the ZNE standard specified in this mitigation measure. Specifically, a ZNE Report shall demonstrate that the commercial development, private recreation centers, and public facilities within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations have been designed and shall be constructed to achieve ZNE, as defined by CEC in its 2015 Integrated Energy Policy Report, which requires the value of the net energy produced by project renewable energy resources	Submit ZNE Report for County review and confirmation prior to issuance of building permits for commercial development and private recreation centers, and prior to the commencement of construction for the public facilities. An energy efficiency and design consultant is qualified to prepare a ZNE Report if the consultant is a Certified Energy Analyst, as established by the California Association of Building Energy	Prior to issuance of commercial building permit(s)	Applicant	• LACDPW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
to equal the value of the energy consumed annually by the project using the CEC's Time Dependent Valuation metric. A ZNE Report shall provide, at a minimum, the following information: • Confirmation that the commercial development, private recreation centers, and/or public facilities shall comply with Title 24, Part 6 building standards that are operative at the time of building permit application. • Identification of additional measures or building performance standards that shall be relied upon to achieve the ZNE standard (as defined above), assuming ZNE is not already achieved by meeting the operative Title 24, Part 6 building standards. In demonstrating that the commercial development, private recreation centers, and/or public facilities achieves the ZNE standard, the ZNE Report may: • Evaluate multiple buildings and/or land use types. For example, a ZNE Report may cover all of the residential and non-residential buildings within a neighborhood/community, or a subset thereof, including an individual building. • Rely upon aggregated or community-based strategies to support its determination that the subject buildings are designed to achieve ZNE. For example, short falls in renewable energy generation for one or more buildings may be offset with excess renewable generation from one or more other buildings. As such, a ZNE Report could determine a building is designed to achieve ZNE based on aggregated or community-	Consultants, or, alternatively, has similar qualifications as confirmed by staff for the County of Los Angeles.			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
based strategies even if the building on its own may not be designed to achieve ZNE. • Make reasonable assumptions about the estimated electricity and natural gas loads and energy efficiencies of the subject buildings. If interconnection of the project's renewable generation is not sufficient to allow compliance with the ZNE standard for the project, or a portion of the project, then Los Angeles County shall allow the project applicant or its designee to achieve an equivalent level of GHG emissions reductions to mitigate such shortfall by providing 5.1 MTCO2e of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard for the project, or a portion of the project, as demonstrated in the ZNE Report. *(This mitigation measure applies to the VCC Planning Area with the qualification that the village-specific equivalency metric is 4.3 [not 5.1] MTCO2e of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard.)*				
RMDP/SCP-2-5: Prior to the issuance of commercial building permits, the project applicant or its designee shall submit building design plans, to Los Angeles County, which demonstrate that the parking areas for commercial buildings on the RMDP/SCP project site shall be equipped with electric vehicle (EV) charging stations that provide charging opportunities to 7.5 percent of the total number of required parking spaces. ("Commercial buildings" include retail, light industrial, office, hotel, and mixed-use	Submit building design plan	Prior to issuance of commercial building permit(s)	Applicant	• LACDPW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
buildings.) The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station. In the event that the installed charging stations use functionality/ technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour.				
RMDP/SCP-2-6: The project applicant-submitted Newhall Ranch Transportation Demand Management (TDM) Plan, located in Final AEA Appendix 7, shall be implemented to reduce vehicle miles traveled (VMT) resulting from project build out with oversight from Los Angeles County. The TDM Plan is designed to influence the transportation choices of residents, students, employees, and visitors, and serves to enhance the use of alternative transportation modes both on and off the project site through the provision of incentives and subsidies, expanded transit opportunities, bikeshare and carshare programs, technology-based programs, and other innovative means. Village-level implementation of relevant elements of the TDM Plan shall proceed in accordance with village-level applicability supplements prepared by a qualified transportation engineer that are reviewed and considered by Los Angeles County when approving tentative subdivision maps for land	A copy of the Valencia TDM Plan is provided in **Appendix 5.9b** of the SEIR. Implementation of the TDM Plan shall proceed in accordance with the provisions outlined in the plan. Additionally, monitoring and implementation of the Valencia TDM Plan shall proceed in accordance with a village-level applicability supplement to the TDM Plan, which is provided in **Appendix 5.9b** of the SEIR.	Prior to issuance of building permit(s)	Applicant	• LACDPW • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
developments that are part of the project. Accordingly, the TDM Plan identifies key implementation actions that are critical to the effectiveness of the VMT-reducing strategies, as well as timeline and phasing requirements, monitoring standards, and performance metrics and targets tailored to each of the strategies. In accordance with the TDM Plan, a non-profit Transportation Management Organization (TMO) or equivalent management entity shall be established to provide the services required, as applicable. *(The Newhall Ranch Transportation Demand Management Plan [which is now known as the Valencia TDM Plan] and above-referenced village-level applicability supplement, entitled Entrada South & Valencia Commerce Center: Transportation Demand Management Plan Evaluation, are provided in* ***Appendices 5.9b*** *and* ***5.9c*** *of the SEIR.)*	The Project applicant or its designee, which may include the Transportation Management Organization or its equivalent entity, shall coordinate with the Los Angeles County Planning Director and secure the Planning Director's approval of one or more strategies that secure an equivalent level of GHG emission reductions. For purposes of calculating the greenhouse gas emissions reductions required to demonstrate equivalency, each un-used NEV purchase subsidy shall equal 2.7 MT CO2e reductions per year and each unused E-Bike purchase subsidy shall equal 0.9 MT CO2e reductions per year. The Project applicant or its designee shall be permitted to utilize any unused			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
	subsidy funding for purposes of achieving this equivalency requirement.			
RMDP/SCP-2-7: Prior to the issuance of traffic signal permits, the project applicant or its designee shall work with Los Angeles County and the California Department of Transportation (Caltrans), as applicable, to facilitate traffic signal coordination along: • State Route 126 from the Los Angeles County line to the Interstate 5 north-bound ramps; • Chiquito Canyon Road, Long Canyon Road, and Valencia Boulevard within the RMDP/SCP Project site; • Magic Mountain Parkway from Long Canyon Road to the Interstate 5 north-bound ramps; and, • Commerce Center Drive from Franklin Parkway to Magic Mountain Parkway. To effectuate the signal synchronization and specifically the operational and timing adjustments needed at affected traffic signals, the project applicant or its designee shall submit traffic signal plans for review and approval, and/or pay needed fees as determined by Los Angeles County or Caltrans, as applicable. A majority of the signals that will be synchronized will be new signals constructed/installed by the project. Thus, for these signals, the project will provide the necessary equipment at the signal controller cabinet, as well as within the new roadways themselves, to enable and facilitate synchronization. The project is responsible for paying 100 percent of the applicable fee amount for the	The Project applicant or its designee shall submit traffic signal plan(s) for County or Caltrans review and approval, as applicable, and/or pay applicable fees as needed for signal operations and timing adjustments to affected traffic signals prior to traffic signal permit issuance.	Prior to issuance of traffic signal permit(s)	Applicant	• LACDRP • Caltrans

