Addendum to Environmental Impact Report for the Marina del Rey Marriott Courtyard and Residence Inn Hotel Project

(Formerly Woodfin Suite Hotel and Timeshare Resort Project)

Marina del Rey, Unincorporated Los Angeles County, California

State Clearinghouse No: 2007031114

Project No. TR067861
Coastal Development Permit No. 200600007
Conditional Use Permit No. 200600288
Parking Permit No. 200600020
Variance No. 200600012
Environmental No. 200600216

October 2014

Addendum to Environmental Impact Report for the Marina del Rey Marriott Courtyard and Residence Inn Hotel Project

(Formerly Woodfin Suite Hotel and Timeshare Resort Project)

Marina del Rey, Unincorporated Los Angeles County, California

State Clearinghouse No: 2007031114

Project No. TR067861
Coastal Development Permit No. 200600007
Conditional Use Permit No. 200600288
Parking Permit No. 200600020
Variance No. 200600012
Environmental No. 200600216

Prepared for:

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, California 90012

Prepared By:

PCR Services Corporation
2121 Alton Parkway, Suite 100
Irvine, California 92606
Contact: Daryl Koutnik, PhD, Principal

October 2014

Table of Contents

List of Figures

List of Tables

I. PURPOSE OF ADDENDUM AND CEQA REQUIREMENTS

The Board of Supervisors ("Board") of the County of Los Angeles ("County") certified on April 26, 2011, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project Final Environmental Impact Report, State Clearinghouse Number 2007031114, which consists of the Draft Environmental Impact Report ("Draft EIR") dated September 2008, Technical Appendices to the Draft EIR dated September 2008, the Re-Circulated Draft Environmental Impact Report ("Recirculated Draft EIR") dated June 2009, and the Final Environmental Impact Report, including Responses to Comments dated February 2010, collectively referred to as the ("Final EIR,") and found that the Final EIR was completed in compliance with the California Environmental Quality Act (Public Resources Code Section 21000, *et seq*.) ("CEQA"). The Board certified that it received, reviewed and considered the information contained in the Final EIR. Prior to the Board certification, the Final EIR was certified by the Regional Planning Commission ("Commission") in March 2010. Having been certified by both the Commission and the Board, the Final EIR is herein referred to as the "Certified EIR".

The Certified EIR analyzed five separate project components located on three different parcels. These included (1) Neptune Marina on Parcel 10R; (2) Neptune Marina on Parcel FF; (3) the Woodfin Suite Hotel and Timeshare Resort on northerly portion of Parcel 9U; (4) a restored public wetland and upland park project on the southerly portion of Parcel 9U; and (5) a public-serving boat anchorage proximal to Parcel 9U within Marina del Rey Basin B. Component 1 includes the landside development of Parcel 10R with of a 400-unit, residential apartment community and waterside development in adjacent Basin B with a small craft anchorage consisting of 174 boat spaces. Component 2 includes the development of Parcel FF with a 126-unit apartment building and appurtenant improvements. Components 4 and 5 are associated with and offset the loss of open space-designated land (which currently is developed with a public surface parking lot) that will result from the development of Neptune Marina Parcel FF. All of these project components, with the exception of the Woodfin Suite Hotel and Timeshare Resort, were approved by the Board at the April 2011 public hearing. This Addendum addresses only the Component 3 (hotel) on the northerly portion of Parcel 9U, which the Board remanded back to the Commission for further consideration at the April 2011 public hearing.

The original development analyzed in the Certified EIR was referred to as the "Woodfin Suite Hotel and Timeshare Resort" and was proposed on the northerly approximately 2.20 acres of Parcel 9U. That proposed project consisted of a 19-story hotel structure with 288 hotel and timeshare suites consisting of a minimum of 152 conventional hotel suites and 136 timeshare suites, meeting rooms, a restaurant and bar/lounge, a spa/fitness center (including an outdoor pool), sundry shop and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities. The building also proposed an outdoor terrace and a large third floor deck with a pool, which overlooked the waters of the marina. In total, up to 21 fee-based "self-park" and 339 valet-managed parking spaces were proposed in a six-level parking garage, with one level below grade, for a project total of 360 parking spaces (herein referred to as the "Original Project"). The Original Project included a rooftop helistop, and the sale of alcoholic beverages for on-site consumption at the proposed accessory hotel restaurant and outdoor terrace dining area. A parking permit for shared use of on-site parking and a variance to allow a reduced yard setback adjacent to the waterfront pedestrian promenade were also part of the original discretionary request.