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
signal synchronization work, with assurance that the necessary funding will be available to fully implement this measure.				
RMDP/SCP-2-10: Prior to issuing grading permits for village-level development within the RMDP/SCP project site, Los Angeles County shall confirm that the project applicant or its designee shall fully mitigate the construction and vegetation change GHG emissions associated with each such grading permit (the "Incremental Construction GHG Emissions") by relying upon one of the following compliance options, or a combination thereof, in accordance with the project applicant-submitted Newhall Ranch GHG Reduction Plan (GHG Reduction Plan; see Final AEA Appendix 6): Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Credits" in a quantity equal to the Incremental Construction GHG Emissions. A "GHG Mitigation Credit" shall mean an instrument issued by an Approved Registry that satisfies the performance standards set forth in the GHG Reduction Plan and shall represent the estimated reduction or sequestration of one metric tonne of carbon dioxide equivalent that will be achieved by a Direct Reduction Activity that is not otherwise required (California Environmental Quality Act [CEQA] Guidelines Section 15126.4(c)(3)). An "Approved Registry" is an accredited carbon registry as defined by the GHG Reduction Plan; or–Obtain and retire "Carbon Offsets" in a quantity equal to the Incremental Construction GHG Emissions. "Carbon Offset" shall mean an instrument issued by an Approved Registry that satisfies the	Prior to obtaining grading permits for development within the VCC Planning Area, the incremental GHG emissions associated with such construction and vegetation change-related activities shall be offset. Compliance with this measure shall be demonstrated as provided for in Section VIII of the Newhall Ranch GHG Reduction Plan (see Final AEA Appendix 6). In the event that multiple village-level projects have shared improvements, as defined to include any type of utility, roadway and/or infrastructure improvement identified for the implementation of each project, the construction-related	Prior to issuance of grading permit(s)	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
performance standards set forth in the GHG Reduction Plan and shall represent the past reduction or sequestration of one metric tonne of carbon dioxide equivalent achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4(c)(3)).	emissions for the shared improvements only shall be offset once and shall be the responsibility of the village-level project that occurs first in time from a grading permit issuance perspective			
RMDP/SCP-2-11: Prior to the issuance of building permits for development within the RMDP/SCP project site, the project applicant or its designee shall undertake or fund Direct Reduction Activities pursuant to the Building Retrofit Program ("Retrofit Program"), as included in Final AEA Appendix 13 to improve the energy efficiency of existing buildings located primarily in disadvantaged communities (as defined in the Retrofit Program). The project applicant or its designee shall retire GHG Mitigation Credits or Carbon Offsets issued by an Approved Registry based on such Direct Reduction Activities in a quantity equal to the sum of the following (together, the "Retrofit Reduction Requirement") as included in Final AEA Appendix 13: • For the residential portion of a building permit application, the product of the planned number of residential units for the village-level project multiplied by 0.0377 MTCO2e; • For the commercial portion of a building permit application, the product of the planned commercial development per thousand commercial square feet multiplied by 0.0215 MTCO2e. ("Commercial development" includes retail, light industrial, office,	Prior to the issuance of building permits for development within the RMDP/SCP project site, the Project Applicant or its designee shall provide the County with an attestation from an Approved Registry that the Project Applicant has retired a sufficient quantity of GHG Mitigation Credits or Carbon Offsets associated with Direct Reduction Activities to undertake or fund building retrofits in a quantity equal to the Retrofit Reduction Requirement. See Final AEA Appendix 6.	Prior to issuance of building permit(s)	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
hotel and mixed-use buildings.) Building retrofits covered by the Retrofit Program can include, but are not limited to: cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting (including, but not limited to, light bulb replacement), energy efficient appliances, energy efficient windows, pool covers, insulation, and water conservation measures. The Retrofit Program shall be implemented within the geographic area defined to include Los Angeles County and primarily within disadvantaged communities, as defined by the Retrofit Program, or in other areas accepted by the Los Angeles County Planning Director. *(The residential portion of this mitigation measure does not apply to the VCC Planning Area because no residential development is proposed.)*				
RMDP/SCP-2-12: Prior to the issuance of the first building permit for the RMDP/SCP project site, the project applicant or its designee shall provide Los Angeles County with proof of installation of EV charging stations capable of serving 20 off-site parking spaces. Thereafter, the project applicant or its designee shall provide Los Angeles County proof of installation of EV charging stations prior to the issuance of residential and commercial building permits per the following ratios: one (1) off-site parking space shall be served by an electric vehicle charging station for every 30 dwelling units, and one (1) off-site parking space shall be served by an electric vehicle charging station for every 7,000 square feet of commercial development. ("Commercial development" includes retail, light industrial, office, hotel	As part of implementation of the Mission Village project, the County has been provided with proof (e.g., illustrative photos) of installation of electric vehicle charging stations capable of servicing 20 off-site parking spaces prior to the issuance of the first building permit for the RMDP/SCP project site; therefore, this portion of	Prior to issuance of building permit(s), as specified	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and mixed-use buildings.) Off-site EV charging stations capable of servicing 2,036 parking spaces would be required if the maximum allowable development facilitated by the RMDP/SCP project occurs; fewer EV charging stations would be required if maximum build-out under the RMDP/SCP project does not occur. The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station and may service one or more parking spaces. In the event that the installed charging stations use functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour. The EV charging stations shall be located within the geographic area defined to include Los Angeles County. The EV charging stations shall be in areas that are generally accessible to the public, such as areas that include, but are not limited to, retail centers, employment centers and office complexes, recreational facilities, schools, and other categories of public facilities. *(The residential portion of this mitigation measure does not apply to the VCC Planning Area because no residential development is proposed.)*	the measure has been satisfied. Prior to the issuance of a commercial building permit for 7,000 square feet and each additional 7,000 square feet thereafter, provide evidence (e.g., illustrative photos) of installation of one off-site parking space being equipped with an electric vehicle charging station			
RMDP/SCP-2-13: In addition to Mitigation Measures 2-1	Prior to obtaining	Prior to issuance of	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
through 2-12, the project applicant or its designee shall offset GHG emissions to zero by funding or undertaking Direct Reduction Activities or, if necessary, obtaining Carbon Offsets through the Newhall Ranch GHG Reduction Plan. The project applicant-submitted Newhall Ranch GHG Reduction Plan focuses on achieving GHG reductions or sequestration through the Direct Reduction Activities in coordination with an Approved Registry, such as the Climate Action Reserve. If these Direct Reduction Activities do not achieve the necessary amount of GHG reductions, the project applicant or its designee can obtain Carbon Offsets issued by an Approved Registry. Prior to issuing building permits for development within the RMDP/SCP project site, Los Angeles County shall confirm that the project applicant or its designee shall fully offset the, project's remaining (i.e., post implementation of Mitigation Measures 2-1 through 2-12) operational GHG emissions over the 30-year project life associated with each such building permit (the "Incremental Operational GHG Emissions") by relying upon one of the following compliance options, or a combination thereof, in accordance with the Newhall Ranch GHG Reduction Plan: • Undertake or fund Direct Reduction Activities that are estimated to result in GHG Mitigation Credits, as described in the GHG Reduction Plan, and retire such GHG Mitigation Credits in a quantity equal to the Incremental Operational GHG Emissions; • Undertake or fund Direct Reduction Activities and retire the Carbon Offsets in a quantity equal to the Incremental Operational GHG Emissions; or	building permits for an incremental amount of development within the RMDP/SCP project site, the incremental operational GHG emissions over the 30-year Modified Project life associated with such building permits that must be offset (the "Incremental Operational GHG Emissions") will be equal to the sum of: (1) the number of proposed residential units covered by the applicable building permit multiplied by 108.89 MT CO2e; and (2) every thousand square feet (TSF) of proposed commercial development covered by the applicable building permit multiplied by 506.86 MT CO2e. For example, to obtain a building permit for 75 residential units and 40,000 square feet of	building permit(s)		

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• If necessary, as determined by the Los Angeles County Planning Director in accordance with the GHG Reduction Plan, to fully offset Incremental Operational GHG Emissions, the project applicant or its designee may purchase and retire Carbon Offsets that have been issued by an Approved Registry in a quantity equal to the Incremental Operational GHG Emissions. Compliance with Mitigation Measure (MM) 2-13 shall be demonstrated incrementally prior to obtaining building permits. The incremental Operational GHG Emissions shall be equal to the sum of (1) the number of proposed residential units covered by the applicable building permit multiplied by a "GHG Residential Ratio" and (2) every thousand square feet of proposed commercial development covered by the applicable building permit multiplied by a "GHG Commercial Ratio." ("Commercial development" includes retail, light industrial, office, hotel, and mixed-use buildings.) GHG Residential Ratio and GHG Commercial Ratio shall mean the emissions ratios in MTCO2e set forth in the applicable CEQA analysis completed by the County of Los Angeles for a specific village-level project to ensure that the related GHG emissions are reduced to zero. *(The residential portion of this mitigation measure does not apply to the VCC Planning Area because no residential development is proposed.)*	commercial development, the Incremental Operational GHG Emissions would be: 75 units x 108.89 MT CO2e/unit + 40 TSF x 506.86 MT CO2e/sf = 28,441 MT CO2e. Compliance with this measure shall be demonstrated as provided for in Section VIII of the Newhall Ranch GHG Reduction Plan (see Final AEA Appendix 6).			
Project Applicant–Proposed Supplemental Commitment In addition to the installation of EV charging stations	Prior to issuance of a commercial building permit for each	Prior to issuance of building permits, as specified	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
required by Mitigation Measures 2-5 and 2-12, and although not required for the project to achieve net zero GHG emissions, the project applicant or its designee shall provide Los Angeles County with proof of installation of EV charging stations prior to the issuance of residential and commercial building permits per the following ratios: one (1) parking space shall be served by an electric vehicle charging station for every 50 dwelling units, and one (1) parking space shall be served by an electric vehicle charging station for every 15,900 square feet of commercial development. ("Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.) EV charging stations capable of servicing 1,010 parking spaces would be required if the maximum allowable development facilitated by the RMDP/SCP project occurs; fewer EV charging stations would be required if maximum build-out under the RMDP/SCP project does not occur. The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station and may service one or more parking spaces. In the event that the installed charging stations use functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour. The EV charging stations shall be located either on the	additional 15,900 square feet thereafter, provide evidence (e.g., illustrative photos) of installation of one on- or off-site parking space being equipped with an electric vehicle charging station. If installed on the RMDP/SCP project site, the parking spaces equipped with an electric vehicle charging station must be in addition to the parking spaces otherwise required to have such infrastructure by Mitigation Measure RMDP/SCP-2-5. If installed off of the RMDP/SCP project site, the parking spaces equipped with an electric vehicle charging station must be in addition to the parking spaces otherwise required to have such infrastructure by Mitigation Measure			

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
project site or within the jurisdictional area of the Southern California Association of Governments. The EV charging stations shall be in areas that are generally accessible to the public, such as areas that include, but are not limited to, retail centers, employment centers and office complexes, recreational facilities, schools, and other categories of public facilities. *(The residential portion of this mitigation measure does not apply to the VCC Planning Area because no residential development is proposed.)*	RMDP/SCP-2-12. Because the parking spaces serviced by the electric vehicle charging stations provided by this measure are in addition to those required by Mitigation Measures RMDP/SCP-2-5 and RMDP/SCP-2-12, a tracking matrix shall be maintained to ensure that this measure's benefits are additive and that the requirements of each measure are independently satisfied.			
8. HAZARDS AND HAZARDOUS MATERIALS				
RMDP/SCP-PH-1: During the earthwork phase of construction, all known abandoned oil wells located beneath the Project site shall be exposed to allow DOGGR to examine the well heads, assess any potential for methane, and determine if reabandonment of any wells will be required. Additionally, any unknown (i.e., "wildcat") wells encountered during earthwork shall also be subject to investigation and potential reabandonment requirements of DOGGR as described below: • File Notice of Intent to re-abandon well; • Excavate and expose several feet of well casing;	Submit confirmation that required records were files with CalGEM	Upon completion of work	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
• Perform hot tap—a method of drilling a hole into the casing under control in order to deal with possible pressure; • Install a wellhead and blow out prevention equipment; • Move drill rig into place and drill out any surface cement plug or any other cement plug to reach a minimum clean-out as required by DOGGR; • Place cement plugs of varying lengths as required by DOGGR; • All portions of well not plugged with cement are to be filled with inert mud fluid having a density of 70 pounds per cubic foot and a gel strength of 25 pounds per 100 square feet; • Move out drill rig; • Cut off casing at least five feet below final finished grade; • Weld a steel plate on top of the wellhead; • Backfill and compact excavation and clean up location; • Survey the center point of the buried well using GPS instrumentation; • Place a permanent survey mark at the surface, demarcating a buried, abandoned oil well; and • Submit the re-abandonment record to DOGGR within 60 days upon completion of work. Additionally, proposed development plans shall be evaluated by means of the Construction-Site Plan Review Program and comply with setbacks from oil and gas wells as determined by DOGGR. Recommendations by DOGGR regarding abandonment procedures shall be				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
incorporated into the final development plans for the Project, if applicable. *(Note that DOGGR is now referred to as the California Geologic Energy Management Division or CalGEM.)*				
RMDP/SCP-PH-6: All activities associated with pipeline relocation, grading in the vicinity of gas mains, and development with the SCGC easements would be conducted in conformance with the requirements of SCGC. These requirements would be explicitly defined by SCGC prior to implementation of the Newhall Ranch Specific Plan. (*SCGC refers to the Southern California Gas Company, or SoCalGas. This measure applies to any SoCalGas pipeline relocation and nearby grading.)*	Submit grading plans	Prior to issuance of grading permit(s) within any SoCalGas easement	Applicant	• LACDPW
RMDP/SCP-PH-8: To reduce potentially hazardous conditions and minimize the impacts from handling potentially hazardous materials, the owner shall include the following in its construction contract documents prior to the initiation of construction activities: • The Contractor(s) shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains per the County's NPDES guidelines and as outlined in the Stormwater Pollution and Prevention Plan; and • The Contractor(s) shall prepare a Health and Safety Plan. The plan shall include measures to be taken in the event of an accidental spill. In addition, the Contractor(s) shall store all reserve fuel supplies only within the confines of a designated	Provide confirmation of construction contract documentation	During grading/construction	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
construction staging area, refuel equipment only within the designated construction staging area, and regularly inspect all construction equipment for leaks.				
RMDP/SCP-PH-10: Prior to initiation of construction activities, the applicant shall prepare a Chemical Inventory for construction and maintenance of the Project. The Chemical Inventory shall be submitted to the Los Angeles County Fire Department Health Hazardous Materials Division for evaluation to determine whether a Hazardous Materials Business Plan is required. If a Hazardous Materials Business Plan is required, the plan shall address handling and potential releases of hazardous materials from the sites. It shall also include: (1) an inventory of all hazardous material and waste handled on site; (2) emergency response plans; (3) procedures in the event of a reportable or threatened release of a hazardous material; and (4) safety procedure training for all employees in the event of a release or threatened release of a hazardous material.	Submit Chemical Inventory; if required by LACFD, prepare and submit a Hazardous Materials Business Plan	During construction, prior to start of work by each contractor necessitating chemical use	Applicant	• LACFD
RMDP/SCP-PH-12: A Soil Management Plan for the residential development envelopes and recreational construction areas shall be developed and implemented, as appropriate. The objective of the Soil Management Plan is to provide guidance for the proper handling, on-site management, and disposal of impacted soil that may be encountered during construction activities (i.e., excavation and grading). The plan shall include practices that are consistent with the California Division of Occupational Safety and Health regulations, California Code of Regulations, title 8, as well as Certified Unified Program Agency remediation standards that are	Document in log demonstrating compliance	Prior to issuance of building permit(s) in areas of impacted soils	Applicant	• LACFD

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
protective of the planned use. Appropriately trained professionals will be on site during preparation, grading, and related earthwork activities to monitor soil conditions encountered. In order to confirm the absence or presence of hazardous substances associated with former land use, a sampling strategy shall be implemented. The sampling strategy shall include procedures regarding logging/sampling and laboratory analyses. The Soil Management Plan will outline guidelines for the following: • Identifying impacted soil; • Assessing impacted soil; • Soil excavation; • Impacted soil storage; • Verification sampling; and • Impacted soil characterization and disposal. In the event that potentially contaminated soils are encountered within the footprint of construction, soils will be tested and stockpiled. The Certified Unified Program Agency will determine whether further assessment is warranted. The Certified Unified Program Agency shall determine and oversee the handling and disposal of impacted soils. *(The soil management plan for the VCC Planning Area is included as **Appendix 5.4f** of the SEIR*				
RMDP/SCP-PH-14: At the time of final subdivision maps permitting construction in development areas that are adjacent to Open Area and the High Country SMAs, a	Submit Wildfire Fuel Modification plan	Prior to issuance of building permit(s).	Applicant	• LACDRP • LACFD

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Wildfire Fuel Modification plan shall be prepared in accordance with the fuel modification ordinance standards in effect at that time and shall be submitted for approval to the Los Angeles County Fire Department. The Wildfire Fuel Modification plan shall depict a fuel modification zone, the size of which shall be consistent with the Los Angeles County fuel modification ordinance requirements. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the fuel modification ordinance. The Wildfire Fuel Modification plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d) water availability pursuant to the Los Angeles County Fire Department requirements. The fuel modification zone will not extend onto any spineflower preserve. *(Construction period requirements (a) through (d) are superseded by PDF-WF-1 listed below in Section 14, Wildfire.)*				
VCC-PH-3: Covenants, Conditions and Restrictions established and implemented by the Developer shall forbid any use of the property fronting on The Old Road and located north of the Southern California ("SCE") Easement and south and east of Castaic Creak for any use that requires an air toxic hot spots Emission Inventory Plan approved by the local Air Quality Control District or a Risk Management and Prevention Plan approved by the County Fire Department.	Establish and implement CC&Rs	Prior to issuance of building permit	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
9. HYDROLOGY AND WATER QUALITY—HYDROLOGY				
RMDP/SCP-GRR-2: Where practical in River and tributary drainages, bridge crossings shall minimize the number and size of piers and/or columns to minimize localized impacts to River and/or tributary geomorphology and riparian resources.	Submit bridge building plan(s)	Prior to issuance of bridge building permit	Applicant	• LACDPW
10. HYDROLOGY AND WATER QUALITY—WATER QUALITY				
RMDP/SCP-WQ-1: Prior to the recordation of any final subdivision map (except those maps for financing or conveyance purposes only) or the issuance of any grading or building permit (whichever comes first), a final SUSMP shall be prepared consistent with the terms and content of both the Newhall Ranch Specific Plan Sub-Regional Stormwater Mitigation Plan and Project Water Quality Technical Report that specifically identifies the BMPs to be used on site. The SUSMP shall be submitted to the DPW for review. The SUSMP shall identify, at a minimum: (1) site design BMPS (as appropriate); (2) the source control BMPs; (3) treatment control BMPs; (4) hydromodification control BMPs; and (5) the mechanism(s) by which long-term operation and maintenance of all structural BMPs would be provided. The BMPs identified in the SUSMP shall include, as applicable, but not be limited to, the PDFs set forth in Table 4.4-12 this EIS/SEIR. *(SUSMP requirements have been superseded by the requirements of the County's Low Impact Development [LID] Ordinance and LID Manual. The final SUSMP is now referred to as the LID Plan per the County LID Manual. Prior to the issuance of any rough grading or*	Submit LID Plan	Prior to final parcel map or issuance of any grading or building permit (whichever comes first)	Applicant	• LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
*building permit (whichever comes first) and as part of the design level hydrology study and facilities plan, a final LID Plan will be prepared consistent with the terms and contents of the Water Quality Report (**Appendix 5.6** of the SEIR), including applicable requirements in the MS4 Permit and LID Ordinance. The BMPs identified in the LID Plan will include, as applicable, but not be limited to, the BMPs set forth in Table 7.4.1-1 of the Water Quality Report. The BMPs set forth in Table 7.4.1-1 therein supersede the PDFs set forth in Table 4.4-12 of the State-certified EIR.)*				
RMDP/SCP-WQ-2: Prior to issuance of a building permit, and as a part of the design level hydrology study and facilities plan, the project applicant shall submit to the Department of Regional Planning a Landscape and Integrated Pest Management Plan, identified in this Section 4.4, which shall be designed to meet the standards set forth below. A Landscape and Integrated Pest Management Plan shall be developed and implemented for common area landscaping within the Specific Plan, Entrada, and VCC Project that addresses integrated pest management (IPM) and pesticide and fertilizer application guidelines. IPM is a strategy that focuses on long-term prevention or suppression of pest problems (i.e., insects, diseases and weeds) through a combination of techniques including: using pest-resistant plants; biological controls; cultural practices; habitat modification (Techniques 1–6 below); and the limited use of pesticides according to treatment thresholds, when monitoring indicates pesticides are needed because pest populations exceed established thresholds (Technique 7). The Landscape and Integrated Pest Management Plan	Submit Landscape and Integrated Pest Management Plan	Prior to issuance of building permit(s)	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
will address the following components: 1. Pest identification. 2. Practices to prevent pest incidence and reduce pest buildup. 3. Monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed. 4. Establishment of action thresholds that trigger control actions. 5. Pest control methods—cultural, mechanical, environmental, biological, and appropriate pesticides. 6. Fertilizer management—soil assessment, fertilizer types, application methods, and storage and handling. 7. Pesticide management—safety (e.g., Material Safety Data Sheets, precautionary statements, protective equipment); regulatory requirements; spill mitigation; groundwater and surface water protection measures associated with pesticide use; and pesticide applicator certifications, licenses, and training (i.e., all pesticide applicators must be certified by the California Department of Pesticide Regulation). (*Reference to Section 4.4 refers to the Water Quality Section of the State-certified EIR.)*				
11. NOISE				
VCC-NOI-7: The Permittee shall route all heavy construction vehicles for the project, except those for	Include the requirement in the CC&Rs and Construction Traffic	During construction	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
PM 18229, away from the Backer Road/I-5 entrance. *(Backer Road has been renamed and is currently known as Hasley Canyon Road.)*	Management Plan			
VCC-NOI-10: Trucks weighing more than 7 tons shall be prohibited on Backer Road between I-5 and Hasley Canyon Road between the hours of 8:00 P.M. and 7:00 A.M. *(Backer Road is now named Hasley Canyon Road.)*	Include the requirement in the CC&Rs	During construction	Applicant	• LACDRP
ES/VCC-MM-NOI-1: For all construction-related activities, the Applicant shall implement the following: • The Applicant shall utilize construction equipment equipped with optimal exhaust muffler systems consistent with FHWA guidance to achieve a noise reduction of 10 dBA or more. • All equipment shall be properly maintained in accordance with manufacturers' specifications to assure that no additional noise due to worn or improperly maintained parts is generated consistent with FHWA guidance. • The Applicant shall utilize construction equipment that incorporates features to dampen metal surfaces and minimize metal-to-metal contact, consistent with FHWA guidance.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-MM-NOI-2: When construction operations occur adjacent to off-site occupied residential uses, the construction contractor(s) shall: (1) locate stationary construction equipment as far away as feasible from nearby receptors; (2) prohibit the idling of construction equipment; (3) notify adjacent residences in advance of	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
construction work; and (4) install temporary acoustic barriers or noise blankets around stationary construction noise sources. These barriers shall be made featuring weather-protected, sound-absorptive material on the construction-activity side of the noise barrier and must be installed in a location that completely blocks line-of-sight between the construction noise source and adjacent sensitive receptors.				
ES/VCC-MM-NOI-3: During construction of the proposed berm on the north side of the VCC Planning Area, the Applicant shall install a temporary noise barrier that achieves a noise reduction level of at least 3.14 dBA at the residences located at the end of the Diablo Place, Rangewood Road, and Quincy Street cul-de-sacs. This temporary noise barrier shall be removed once construction of the berm is completed. The location of the temporary noise barrier is shown on **Figure 5.8-2**, Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure ES/VCC-MM-NOI-3.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-MM-NOI-4: Prior to the start of construction and maintained for the duration of construction, the Applicant shall clearly post construction hours, allowable workdays, and the phone number of the job superintendent at all construction entrances to allow for surrounding owners to contact the job superintendent. The superintendent shall ensure that all complaints received are logged noting the date, time, complainant's name, nature of the complaint, and any corrective action taken.	Maintain log demonstrating compliance	Prior to the start of construction	Applicant	• LACDRP
12. PALEONTOLOGICAL RESOURCES				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-PR-1: A qualified paleontologist shall be retained to monitor and salvage scientifically significant fossil remains. The duration of these inspections depends on the potential for the discovery of fossils, the rate of excavation, and the abundance of fossils. (a) The Saugus and Pico Formations have a high potential to yield paleontological resources and will require continuous monitoring during all grading activities. This may require use of multiple paleontologists working on the site at the same time if simultaneous ground disturbing activities are occurring over an extensive area to assure all areas of excavation are being fully monitored for the presence of paleontological resources. The number of required monitors shall be determined by Project's monitoring paleontologist. (b) The older dissected Pleistocene formations have a moderate potential to yield paleontological resources and will require halftime monitoring during all grading activities by a qualified paleontologist(s). Because of the large size and long duration of this Project, it will be necessary to periodically review the paleontological potential assigned to each rock unit. This shall be done at the end of each phase of grading. This reassessment of potential will be used to develop mitigation plans for future phases of development. If fossil production is lower than expected, the duration of the monitoring efforts should be reduced to less than continuous monitoring during all grading activities.	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
RMDP/SCP-PR-2: The paleontologist, in consultation with the grading contractor, developer, and Los Angeles County inspector, shall have the power to divert temporarily or direct grading efforts in the area of an exposed fossil to allow evaluation and, if necessary, salvage of exposed fossils.	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP
RMDP/SCP-PR-3: Microinvertebrates are known to exist in the Saugus Formation within the Project area. Samples of the Saugus Formation rock units shall be collected periodically as directed by the Project paleontologist. Appropriate materials for collection are samples of at least 2,000 pounds of rock from likely horizons identified by the Project paleontologist. These samples can be stockpiled (to allow for processing at a later time) to avoid delays in grading activities. The representative rock samples shall be analyzed by a qualified paleontologist for data collection purposes. Based on the results of initial evaluations, the number of collection samples in subsequent grading phases may be increased or decreased as deemed appropriate by the Project paleontologist.	Maintain log demonstrating compliance	During grading	Applicant	• LACDRP
RMDP/SCP-PR-4: Because fossils were discovered during the course of the 1994 field survey, pre-grading salvage is necessary in localities 13, 13A, 14, and 23, as presented in the 1994 Paleontological Technical Report prepared by RMW. This report provides specific details pertaining to the existing conditions as they relate to paleontological resources of the Specific Plan portion of the RMDP and was presented in the Newhall Ranch Specific Plan Program EIR, and is available for public review at the Los Angeles County Department of Regional	Maintain log demonstrating compliance	Prior to grading	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Planning, 320 W. Temple Street, Los Angeles, California, 90012. These locations represent significant fossil discoveries. A minimum of 2,000 pounds of rock should be collected at each site, stockpiled, and screen washed before grading begins at these locations. The representative rock samples shall be analyzed by a qualified paleontologist for data collection purposes. Based on the results of initial evaluations, the number of collection samples in subsequent grading phases may be increased or decreased as deemed appropriate by the Project paleontologist.				
RMDP/SCP-PR-5: Scientific specimens are to become the property of a public, nonprofit educational institution, such as the Los Angeles County Museum of Natural History (or similar institution). Most institutions are now requiring, as conditions for accepting the materials, that significant fossils be prepared, identified to a reasonable level, and catalogued before donation. Therefore, to meet these requirements, prior to the start of Project-related grading, an agreement shall be reached with a suitable scientific repository regarding acceptance of the fossil collection.	Submit copy of curation agreement to LACDRP	Prior to grading	Applicant	• LACDRP
RMDP/SCP-PR-6: Locations of recorded fossil deposits shall remain confidential and shall be disclosed to qualified paleontologists or other qualified individuals on a "need to know" basis.	Maintain log demonstrating compliance	During grading/ following completion of grading	Applicant	• LACDRP
RMDP/SCP-PR-7: To assure compliance with the Los Angeles County guidelines and CEQA, a final report summarizing the results of the mitigation efforts is necessary. To adequately report the results of the mitigation efforts, the report shall include: (1) an itemized	Submit final report regarding paleontological monitoring	Following completion of grading	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
inventory of the fossils; (2) pertinent geologic and stratigraphic data; (3) field notes of the collectors; and (4) indication of the repository. Because the Newhall Ranch Specific Plan and the VCC and Entrada planning areas will be developed in phases, a final report shall be prepared at the end of the grading activities associated with each phase of development. This report shall provide the information necessary to reassess the paleontological potential of each rock unit graded and shall include recommendations for future monitoring efforts in those rock units.				
13. PUBLIC SERVICES—SHERIFF PROTECTION AND SCHOOLS				
ES/VCC-PDF-PS-1: Any gated entrances to the Project Site subareas shall incorporate a Knox-Box entry system or equivalent.	Submit building plan(s) showing gate entry systems	Prior to installation of gates	Applicant	• LACFD
ES/VCC-PDF-PS-2: The Project Applicant, its successors or designees shall notify the Los Angeles County Sheriff's Department and California Highway Patrol prior to any Project-related lane closures or other road construction and ensure emergency access remains clear and unobstructed.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-PS-3: During construction, construction signs shall be posted with a reduced construction zone speed limit per guidance from the California Highway Patrol.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-PS-4: Upon completion, the Applicant shall provide the Santa Clarita Valley Station Commander with a diagram of each portion of the Project Site, including	Submit as-built site plans with access routes	Upon completion of development within each planning area	Applicant/ Commercial Developer(s)	• LACSD