The height of the hotel structure was proposed to not exceed 225 feet (exclusive of appurtenant, screened rooftop equipment) when measured per county standards, and consistent with the Marina del Rey certified LCP. The previously proposed hotel/timeshare resort structure was oriented on the site in a fashion that maximized public views to the water from Via Marina. The structure would front on Via Marina over the northerly portion of the parcel. Also consistent with the LCP height standards allowing for a building with a maximum height of 225 feet on this parcel, the project was designed with an unobstructed view corridor comprising at least 40 percent of the parcel's frontage on Via Marina; this large public view corridor was provided over the public wetland park to be developed on the southerly approximately 1.46 acres of Parcel 9U. Public viewing of the harbor was to be enhanced through the project's development of a 28-foot-wide public pedestrian promenade along the parcel's entire waterfront. The public could access both the public waterfront promenade and adjacent wetland park at multiple access points provided within the hotel/timeshare resort facility.

Following completion of the Final EIR, the applicant for the Woodfin Suite Hotel and Timeshare Resort Project revised the project design at the direction of the Board, which, as noted, remanded the project back to Commission for further consideration. The applicant has significantly reduced the project's height, size and massing: the overall height has been reduced from 225 feet plus rooftop appurtenances to a maximum height of approximately 72 feet (approximately 61 feet along the Via Marina frontage with the approximately 72-foot tower slightly setback from Via Marina). The project would still provide 288 hotel rooms but in two lower-rise building "wings" oriented to the north (Parcel 10R-facing) and south (wetland park-facing) instead of a single 19-story tower. In addition, the applicant has eliminated the timeshare component.

Like the Original Project, the revised project (herein referred to as the "Reduced Scale Project") would include meeting rooms, which can be combined to a single larger space, a restaurant facing the Marina, a dining deck facing the Marina, a bar, pool deck, and a sundry shop. The Reduced Scale Project would not include a spa or a formal ballroom, but would include a gym for hotel guests. The Reduced Scale Project would provide 212 parking spaces in a single level, as compared to the original six levels of parking. The originally proposed promenade amenities and the wetland park amenities and interface between the two remain unchanged, as do the hotel vehicular access and truck loading element on Via Marina.

The reduced scale of the ancillary elements under the Reduced Scale Project (i.e. , elimination of the formal ballroom, replacement of the spa with a gym for hotel guests) would likely reduce impacts with respect to issues that are affected by the scale of such uses, including traffic, mobile air quality, mobile noise, public utilities, and public services. However, for the purposes of these findings, the Board has conservatively assumed no reduction and that the Reduced Scale Project would generally generate the same level of impacts as the original project, except with respect to visual character.

The Board and Commission determined, based on the FEIR, that Project design features, mitigation measures, and conditions of approval will reduce Project-specific impacts concerning Geotechnical Resources and Soils, Operational Noise, Hydrology and Drainage, Operational Air Quality, Biota, Traffic, Sewer Service, Water Service, Solid Waste, Education, Police Services, Fire Services, Library Services, Parks and Recreation, Population and Housing, and Land Use and Planning to less than significant levels. In addition, the Board and Commission determined that there are no significant cumulative impacts, or that Project design features, mitigation measures, and conditions of approval will reduce the Project's contribution to less than cumulatively considerable levels, concerning Geotechnical Resources and Soils,

Operational Noise, Hydrology and Drainage, Operational Air Quality, Wind Patterns, Global Climate Change, Biota, Visual Character from Distant Locations, Sewer Service, Water Service, Education, Police Services, Fire Services, Library Services, and Parks and Recreation.