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
building entries and access routes.		of the site		
ES/VCC-PDF-PS-5: Prior to commencement of construction, the Project Applicant shall retain the services of a private security company to patrol the construction site(s), as necessary, to minimize the potential for trespass, theft, and other unlawful activity.	Maintain log demonstrating compliance	During construction	Applicant	• LACDRP
ES/VCC-PDF-PS-7: The developer of future subdivisions which allow construction shall comply with the terms and conditions of the School Facilities Funding Agreement between The Newhall Land and Farming Company and the William S. Hart Union High School District.	Provide verification of compliance from School	Prior to building permit issuance	Applicant	• LACDPW
ES/VCC-PDF-PS-8: The developer of future subdivisions which allow construction shall comply with the terms and conditions of the School Facilities Funding Agreement between The Newhall Land & Farming Company and the Castaic Union School District.	Provide verification of Compliance from School District	Prior to building permit issuance	Applicant	• LACDPW
14. TRANSPORTATION/TRAFFIC				
ES/VCC-PDF-TR-1: Prior to any construction activities and/or issuance of required encroachment permits from the County of Los Angeles, the City of Santa Clarita, and/or Caltrans, a detailed Construction Traffic Management Plan shall be submitted to the relevant agency or agencies for review and approval, consistent with each agency's established codes and procedures. The Construction Traffic Management Plan shall include the following, as required by the applicable agency or agencies: • Provisions for traffic control during all phases of	Submit Construction Traffic Management Plan	Prior to construction and/or issuance of encroachment permit(s)	Applicant	• LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
construction activities to improve traffic flow on public roadways (e.g., flag persons), as needed; • Scheduling construction activities to reduce the effect on traffic flow on arterial streets, including limiting construction worker arrivals immediately prior to opening hours at Six Flags Magic Mountain; • Provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers on streets impacted by Project construction; • Detour signs, as needed; • Provisions to configure construction parking to minimize traffic interference; • Provision of adequate emergency access to all residences and businesses adjacent to the roadways impacted by the roadway construction (mitigation) activities during all phases of construction activities; • Provisions to maintain emergency access at all times in the event temporary lane closures are necessary for the installation of utilities; and • With the exception of off-site infrastructure improvements, prohibition against parking of construction-related vehicles on streets in predominantly residentially zoned areas.				
RMDP/SCP-TR-5: The Project applicant shall contribute its fair-share of the costs to add additional capacity to The Old Road north of Magic Mountain Parkway by increasing the planned six-lane roadway to a six-lane augmented roadway. (This mitigation measure is applicable to [State	Satisfy applicable Westside Bridge and Thoroughfare fees	Prior to issuance of building permit(s)	Applicant	• LACDPW

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
Certified EIR] Alternatives 2, 3, and 7 only.)				
RMDP/SCP-TR-7: The Project applicant shall contribute its fair-share of the costs to add additional capacity to Rye Canyon Road east of The Old Road by increasing the existing six-lane roadway to a six-lane augmented roadway. (This mitigation measure is applicable to [State Certified EIR] Alternatives 2 through 7.)	Satisfy applicable Westside Bridge and Thoroughfare fees	Prior to issuance of building permit(s)	Applicant	• LACDPW
RMDP/SCP-TR-8: The Project applicant shall contribute its fair-share of the costs to add additional capacity to Via Princessa east of Santa Clarita Road by increasing the planned six-lane roadway to a six-lane roadway. (This mitigation measure is applicable to [State Certified EIR] Alternatives 2, 3, 4 and 5 only.) *(As a clarification, Via Princessa would be increased from a planned six-lane roadway to an eight-lane roadway. The VCC Project's fair share of the cost of this improvement is 0.2%.)*	Satisfy applicable Westside Bridge and Thoroughfare fees	Prior to start of construction of this portion of Via Princessa	Applicant	• LACDPW
15. WILDFIRE				
ES/VCC-PDF-WF-1: Prior to any construction activities, a detailed Construction Fire Prevention Plan (CFPP) shall be prepared for the Modified Project and submitted to the Los Angeles County Fire Department (County Fire) for review and approval. The CFPP shall designate fire safety measures to reduce the possibility of fires during construction activities, including fire watch during hot works and heavy machinery activities (e.g., welding), spark arresters on all equipment, water supply via hose lines attached to hydrants, or a water tender pursuant to County Fire requirements, red flag period restrictions, and	Submit Construction Fire Prevention Plan	Prior to commencement of construction	Applicant	LACFD

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mandatory on-site fire resources. Employees would be presented with basic prevention fire training upon employment and the on-site safety officer and/or supervisor/foreman shall maintain documentation of training. Training shall include reviewing the Modified Project's Fire Protection Plan, and Occupation Safety and Health Administration (OSHA) Fire Protection and Prevention guidance on the proper response and notification of a fire and the use of fire extinguishing equipment. A site safety officer shall be responsible for the implementation of the CFPP, ensuring fire control equipment are maintained in good working conditions, monitoring combustibles onsite, conducting fire safety surveys, posting fire rules in an area visible to employees, stopping work activities that pose a fire hazard or are not in compliance with the CFPP, and reporting all fire ignited on site to County Fire.				
ES/VCC-PDF-WF-2: Prior to bringing lumber or combustible materials related to building construction onto the Modified Project Site, site improvements within the active development area shall be in place, including utilities, operable fire hydrants, and an approved, temporary roadway surface and fuel modification zones shall be established. Combustible materials may be utilized on-site prior to stated site improvements as needed for providing the improvements (e.g., wood forms for cast-in-place concrete). The applicant shall submit site improvement plans to County Fire prior to the issuance of the building permits.	Submittal of site improvement plans	Prior to issuance of building permits	Applicant	• LACFD
ES/VCC-PDF-WF-3: All vegetation management with the Fuel Modification Zones (FMZs) and common areas shall	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
be completed annually by May 1 of each year. Vegetation management may be completed more often for fire safety if determined necessary by County Fire. The Modified Project Homeowners' Association (HOA) or equivalent entity shall be responsible for the annual maintenance of all vegetation management within the FMZs in the common areas ensuring compliance with Los Angeles County Fire Department (County Fire) fuel modification guidelines. Property owners will be responsible for maintaining the Ember Resistant Zone (ERZ) and any fuel modification within their property. The annual maintenance would be managed and maintained by the Modified Project HOA through a qualified contractor that shall be required to meet fire safety requirements regarding equipment, the timing of maintenance, and fire suppression capabilities. Maintenance activities would include but not be limited to removing dead and dying material, removing undesirable plant species, and conducting thinning activities to maintain adequate spacing requirements. The Modified Project HOA or similar entity shall be responsible for ensuring the long-term funding and ongoing compliance with all provisions of the FPP including, vegetation planting, fuel modification of the perimeter areas, vegetation management on all common areas including roadsides, and open space areas under their control (if not considered Entrada Spineflower Preserve). The Modified Project HOA shall be responsible for the implementation of the annual FMZ maintenance subject to ongoing enforcement by County Fire.				
ES/VCC-PDF-WF-4: By June 1 of each year, a third-party inspector shall be hired by the Modified Project HOA	Include the requirement	Prior to issuance of	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
or equivalent entity to conduct an annual inspection of the Fuel Modification Zones (FMZs), including the Ember Resistant Zone (ERZ) and FMZs that are within private property. The inspector would evaluate the FMZs for compliance with regulations and that they are operating accordingly. The inspector shall notify the HOA of any non-compliant FMZs, recommend measures for remediation, and a timeframe for reinspection. The Modified Project HOA shall be responsible for the long-term funding of the inspections. An inspection report shall be submitted to County Fire each year documenting inspection results and compliance with County FMZ requirements.	in the CC&Rs	building permits		
ES/VCC-PDF-WF-5: The Modified Project residents and occupants shall be provided with ongoing education regarding wildfire, the FPP, and the Wildland Fire Evacuation Plan. The education program would support fire safety, evacuation practices, and fire safety features designed for the community. The Wildfire Education Program would provide target outreach to residents and occupants living in a fire risk area and would be a layered approach to maintaining high wildfire risk awareness that includes active and passive features. Contents of the educational program would be reviewed and approved by Los Angeles County Fire Department (County Fire) before printing and distribution. The Modified Project HOA or similar entity shall be responsible for the ongoing funding and maintenance of the wildfire education program. The educational program shall consist of the following: 1. Bi-annual email and mailers: Residents and occupants will be provided with bi-annual emails and	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
mailers in April and in August. Mailers would be sent to each property address and property owners would receive digital copies. Property owners would be highly encouraged to share this information with tenants should they choose to rent their property. The mailers and emails would include information such as reminders about annual defensible space inspections, maintaining the Ember Resistant Zone (ERZ), how to prepare for wildfire season, evacuation information, and how to prevent wildfires. There would also be links to various resources on where to get trusted information such as County Fire, 211 LA County, and Ready LA County. 2. Website: There shall be a dedicated community website with more detailed information and resources about wildfire awareness and prevention. The website would serve as a centralized resource for the fire education program and include information from the FPP. The website will also have fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents will also be able to use the website to sign up for an annual residential defensible space inspection from the HOA Fire Committee. 3. Community workshops and webinars: Two times a year there shall be either in-person or virtual community workshops. The goal of the workshops would be to cover various fire topics more in-depth. For example, this could include having a County Fire representative come to meet the community, a workshop on how to make a go-bag, a workshop on how to make a residential evacuation plan, or how to				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
maintain the home ignition zone. 4. New resident packet: All residents and new residents in the future shall also be presented with a wildfire awareness and safety package upon purchase or rental of a home. This would also be given to businesses as part of their employee training program. Within the package will be a memory stick with the evacuation plan, a list of fire protection features, information on the regional fire hazard, prohibited activities in fire risk areas, how to build a go-bag, and a list of agencies and resources for receiving trusted information. 5. Emergency alert campaign: Residents and businesses would be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, State, and Federal agencies alerts, health notifications, building alerts, and other updates from County, State, and Federal agencies. The campaign shall occur annually and encourage residents to sign up for Alert La County. Reminders would also be sent out in the bi-annual mailers and emails, on the community website, in the workshops, and the new resident package. 6. Fire watch groups: Within the community, there shall also be volunteer fire watch groups. These would be residents or businesses who volunteer to participate in a fire watch group for the community. During red flag warning days, this group would be responsible for reminding businesses and residents of fire-safe practices and restrictions. During red flag warning				

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
days, the fire watch group would also maintain vigilance of potential fires and would be trained on procedures for alerting County Fire in the event of a fire. 7. HOA fire safety committee: The fire safety committee shall be responsible for overseeing the maintenance of community-wide fire protection features. Residents would be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee will be responsible for the coordination of the 3rd party Fuel Modification Zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for organizing and coordinating an annual education workshop on how to maintain the ERZ. The committee shall also be responsible for the creation and distribution of the educational program for the Modified Project. The committee would serve as a communication link between County Fire and the community.				
ES/VCC-PDF-WF-6: The Modified Project shall formally adopt, practice, and implement a "Ready!, Set!, Go!" approach to evacuation through the creation of a Wildland Fire Evacuation Plan (WFEP) for the Modified Project. The WFEP would be based on standard evacuation planning used by the Los Angeles County Office of Emergency Services and provide residents and occupants with potential egress route information and procedures. The WFEP would be provided to the Entrada South and VCC residents and commercial tenants and posted on the community website. The WFEP would be reviewed by residents at least annually through organized meetings	Include the requirement in the CC&Rs	Prior to issuance of building permits	Applicant	• LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
and educational outreach by the HOA, Community Services District, or other means.				
RMDP/SCP- PH-7: All development of the Newhall Ranch Specific Plan site and the VCC and Entrada Planning Areas shall be in compliance with the provisions of Los Angeles County Code, Title 21, Chapter 21.24, for secondary evacuation access. (This mitigation measure would be achieved through compliance with the referenced County Code regulatory provisions, which establish secondary evacuation access standards. Because the Modified Project is required to comply with the County Code provisions referenced in this measure, no further action on this measure is required.)	Submit plans indicating compliance	Prior to issuance of building permits	Applicant	• LACDRP
RMDP/SCP- PH-14: At the time of final subdivision maps permitting construction in development areas that are adjacent to Open Area and the High Country SMAs, a Wildfire Fuel Modification plan shall be prepared in accordance with the fuel modification ordinance standards in effect at that time and shall be submitted for approval to the Los Angeles County Fire Department. The Wildfire Fuel Modification plan shall depict a fuel modification zone, the size of which shall be consistent with the Los Angeles County fuel modification ordinance requirements. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the fuel modification ordinance. The Wildfire Fuel Modification plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d)	Submit Wildfire Fuel Modification Plan	Prior to issuance of building permits	Applicant	• LACFD • LACDRP

Table 2 (Continued)
Draft Mitigation Monitoring And Reporting Program Valencia Commerce Center Planning Area

Project Design Feature/Mitigation Measure	Action Required to Demonstrate Compliance[a]	Timing	Responsible Party	Monitoring/ Enforcement Agency
water availability pursuant to the Los Angeles County Fire Department requirements. The fuel modification zone will not extend onto any spineflower preserve.				

[a] *As indicated below, the Project Applicant will, as appropriate, maintain an implementation log to document compliance with various mitigation measures and PDFs identified in this MMRP. Results contained in the implementation log will be submitted to the County in the Project Applicant's annual report to the extent applicable. Depending on the nature of the measure, compliance may be documented in a single occurrence (i.e., once the action is completed) or on an ongoing or periodic basis, as appropriate based on the specific requirements of each measure.*

[b] *All VCC measures included herein are excerpted from the Mitigation Monitoring Program (MMP) adopted at the September 17, 1991, Los Angeles County Board of Supervisors meeting, at which meeting the Board certified the VCC EIR (SCH No. 1987-123005). The measures within that MMP had different numbering, but the text of the measures remains unchanged herein.*

[c] *For detailed information concerning the Corps compensatory mitigation program for impacts to waters of the United States, please reference Appendix 11.0 of the Section 404(b)1 Alternatives Analysis, included in Appendix F1.0 of the Final EIS/EIR.*

Table 14
Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA and Tributaries

Trees	
red willow	*Salix laevigata*
arroyo willow	*Salix lasiolepis*
Fremont cottonwood	*Populus fremontii*
black cottonwood	*Populus balsamifera* ssp. *trichocarpa*
western sycamore	*Platanus racemosa*
Shrubs	
mulefat	*Baccharis salicifolia*
sandbar willow	*Salix exigua*
arrow weed	*Pluchea sericea*
Herbs	
mugwort	*Artemisia douglasiana*
western ragweed	*Ambrosia psilostachya*
cattail	*Typha latifolia*
bulrush	*Scirpus americanus*
prairie bulrush	*Scirpus maritimus*

This is a recommended list. Other species may be found suitable based on site conditions and state and federal permits.

Table 15
Additional RMDP/SCP BIO-22c Oak Tree Replacement Ratios

Trunk Diameter*	Mitigation Ratio
8–35	0.5:1
36+	2.5:1

** Trunk diameter measured at 4.5 feet above mean natural grade. Mitigation required for single-stem oaks with a minimum 8-inch diameter and multi-stem oaks with a combined diameter of 12 inches.*

Table 16
Optimal Woodland Densities and Acorn Planting Quantities, by Oak Woodland Type

Woodland Type	Average Existing Woodland Density (trees per acre)	Target Density for Newhall Land (trees per acre)
Coast live oak woodland	22	50
Mixed oak woodland	19	40
Valley oak woodland	16	25

APPENDIX 2

MITIGATION MONITORING AND REPORTING PROGRAM— ACRONYMS, SHORTENED TERMS, AND ABBREVIATIONS

ACOE	Army Corps of Engineers
AEA	Additional Environmental Analysis
AEA	Additional Environmental Analysis
AG	Agriculture and Forest Resources
APLIC	Avian Power Line Interaction Committee
AQ	Air Quality
BACT	Best Available Control Technology
BIO	Biological Resources
BMP	Best Management Practices
Cal/OSHA	California Division of Occupational Safety and Health
CalGEM	California Geologic Energy Management Division
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAM	Cismontane alkali marsh
CARB	California Air Resources Board
CBC	California Building Code
CC&R	Covenants, Conditions, and Restrictions
CDFG	California Department of Fish and Game (became CDFW)
CDFW	California Department of Fish and Wildlife (formerly CDFG)
CFPP	Construction Fire Prevention Plan
CGS	California Geological Survey