The Board and Commission determined that, although FEIR mitigation measures and design features included as part of the Project will reduce the following effects, the following effects cannot be feasibly or effectively mitigated to less than significant levels: construction-related Noise and Vibration impacts, construction-related Air Quality impacts, Visual Character impacts from immediately adjacent locations, cumulative construction Noise and Vibration impacts, cumulative construction Air Quality impacts, cumulative Visual Resources impacts relating to projects in the immediate Project vicinity, cumulative Construction Traffic impacts, cumulative Operational Traffic impacts, cumulative Solid Waste service impacts, cumulative Population and Housing impacts, and consequently cumulative impacts to Land Use and Planning.

The purpose of this Addendum is to analyze the "Marina del Rey Marriott Courtyard and Residence Inn Hotel" (also referred to as the "Reduced-Scale Project") proposed for development on the northerly approximately 2.2 acres of Marina del Rey Parcel 9U to determine whether any significant environmental impacts that were not identified in the original Certified EIR would result, or whether previously identified significant impacts would be substantially more severe. This document has been prepared in accordance with State CEQA Guidelines (Title 14, Cal. Code Regs., 15000 *et seq*.) Sections 15162 and 15164.

Section 15162(a) of the State CEQA Guidelines provides that, for a project covered by a Certified EIR or adopted negative declaration, preparation of a subsequent EIR or negative declaration is not required unless oneor more of the following conditions occur:

1. *Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant 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 or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of the 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 of the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*

    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 or negative declaration;*

    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 or negative declaration would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measures or alternative.

Section 15164(a) of the State CEQA Guidelines states:

The lead agency or responsible agency shall prepare an addendum to a previously Certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

A. Changed Circumstances

Section 15162 of the State CEQA Guidelines states that a Subsequent EIR would be required if (1) substantial changes are proposed in the project 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; (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, becomes available. Such changes in circumstances include a redesigned, lower-scale project, changes in the buildout year/implementation schedule, and changes to the cumulative development in the project area.

First, changes to the proposed development within Parcel 9U have been proposed in response to the Board's April 2011 action remanding the project back to the Commission for its further consideration. Project changes have resulted in a lower-scale hotel project on the same site as the previously proposed 19-story hotel. Overall, the square footage of development proposed for the Project site would be reduced from approximately 547,000 square feet under the original design to approximately 263,400 square feet under the current proposal. The changes in the project are intended to reduce the impacts identified in the Certified EIR, and, as such, these changes to the project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

With regard to changed circumstances, the buildout year for the proposed hotel has been updated to reflect the anticipated timing of project implementation, and an updated list of related projects has been prepared to reflect current development projects in the surrounding area to determine cumulative traffic conditions. Figure 6 in the 2007 Traffic Study (included in Attachment E of theSupplemental Traffic Impact Analysis [the "Supplemental TIA"], included as **Appendix B** of this Addendum) illustrates the location of the related projects identified for Year 2007 conditions. The development and associated trip generation are summarized in Table 8 of the 2007 traffic study (included in Attachment E of the Supplemental TIA). The location of the related projects evaluated under Year 2013 conditions are illustrated in Attachment F of the Supplemental TIA (Appendix B of this Addendum) and the development and associated trip generation are summarized in Attachment G of the Supplemental TIA. Based on a comparison of the related projects between Year 2007 and Year 2013 conditions, it can be concluded that, since the March 20, 2010 EIR certification for the Original Project, there have been no significant changes to related projects in the project area that could have substantial implications with regard to cumulative impacts that were previously

analyzed. Overall, under Year 2013 conditions, there are fewer related projects in the immediate vicinity of the Project site, as shown in the respective related project location maps referenced above. Additionally, as summarized in **Table 5**, *Baseline Traffic Comparison Traffic Study (2007) vs. 2013 Traffic Volumes*, and discussed in Section IV.7, *Traffic/Access*, of this Addendum, overall cumulative traffic generation for Year 2013 conditions is lower than under Year 2007 conditions.