CHP	California Highway Patrol
CLAOTO	County of Los Angeles Oak Tree Ordinance
CLWA	Castaic Lake Water Agency
CMIP	Comprehensive Mitigation Implementation Plan
CNLM	Center for Natural Lands Management
Corps	Army Corps of Engineers
County Fire	Los Angeles County Fire Department
CR	Cultural Resources
CUP	Conditional Use Permit
CVN	Compliance Verification Notice
DAPTF	Declining Amphibian Populations Task Force
dbh	diameter at breast height
DOGGR	Department of Conservation, Division of Oil, Gas and Geothermal Resources (now CalGEM)
DPW	Department of Public Works
E-Bikes	Electric Bikes
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ERZ	Ember Resistant Zone
ES	Entrada South
EV	Electric Vehicle
FHWA	Federal Highway Administration
FMZ	Fuel Modification Zone
FPP	Fire Prevention Plan
GEO	Geology and Soils
GHG	Greenhouse Gas
GPS	Global Positioning System

GRR	Geomorphology and Riparian Resources
HARC	Hybrid Assessment of Riparian Communities
HOA	Home Owners' Association
IPM	Integrated Pest Management
ITP	Incidental Take Permit
JPA	Joint Powers Authority
LACDAC	Los Angeles County Department of Arts and Culture
LACDPW	Los Angeles County Department of Public Works
LACDRP	Los Angeles County Department of Regional Planning
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LID	Low Impact Development
MM	Mitigation Measure
MMP	Mitigation Monitoring Program
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
MTCO2e	Metric Tons Carbon Dioxide Equivalent
NEV	Neighborhood Electric Vehicle
NLMO	Natural Lands Management Organization
NOAA	National Oceanic and Atmospheric Administration
NOI	Noise
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupation Safety and Health Administration
PDF	Project Design Feature
PH	Potentially Hazardous
PR	Paleontological Resources

PS	Public Services
Retrofit Program	Building Retrofit Program
RMDP	Resource Management and Development Plan
RMDP/SCP	Resource Management and Development Plan and Spineflower Conservation Plan
RMP	Resource Management Plan
RMW	RMW Paleo Associates, Inc.
RWQCB	Regional Water Quality Control Board
SCAQMD	Southern California Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SCP	Spineflower Conservation Plan
SCPWD	Santa Clarita Public Works Department
SCV Water	Santa Clarita Valley Water
SEA	Significant Ecological Area
SEIR	Supplemental Environmental Impact Report
SMA	Special Management Area
SoCalGas	Southern California Gas Company
SOON	Surplus Off-Road Opt-In for NO_X
SP	Specific Plan
sq. ft.	square feet
SUSMP	Standard Urban Stormwater Mitigation Plan
SW	Jurisdictional Waters and Streams
SWPPP	Stormwater Pollution Prevention Plan
TDM	Transportation Demand Management
TMO	Transportation Management Organization
TR	Transportation/Traffic

TSF	thousand square feet
USFWS	United States Fish and Wildlife Service
UTS	Unarmored Threespine Stickleback
VCC	Valencia Commerce Center
VMT	Vehicle Miles Traveled
VR	Visual Resources
WEAP	Worker Environmental Awareness Program
WF	Wildfire
WFEP	Wildland Fire Evacuation Plan
WQ	Water Quality
WS	Water Supply
ZNE Report	Zero Net Energy Confirmation Reports
ZNE	Zero Net Energy

Stantec

To:	Eyestone Environmental	From:	Maria Morris and Daryl Zerfass Stantec
Project/File:	2042604600	Date:	November 2025

Reference: Entrada South and Valencia Commerce Center Transportation Impact Analysis Overview

This memorandum provides an overview of the Entrada South and Valencia Commerce Center (VCC) (Project) Transportation Impact Analysis (TIA) as additional information clarifying responses to comments made to the Regional Planning Commission regarding the Project. The Entrada South planning area is located just west of Interstate 5 (I-5) and The Old Road, north of the existing Westridge community, and directly east of the approved Mission Village development located within the Newhall Ranch Specific Plan. The VCC planning area is located along Commerce Center Drive just north of State Route 126 (SR 126) and just west of the I-5 freeway and The Old Road within the existing business and industrial park development.

Table 1 summarizes the Project description for each planning area.

Table 1 Project Description

Planning Area	VCC Planning Area
Entrada South	• 1,574 residential units • 730,000 square feet (SF) of non-residential commercial • elementary school • parks
VCC	• 3,400,000 SF of industrial/business park uses

Background

- The proposed Project would be located within the planning boundary of the previously approved Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP), which was approved in 2017 and was the subject of an EIR previously certified by the California Department of Fish and Wildlife (CDFW) (SCH No. 2000011025; hereafter referred to as the State-certified EIR). In the State-certified EIR, the development area covered by this report is identified as the “Entrada planning area” and the “VCC planning area.”
- Under the California Environmental Quality Act (CEQA), when evaluating project changes relative to a previously certified EIR, the additional CEQA analysis shall focus solely on the incremental changes in the project, changes in circumstances, or new information since the certification of the prior EIR. The “2017 Project” refers to the development analyzed by CDFW in 2017 in the State-certified EIR for the Entrada and VCC planning areas as part of its RMDP/SCP approval.
- The Entrada South and VCC Project as currently proposed reflects minor changes and refinements related to the development of the Entrada and VCC planning areas, as compared to the proposed

development evaluated in the State-certified EIR. As such, the proposed Entrada South and VCC Project is referred to in the TIA as the "Modified Project."

- The Modified Project results in a total reduction of trips of approximately 19% (i.e., a reduction in approximately 13,000 daily trips) compared to the 2017 Project as analyzed in the State-certified EIR.

CEQA Analysis (VMT)

- The Modified Project's potential impacts related to vehicle miles traveled (VMT) were evaluated in accordance with the County's updated TIA Guidelines and recommendations from the Governor's Office of Planning and Research Technical Advisory.

- Screening criteria outlined in the TIA Guidelines state that projects that generate less than 110 net new trips per day are concluded to have a less than significant impact in accordance with OPR's Technical Advisory. The Modified Project, which is predominately non-retail, would not generate more than 110 trips per day in comparison to the 2017 Project as analyzed in the State-certified EIR. Specifically, the Modified Project would generate approximately 13,000 ADT less than the 2017 Project, which is a 19% reduction in trips. Therefore, the Modified Project would meet the trip generation screening criteria and would not be subject to further VMT analysis.

- While not required, a VMT analysis was prepared for informational purposes, which demonstrated that the Modified Project would have a less-than-significant impact on VMT based on the County's TIA Guidelines.

- The Project will implement Transportation Demand Management (TDM) measures to reduce vehicle trips.

Non-CEQA Analysis (LOS)

- For non-CEQA purposes, the Modified Project's potential impacts related to level of service (LOS) metrics were evaluated in accordance with the County's TIA Guidelines. An operational analysis of the roadways and intersections potentially affected by development of the Modified Project was prepared and improvements related to site access were identified.

- A comparison of traffic forecasts for the 2030 horizon year (the Modified Project's anticipated buildout date) that are based on the 2017 Project from the State-certified EIR and based on the Modified Project, respectively, shows that the Modified Project generally results in lower traffic volume forecasts in comparison to the 2017 Project.

- For the Entrada South planning area, the Project will extend the westbound left turn lane at the Media Center Lane at Magic Mountain Parkway intersection. In addition, certain on-site roadway improvements are required to provide site access and intersection lane configurations and traffic controls recommendations are proposed in the TIA.

Reference: Entrada South and Valencia Commerce Center Transportation Impact Analysis Overview

- For the VCC Planning area, the Project will extend the northbound left turn lane at The Old Road at Turnberry Lane and construct a traffic signal at the intersection. In addition, certain on-site roadway improvements are required to provide site access and intersection lane configurations and traffic controls recommendations are proposed in the TIA.

The Project's draft TIAs were reviewed by the County multiple times, and the final TIA was approved by the County Public Works and Traffic Safety and Mobility Division on June 27, 2024. This memo provides a summary of the TIA and does not change the overall analysis or conclusions with the prior responses to comments. The comments do not raise issues that require changes to the TIA or the analysis in the SEIR.

Sincerely,

STANTEC CONSULTING SERVICES INC.

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RAMBOLL

ENVIRONMENT
& HEALTH

EYESTONE ENVIRONMENTAL
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REVIEW OF CLARK & ASSOCIATES COMMENTS FOR ENTRADA SOUTH AND VALENCIACOMMERCE CENTER (VCC)- ADDITIONAL INFORMATION RELATED TO RESPONSE TO FREEWAY DISTANCE, BACK-UP GENERATORS, AND VALLEY FEVER IMPACTS

Dear Eyestone Environmental:

Ramboll Americas Engineering Solutions, Inc. (Ramboll) has prepared this analysis regarding the air quality comments submitted in regards to the Entrada South and Valencia Commerce Center Project ("Project"; *Entrada South and Valencia Commerce Center Project Final Supplemental Environmental Impact Report (Project Nos. 00-210-(5), 87-150-(5); DA No. RPPL2025003357; VTTM No. 53295; Zone Change No. 00-210; CUP No. 00-210).* This letter provides additional information related to the responses to the Adams Broadwell Joseph & Cardozo comment letter dated September 30, 2025 ("ABJC comment letter"), specifically the supporting exhibit by Clark & Associates dated September 24, 2025 (Clark Exhibit) specific to freeway traffic, back-up generators, and Valley Fever.

Date: November 2025

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INTRODUCTION

The ABJC comment letter referred to its Exhibit A from Clark & Associates and claimed that the Final Environmental Impact Report (FSEIR) did not address the need for an operational health risk analysis, emissions from back-up generators, and Valley Fever exposure.

The Supplemental Environmental Impact Report (SEIR) and prior responses have previously addressed the issues raised in the ABJC comment letter and the Clark Exhibit. Specifically, the prior response includes a comprehensive discussion of how emergency generators are addressed and how the Project's proximity to Interstate 5 does not create unevaluated issues. The SEIR provides proper analysis and disclosure of Valley Fever. These issues are addressed further in response to the exhibit by Clark & Associates.

The information in this memo clarifies and adds to the prior responses to comments but does not change the overall analysis or conclusions. These comments do not require any changes to the Air Quality Technical Report or the SEIR.

RAMBOLL

ADDITIONAL INFORMATION RELATED TO SPECIFIC COMMENTS

1. No Health Risk Assessment of Operational Emissions Is Required Because the Modified Project Has No Sensitive Receptors Near the Freeway

As noted in the published Response to Comments,[1] the Draft SEIR includes a detailed analysis of air quality and health risk impacts and is supported by an expert technical report attached as Appendix 5.1 Air Quality Technical Report (AQ Report) of the Draft SEIR. The Draft SEIR appropriately accounted for the referenced the notice of preparation comment letter from South Coast Air Quality Management District (SCAQMD) by documenting that the Modified Project does not propose residences or other sensitive receptors within 500 feet of Interstate 5 or any other freeway.

Specifically, as described in the Draft SEIR, page 5.1-24, and Air Quality Report, Section 4.8, an analysis was performed consistent with the SCAQMD California Environmental Quality Act (CEQA) Handbook[2] and California Air Resources Board (CARB) Air Quality and Land Use Handbook[3] regarding evaluating health risks associated with siting criteria for sensitive receptors. Regarding freeway impacts, the CARB Air Quality and Land Use Handbook recommends health risks if a project sites sensitive receptors within 500 feet of a freeway, which is not the case here. The Modified Project's sensitive receptors are not closer to emissions sources than these minimum distances recommended in the SCAQMD CEQA Handbook or the CARB Air Quality and Land Use Handbook.

In the Clark Exhibit, it refers to a 2013 non-binding document from Los Angeles County Public Health Department (LACDPH)[4] titled "Air Quality Recommendations For Local Jurisdictions Air Quality Recommendations For Local Jurisdictions" that is advisory in nature and non-binding. The 2013 document states "buffer of at least 500 feet should be maintained between the development of new schools, housing or other sensitive land uses and freeways." As noted above, no schools, housing or other sensitive land uses will be located within 500 feet of a freeway for the Project. The Clark Exhibit also lists other "recommendations" from the County that go beyond the suggestions in the 2013 document for sensitive uses within 1,500 feet of a freeway. In any instance, LACDPH has reviewed the Project and SEIR as part of the County's administrative review process.

Additionally, it is also noted that the comment's request is what is commonly termed "CEQA–in–Reverse." As determined in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478, "that ordinary CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents." The ABJC comment letter requests for a health risk assessment of the Interstate 5 emissions on to the Project would be an assessment of the environment's impact onto

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[1] Entrada South and Valencia Commerce Center (VCC) Project, Final Document, Section 2 Response to Written Comments. Available at: https://files.ceqanet.lci.ca.gov/115152-16/attachment/tWfPs2wd-E3GqKa4N8AQ4GdvgxFgCqM-gX7KiSqU_7kw7IwAQQuknKIvIFtpKPxsO43yrnqPYKrEkDHu0. Accessed October 2025.

[2] SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Panning*, 2005. Available at: https://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf. Accessed: October 2025.

[3] CARB, *Air Quality and Land Use handbook, a Community Health Perspective*, 2005. Available at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf. Accessed: October 2025.

[4] Los Angeles County Department of Public Health, *Air Quality Near Freeways*. 2013. Available at: https://publichealth.lacounty.gov/eh/docs/safety/air-quality-near-freeways.pdf. Accessed: October 2025.

the Project, and thus it is not required. Nevertheless, the SEIR has assessed and considered if there may be a health risk posed to the potential future residents of the Project from Interstate 5, as described above, based on expert agency guidance from CARB and SCAQMD and will satisfy the CARB, SCAQMD, and LACDPH guidance.

For these reasons, no revisions to the FSEIR or additional mitigation measures are warranted.

2. Draft SEIR's Analysis for Back-up Generators was Appropriate, and No Additional Analysis or Mitigation is Required.

The Clark Exhibit makes comments regarding potential impacts from back-up generators and fire pumps without providing Project-specific information indicating these impacts have the potential to be significant for the Project. Although the comments are speculative and lack detail, we provide a technical response with the following.

As detailed in the previous Response to Written Comments, the Modified Project would include fewer residential back-up generators than the 2017 Project. This reduction is due to the Modified Project comprising 151 fewer dwelling units, combined with data from a 2020 CARB report indicating that one in eight California households owns a generator.[5] Furthermore, it should be noted that emergency generators and fire pumps are not typically installed at residential land uses and the Project has not proposed emergency generators or fire pumps for the new housing units.

The ABJC comment letter cites and relies on Clark Exhibit's to assert that the Modified Project failed to analyze emergency generators associated with commercial operations, including the planned hotel. However, the commenter has not provided any evidence that emergency generator use, if any, would be higher for the Modified Project compared to the 2017 Project. As described in the Draft SEIR, Air Quality Report, and previous Responses to Written Comments, the Modified Project shows a decrease in operational emissions for all criteria pollutants, with minor changes in proposed land uses that would decrease the total square footage compared to the 2017 Project. In other words, as detailed in the Draft SEIR, emissions that may result in health risks will be lower for the Modified Project than the 2017 Project due to enhanced regulatory standards and a cleaner equipment fleet based on meeting stricter environmental requirements. The SEIR also explains that, in addition, the Modified Project will further implement Project Design Features that will cut criteria pollutants by 50-80 percent depending on the pollutant compared to the estimates of the 2017 Project in the State-certified Environmental Impact Report (EIR).

With respect to generator use, the prior Response to Written Comments demonstrate that even if the commenter's suggestions were accepted, the Modified Project will reduce emissions for emergency generators at residential uses within the Project. For non-residential generators, the prior Response to Comments also clarified that the specific land uses planned at the Project Site are not expected to install emergency diesel generators, and even if some commercial sites install emergency generators as a precaution, those generators would likely exceed 50 hp in rating and would therefore be subject to various regulations. Nonetheless, the ABJC comment letter and Clark Exhibit continue to assert that the response does not address emergency generators and fire pumps for non-residential uses, particularly related to the proposed hotel use. The commenters do not provide any specific information or details

[5] CARB. Emission Impact: Additional Generator Usage Associated with Power Outage. 2020. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-01/Emissions_Inventory_Generator_Demand%20Usage_During_Power_Outage_01_30_20.pdf. Accessed: October 2025.

indicating the changes in the Modified Project would result in significant impacts. In any instance, to address this comment, Ramboll completed an analysis demonstrating that the Modified Project would still have an overall emission reduction if assuming additional emergency back-up generators and fire pumps for commercial land use such as a hotel. The emissions *reductions* are shown in **Table 1**. For the purpose of this analysis, a total of three 165kW industrial back-up generators and three diesel fire pumps with similar power are conservatively estimated for the Modified Project.[6] Their average daily operations were derived from applicable permit conditions from SCAQMD rules (i.e., Rule 1110.2[7] and Rule 1470,[8] respectively).

Table 1. Emissions Changes from Emergency Generators and Fire Pumps for Residential and Commercial Uses (Conservative Assumptions)

	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Reduction in Emissions from Residential Generators (lb/day)[1]	-0.35	-6.56	-7.34	-0.41	-0.04	-0.04
Increase in Emissions from Non–residential Generator (lb/day)[2]	0.12	2.27	2.09	0.17	0.01	0.01
Increase in Emissions from Non–residential Diesel Fire Pumps (lb/day)[3]	0.03	0.57	0.52	0.04	0.00	0.00
Net Generator Change (lb/day)	-0.20	-3.72	-4.73	-0.20	-0.03	-0.03

Notes:

1 Assuming one hour per day of emergency generator operation for 18 emergency generators. Emission factors for CO, NO_X, PM, and volatile organic compounds (VOCs) are based on Tier 4 emissions standards, assuming that the "NMHC + NO_X" standard can be allocated as 95 NO_X and 5 percent VOC. Emission factor for sulfur oxide (SO_X) is a default from South Coast AQMD.

2 Assuming 200 hours per year of emergency generator operation for three 165 kW industrial emergency generators. The operation hour is based on SCAQMD Rule 1110.2 permit condition. The number and size of back-up generator was conservatively estimated based available online sources. Emission factors for CO, NO_X, PM, and VOC are based on Tier 4 emissions standards, assuming that the "NMHC + NO_X" standard can be allocated as 95 NO_X and 5 percent VOC. Emission factor for SO_X is a default from South Coast AQMD.

3 Assuming 50 hours per year of fire pump operation for three 165 kW fire pumps. The operation hour is based on SCAQMD Rule 1470 permit condition. The number and size of fire pump was conservatively estimated to be the same as diesel back-up generator. Emission factors for CO, NO_X, PM, and VOC are based on Tier 4 emissions standards, assuming that the "NMHC + NO_X" standard can be allocated as 95 NO_X and 5 percent VOC. Emission factor for SO_X is a default from South Coast AQMD.

[6] Size and number of non-residential fire pumps are conservatively estimated to be the same as backup generators.

[7] SCAQMD. *Rule 1110.2 – Emissions from gaseous- and liquid-fueled engines*. 2019. Available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1110-2.pdf. Accessed: October 2025.

[8] SCAQMD. *Rule 1470 – Requirements for stationary diesel-fueled internal combustion and other compression ignition engines*. 2016, available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1470.pdf. Accessed: October 2025.

3. The SEIR has Adequately Addressed Valley Fever

Ramboll has analyzed and addressed the Valley Fever impact to the Modified Project in Section 4.6 of the Air Quality Technical Report (AQ Report), included as Appendix 5.1 of the SEIR. As described in the AQ Report, Valley Fever (*Coccidioidomycosis*) is caused by inhalation of spores from *Coccidioides* that occur naturally in native soils in arid and semi-arid regions. The AQ Report provides background information on the disease, including Valley Fever cases over recent years in Los Angeles County and describes a quantified range of Valley Fever symptoms based on information from public health agencies. Specifically, the AQ Report notes that approximately 60 percent of exposed individuals show no symptoms, most of the remainder experience mild, flu-like symptoms, approximately 5 to 10 percent may experience longer-term respiratory or systemic effects, and about 1 percent of cases may result in severe complications if the infection becomes disseminated (AQ Report, p. 40).

The AQ Report further explains that potential exposure is related to soil-disturbing activities that may release spores into the air. Because the Modified Project would involve less overall grading and would not expand the previously approved grading area, the potential for soil disturbance—and thus the potential for exposure to *Coccidioides*—would be reduced compared to the 2017 Project. Based on this analysis, the AQ Report concludes that the Modified Project would not result in any new or increased risk of Valley Fever infection or other health effects. Accordingly, the SEIR determines that potential impacts related to Valley Fever would remain less than significant. A determination of no significant impact indicates that no additional mitigation measures are required. Because the SEIR concludes, based on substantial evidence, that the Modified Project would not result in any increased impact related to Valley Fever, no further mitigation measure is necessary.

In addition, the SEIR identifies and incorporates applicable regulatory requirements and standard construction practices that further minimize dust generation, which is the primary mechanism by which Valley Fever spores could become airborne. Specifically, the SEIR describes SCAQMD Rule 403 (Fugitive Dust) as a mandatory requirement applicable to all grading and earthmoving activities (Draft SEIR, p. 5.1-37). The Modified Project will follow all dust suppression and control measures required by Rule 403, including requirements for watering exposed surfaces, stabilizing access roads, limiting vehicle speeds, and ceasing earthmoving operations during high wind conditions.

A Fugitive Dust Mitigation Plan prepared by Ramboll and included as Appendix D to the AQ Report incorporates best management practices consistent with SCAQMD guidance. Compliance with Rule 403 and implementation of the Fugitive Dust Mitigation Plan are also reinforced through multiple SEIR mitigation measures (MM-AQ-29, MM-AQ-30, MM-AQ-32, MM-AQ-33, MM-AQ-70, and MM-AQ-71), all of which include measures to control Fugitive Dust emissions. Implementation of these measures will ensure that dust—and, by extension, the potential for Valley Fever spores to become airborne—is effectively minimized during all construction phases.