In addition, no significant changes to regulations or planning documents such as the General Plan, the Zoning and Planning Code, and the Southern California Association of Governments' (SCAG's) 2008 Regional Transportation Plan (RTP) and Compass Blueprint Growth Plans have occurred that would be relevant to the revised hotel design (although SCAG recently released the updated 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS], the updates to the RTP do not have a specific effect on the project area or the findings of the Certified EIR). However, in February 2012, the California Coastal Commission certified a major amendment to the Marina del Rey Local Coastal Program. Changes codified in the 2012 major amendment to the LCP provided additional regulations affecting development of a public Wetland Park on the southern portion of Parcel 9U (for example, the LCP land use category for the southerly portion of the subject Parcel 9U was changed from "Hotel" to "Open Space" to accommodate the Wetland Park), but did not materially affect the site-specific development standards pertaining to the Reduced-Scale Project.

Thus, no substantial changes in plans, policies, and regulations were identified that would present new conflicts that would result in significant or substantially more severe physical impacts on the environment. Additionally, no substantial changes to the environmental setting in the Project area have been identified since the certification of the EIR. Overall, no substantial changes in circumstances have occurred since certification of the EIR that would result in new significant impacts or substantial increases in the severity of previously identified significant impacts. Lastly, no other additional information of substantial importance has been found that would warrant preparation of a Subsequent EIR pursuant to Section 15162 of the State CEQA Guidelines.

Based on the analysis presented herein, it has been determined that the Reduced Scale Project would not result in any new significant impacts or a substantial increase in the severity of an impact disclosed in the Certified EIR or otherwise require preparation of a subsequent of supplemental EIR. Therefore, this Addendum to the Certified EIR is the appropriate CEQA document for the Reduced Scale Project. The environmental analysis relies in part on the analyses completed in the previous EIR and directly references the EIR, where appropriate.

II. INTRODUCTION

A. Project Location

The Project site for the proposed Marina del Rey Marriott Courtyard and Residence Inn Hotel (the "Reduced-Scale Project," previously proposed as the Woodfin Suite Hotel and Timeshare Resort) is located in the western portion of the Marina del Rey small-craft harbor. Refer to **Figure 1**, *Project Location Map*, for the Project site location in the regional and local context. Parcel 9U, within which the Reduced-Scale Project would be implemented, consists of 3.66 landside acres and is bound by Marina del Rey Parcel 10R to the north, Via Marina to the west, Basin B of Marina del Rey to the east and Tahiti Way to the south. The Reduced-Scale Project, however, would be confined to the northernmost approximate 2.2-acre portion of

Parcel 9U, as previously proposed. The restored public wetland and upland park (the "Wetland Park") (which obtained unanimous Coastal Commission approval in December 2012 per CDP No. A-5-MDR-12-161) would comprise the approximately 1.46-acre southern portion of Parcel 9U though, having been previously approved by the Coastal Commission, the Wetland Park is thus not part of the Reduced-Scale Project.

B. Project Background

Pursuant to the provisions of CEQA, as discussed above, the County, serving as the Lead Agency, released the Draft EIR for the combined Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project on September 8, 2008 for public comment [Woodfin Suite Hotel and Timeshare Resort project number TR067861, RENVT200600216; State Clearinghouse #2007031114]. The comment period was 45 days, ending on October 22, 2008. A Recirculated DEIR was made available for public review from June 11, 2009 until July 27, 2009. The Commission certified the EIR on March 10, 2010, while the Board certified the EIR on April 26, 2011. Project opponents appealed the Commission approval action to the County Board of Supervisors, who, in turn, remanded the hotel project back to the Commission for its further review of a lower-in-height hotel concept.

Around June 2012, the public Wetland Park planned for development on the southerly approximately 1.46 acres of the parcel was undergoing further study and design changes. These changes were associated with the Coastal Commission staff's review of an appeal to the County's approval of the Coastal Development Permit for the Wetland Park that had been filed with the Coastal Commission by opponents of the Wetland Park. The Coastal Commission unanimously approved a Coastal Development Permit for the Wetland Park in December 2012. An opponent of the Wetland Park filed a lawsuit challenging the Coastal Commission's approval of the Coastal Development Permit for the Wetland Park. The parties to the litigation settled the litigation in May 2014, and the court formally dismissed the litigation with prejudice in June 2014.

Since certification of the EIR by the County, the project applicant, MDR Hotels, LLC, (formerly The Hardage Group, herein referred to as "Applicant") has proposed a revision to the project design that would reduce the height and massing of the hotel structure and eliminate the timeshare units. (The case numbers for the Reduce-Scale Project are Coastal Development Permit No. 200600007, Conditional Use Permit No. 200600288, Parking Permit No. 200600020, and Variance No. 200600012.) At the direction of the Board, the applicant has revised the project to reduce the building height through a redesigned hotel with less intensive visitor-serving uses. The proposed revisions include a reduction in height, building mass overall floor area and parking spaces as compared to the Original Project. Like the Original Project, the primary access to the Reduced-Scale Project will be from Via Marina.

To address the proposed revisions, an Addendum to the Certified EIR has been prepared. The County has determined that an Addendum is the appropriate subsequent CEQA document to address the Reduced-Scale Project pursuant to the State CEQA Guidelines Section 15164, as explained in more detail above in Section I, *Purpose of Addendum and CEQA Requirements*. Pursuant to State CEQA Guidelines Section 15164(c), this Addendum is not required to be circulated for public review, but will be attached to the Certified EIR.

PCR

N

0 400 800 Feet

Project Location Map

Marina del Rey Marriott Courtyard and Residence Inn Project

Source: ESRI Street Map, 2009; PCR Services Corporation, 2014.

FIGURE

1

This page is intentionally blank.

III. APPLICATION OF PREVIOUSLY CERTIFIED ENVIRONMENTAL DOCUMENTATION TO THE REDUCED-SCALE PROJECT

A. Original Project

The Original Project analyzed in the Certified EIR entailed site preparation and construction on the northerly approximately 2.2 acres of the 3.66-acre Marina del Rey Parcel 9U of a 19-story (225-foot-tall, exclusive of screened rooftop mechanical equipment, emergency helistop and elevator machine room), 288-room hotel and timeshare resort structure (a minimum of 152 conventional hotel suites and 136 timeshare suites) with the following accessory uses in conjunction with the primary hotel/timeshare use: restaurant with interior and outdoor terrace dining areas and kitchen; cocktail lounge; sundry shop; hotel spa/fitness room; banquet and meeting rooms; pool; pre-function areas; and resort administrative offices and "back of house" areas (e.g., laundry and storage, etc.). The Original Project included a six-level parking garage adjoining the hotel/timeshare structure to the north accommodating 360 parking spaces, 21 of which were to be fee-based "self-park" spaces and the balance of which were intended to be valet-managed parking spaces. The Original Project also included construction of a 28-foot-wide public pedestrian promenade along the parcel's entire water frontage, including public amenities (shade benches, light standards, drinking fountains, decorative railing and paving, and a water taxi gateway landing feature at the gangway entrance to the public anchorage that will front the landside parcel).

The Original Project required approximately 44,000 cubic yards of grading, with approximately 1,800 cubic yards of cut soil being balanced on-site and approximately 42,200 cubic yards of cut soil being exported to a landfill located in Los Angeles County for use as daily cover.

At the request of the Board, the Original Project was redesigned to provide the same number of hotel rooms (288) while substantially reducing the height and overall size/massing of the hotel. The "Reduced-Scale Project" is described in detail below. In general, however, the Reduced-Scale Project design differs from that described in the publicly circulated EIR for the Original Project in several key ways, summarized here:

1. A reduction in the structure height from 225 feet to a maximum of approximately 72 feet.

2. A reduction in the maximum number of building floors from 19 to 6.

3. An overall reduction in the total number of 2-bedroom units from 83 to zero (0).

4. A reduction in the number of parking spaces from 360 to 231, which exceeds the County code mandated parking spaces for the Reduced-Scale Project (17 of the 21 public parking spaces will be valet parked instead of self park).