The Clark Exhibit also stated that *Coccidioides* "are approximately 5 times smaller than typical PM_{10} particles... posing a significant risk to both onsite workers and nearby communities." His assertion that *Coccidioides* pose a significant risk to nearby communities is highly speculative and unsupported by evidence or data. Nevertheless, it is important to note that fungal spores, despite their small aerodynamic size, are transported and dispersed in the same manner as other airborne particles. Therefore, the best management practices outlined in the Fugitive Dust Mitigation Plan, along with the Modified Project's compliance with Fugitive Dust regulations, also address potential offsite exposure.

Consequently, the SEIR provides substantial evidence demonstrating that the Modified Project would not result in significant health impacts related to Valley Fever. The combination of reduced grading activity relative to the approved Project, mandatory compliance with SCAQMD Rule 403, and the implementation of best management practices listed in the Fugitive Dust Mitigation Plan ensures that the potential for increased exposure to *Coccidioides* is less than significant. Therefore, the SEIR has adequately addressed Valley Fever, and no additional analysis or mitigation is warranted; however, for reference, additional information is provided below.

a. The Potential for Valley Fever in the Region is a Known Issue and Has Been Known Since Prior to State-certified EIR.

In soil, *Coccidioides* grow as a network of branching hyphae. Small rodents and other animals are thought to serve as a medium for *Coccidioides* growth. As the hyphae grow, they produce chains of asexual spores known as arthroconidia, which become airborne when the soil is disturbed.

Coccidioides prevalence in air is highly variable. More studies are needed to better understand how they are transported and dispersed in ambient conditions, once disturbed and/or under high wind events. According to the National Institutes of Health, *Coccidioides* distribution in air and soil are sporadic and uneven. The absence of commercially available air and/or soil sampling methods, and the absence of regulatory-approved laboratory analytical methods, makes worksite-specific characterization of *Coccidioides* not feasible. It is not uncommon, even in studies sampling in highly endemic areas, for the fungus to be detected in few or none of the soil samples. Current regulations and guidance do not recommend nor require sampling because of these factors.

The Clark Exhibit asserted that the FSEIR did not address concerns over exposure to Valley Fever in the region. As noted above, the SEIR acknowledges that Valley Fever (coccidioidomycosis) is a recognized health concern in the region and has discussed this in Section 4.6 of the Air Quality Technical Report (AQ Report), included as Appendix 5.1 of the SEIR. The potential risk of Valley Fever, including related to a development Project, has been a known issue for decades, even predating the publication of the State -certified EIR.[9,10,11] Clark Exhibit also acknowledges Valley Fever risks date back to at least 1968, based on the studies it references (e.g., footnote 8 of the Clark Exhibit). Therefore, risks related to Valley Fever were known or could have been known at the time the State-certified EIR was prepared.

In addition, the sources cited in the Clark Exhibit should be interpreted with caution when applied to the proposed Project. First, while the Project Site is located in Service Planning Area (SPA) 2 of Los Angeles County, which reported the highest number of Valley Fever cases (483) in 2022 as noted in the Clark Exhibit, it is noteworthy that SPA 2 also has the largest population in the County.[12] On a per-capita basis, SPA 2 actually has less than one-third the cases of SPA 1. Therefore, the Clark Exhibit is

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[9] Centers for Disease Control and Prevention (CDC). *Increase in Coccidioidomycosis — California, 2000–2007. Morbidity and Mortality Weekly Report (MMWR)* 58, no. 5 (2009): 105–109. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5805a1.htm. Accessed: October 2025

[10] Charles Edward Smith. "Epidemiology *of Acute Coccidioidomycosis with Erythema Nodosum ('San Joaquin' or 'Valley Fever')".* American Journal of Public Health 30, no. 6 (1940): 600–611. https://doi.org/10.2105/AJPH.30.6.600. Accessed: October 2025

[11] T.N. Kirkland. *"Coccidioidomycosis: A Reemerging Infectious Disease."* Emerging Infectious Diseases 2, no. 3 (1996): 192–199. https://doi.org/10.3201/eid0203.960305. Accessed: October 2025

[12] Los Angeles County Department of Public Health, *Los Angeles County Population Estimates*. 2022. Available at: http://www.publichealth.lacounty.gov/epi/docs/2022-LAC-Population-8RE.pdf. Accessed: October 2025

misrepresenting the relative risk in SPA 2 by selectively reporting only total case counts without providing the population context.

And second, the comment cites the Antelope Valley study to suggest a higher risk of exposure from soil disturbance. However, this comparison is not directly applicable or relevant. The Antelope Valley study assessed soil disturbance across a much larger area, encompassing multiple projects conducted between 2000 and 2014, and the study area is located in the Mojave Desert—a high desert basin with environmental conditions distinct from those at the Project Site.

In summary, while Valley Fever is a known regional issue, the data and examples cited in the Clark Exhibit is not accurately representative of the potential risk associated with the Modified Project, which, as indicated above, was analyzed in the SEIR and determined to be less than significant.

b. The Project Is Further Subject to Substantial Regulatory Oversight and Best Practices Established by Cal/OSHA to Manage Exposure Risk of Valley Fever Identified by Clark and Associates.

As elaborated in Response 3 above, the Clark Exhibit incorrectly claims that the Modified Project does not sufficiently prevent exposure to *Coccidioides*. The Modified Project will reduce grading activity relative to the 2017 Project, comply with SCAQMD Rule 403, and implement best management practices listed in the Fugitive Dust Mitigation Plan. All these measures together ensure that the relative exposure to *Coccidioides* is less than the 2017 Project and therefore less than significant.

Additionally, the Modified Project will also fully comply with applicable Cal/OSHA regulations regarding Valley Fever. Specifically, Cal/OSHA regulates worker protection and harmful exposures via the following California Code of Regulations, Title 8, sections:

- Section 342 - Reporting Work-Connected Fatalities and Serious Injuries
- Section 3203 - Injury and Illness Prevention Program
- Section 5141 - Control of Harmful Exposures to Employees
- Section 5144 - Respiratory Protection
- Section 14300 - Employer Records of Occupational Injury or Illness (Log 300)

These standards are applicable to the regulation of worker exposures to *Coccidioides* and define employer responsibilities for identifying and communicating occupational hazards to affected employees, implementation of site-specific written programs and controls to minimize employee's exposures, and that require immediate reporting of serious injury, illness or death from Valley Fever.

Training is a critical component of the site-specific Injury and Illness Prevention Program and must include a review of key definitions related to Valley Fever, high-risk areas at the worksite, a review of the specific job tasks and conditions that increase potential for exposure, personal risk factors, water–based dust suppression protocols, hygiene practices, the importance of early detection, diagnosis and treatment, how to recognize signs and symptoms, reporting symptoms, treatment and prognosis.

Similarly, employers in the construction industry are also required to follow the requirements to train workers on prevention in California Labor Code 6709.

In summary, the Modified Project is also subject to substantial regulatory oversight and best practices established by Cal/OSHA and can effectively protect workers from exposure risk of Valley Fever.

RAMBOLL

Please feel free to contact the undersigned if you have any further questions. Thank you for the opportunity to assist you with these matters.

Sincerely,

Eric C. Lu, MS, PE
Reginal Director

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TW:ta

COUNTY of VENTURA
Board of Supervisors

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KELLY LONG
Third District

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November 7, 2025

Supervisor Kathryn Barger
Los Angeles County Board of Supervisors
383 Kenneth Hahn Hall of Administration
Los Angeles, California 90012

Re: Entrada South (PROJECT NO. 00-210) and Valencia Commerce Center ("VCC") (PROJECT NO. 87-150):

Dear Supervisor Barger,

As the Supervisor representing the 3rd District in Ventura County, I wanted to acknowledge the outreach my office has received from FivePoint regarding their proposed Entrada South and Valencia Commerce Center projects currently under consideration in Los Angeles County. Sandy Sanchez from FivePoint provided a comprehensive briefing, and I appreciate the effort they have made to keep regional leaders informed and engaged.

FivePoint's proactive communication reflects a thoughtful approach to regional collaboration and transparency. Their willingness to engage neighboring jurisdictions demonstrates good stewardship and recognition of the interconnected nature of our communities and economies across county lines.

I value the opportunity to have been briefed on their plans and commend their commitment to open dialogue with stakeholders beyond their immediate project area. Thank you for your consideration as you review this matter.

Sincerely,

Kelly Long

Kelly Long, Supervisor 3rd District
County of Ventura

Cc: Supervisor Hilda Solis, 1st District
Supervisor Holly Mitchell, 2nd District
Supervisor Lindsey Horvath, 3rd District
Supervisor Janice Hahn, 4th District

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From:	Martin Tripp
To:	PublicHearing
Subject:	Agenda Item #90 - Entrada South and Valencia Commerce Center, or VCC
Date:	Sunday, November 16, 2025 9:46:23 AM

I am in opposition to these projects. As a resident of Santa Clarita for nearly 40 years I have witnessed first hand how the community continues to move further away from the beauty and openness of what once characterized our valley.

The latest example of how growth in the community comes at an expense to existing residents is evidenced by the Bouquet Canyon Project with the development of over 375 residential units and considerable roadway expansion. What this means to existing residents is years of inconvenience from ongoing construction, street closures, and rerouting of traffic, with reduced ingress/egress to personal residences and places of business. Synactico Investments has plans to build more homes on over 328 acres north of Vasquez and Bouquet Canyon roads. These projects are destroying the natural beauty of the area we live in and decimating habitat for wildlife.

Back to the Entrada South and Valencia Commerce Center projects. In an article from The Signal newspaper dated October 1, 2025, 5th District Supervisor Kathyrn Barger is quoted as saying "these projects reflect responsible growth, preservation of natural open spaces areas, and a high level of sustainability to support the long-term well-being and quality of life for the communities I represent." Perhaps in isolation these two projects reflect responsible growth, but when they are examined as part of the collective development within Santa Clarita they will drain the community of vital resources (water), reduce open spaces, and add to traffic congestion. The increased infrastructure required by these developments comes with a price tag paid for by taxpayers/residents.

These projects are not being built for the enjoyment or benefit of existing residents or the broader community. Many of these homes are being built in high fire risk areas which are becoming increasingly more difficult to insure. The Board of Supervisors should enact a moratorium on building residences in high risk areas and force these developers to build more responsible projects that fit better within the community landscape to truly preserve more of our natural resources. These projects should not be rubber stamp approved which is what appears to be being done today.

Santa Clarita was once a beautiful place to live but its beauty is being destroyed by overdevelopment. Why aren't the City of Santa Clarita and the Board of Supervisors doing more to control growth and protect the character of our city?

Sincerely,

Martin Tripp, Citizen of Santa Clarita