5. A reduction in the number and size of the accessory uses associated with the hotel, and a concomitant reduction in occupancy load (reduced size of spa and fitness center, and elimination of banquet kitchen, ballroom and three meeting rooms).

6. Elimination of the (136) timeshare units within the hotel operation and withdrawal of the associated tentative tract map.

7. Elimination of the need for an emergency rooftop helistop.

B. Reduced-Scale Project

1. Overview of the Reduced-Scale Project

The Reduced-Scale Project includes development of the northerly approximately 2.2 acres of Parcel 9U and is referred to as the "The Marina del Rey Marriott Courtyard and Residence Inn Hotel." Proposed development under the Reduced-Scale Project consists of one structure containing a five-story hotel "wing" (tower height of approximately 61 feet) and a six-story hotel wing (tower height of approximately 72 feet) with 288 hotel studios, suites, and standard guest rooms, which would include two meeting rooms, a hotel-oriented restaurant and bar/lounge, fitness center (including an outdoor pool and spa), and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities. The building would also feature an outdoor patio/terrace, a large second floor deck with a pool, both of which would overlook the waters of the Marina and a 28-foot-wide pedestrian promenade (approximately 386 feet in length).

The Marriott Courtyard wing would be a "Select Service" hotel, designed primarily with family vacationers and business travelers in mind. Courtyard features would include a multi-use public area with a variety of working spaces for small group meetings or individual use, free Wi-Fi, in-room desk with power stations and a sundry store (24-hour mini market). The Marriott Residence Inn would be an "Extended Stay" hotel, including amenities and services allowing guests to maintain their personal and business routines while providing personal comforts, such as a kitchen for self-prepared meals. The length of stay for "extended stay" guests may be five or more nights.

The Reduced-Scale Project would require approximately 30,000 cubic yards of grading, with approximately 28,000 cubic yards of cut soil being exported to a landfill located in Los Angeles County for use as daily cover.

Consistent with County Code parking requirements, which require a total of 165 parking spaces for the Reduced-Scale Project, a minimum of 212 parking spaces would be provided in a single-level subterranean parking garage to serve the proposed hotel and accessory uses, as well as 21 public parking spaces (four of which would be free self-park and the remaining 17 valet parked) available for the adjacent Wetland Park, for a total parking supply of 231 spaces, inclusive of surface parking. The garage parking would be 100% valet serviced; as previously proposed, the applicant is seeking a Parking Permit to authorize commercial valet parking.

Consistent with the Marina del Rey certified LCP, the height of the hotel structure would not exceed approximately 72 feet (exclusive of appurtenant, screened rooftop equipment) when measured per County standards. The certified LCP classifies the northerly, "Hotel"-designated portion of the subject parcel as Height Category 5, allowing a maximum building height of 225 feet with provision of a view corridor comprising at least 40 percent of the parcel's water frontage. The hotel structure has been oriented on the site in a fashion that maximizes public views to the water from Via Marina. The structure would front on Via Marina over the northerly portion of the parcel. The project has been designed with an unobstructed view corridor comprising 41 percent of the parcel's frontage on Via Marina (159 feet); this large public view corridor would be provided over the public Wetland Park to be developed on the southerly approximately 1.46 acres of the parcel. Public viewing of the harbor would be further enhanced through the project's development of a 28-foot-wide public pedestrian promenade along the parcel's entire water frontage (which would connect seamlessly to the waterfront pedestrian promenade being constructed as part of the Parcel

10R project component). Public access from Via Marina to the waterfront would be provided along the perimeter of the adjacent public Wetland Park. Moreover, the public would be able to access both the public waterfront promenade and adjacent Wetland Park at multiple access points to be provided within the proposed hotel facility.

Discretionary approvals required for the Reduced-Scale Project include a Coastal Development Permit (required for all development in the coastal zone), a Conditional Use Permit (for the proposed parking structure, project building identification signage, and the sale of alcoholic beverages (beer, wine and spirits) for on-site consumption at the proposed accessory hotel restaurant and outdoor terrace dining area, hotel lounge/bar, hotel meetings room and within hotel guest rooms via customary "mini-bar" service), Parking Permit (to authorize a valet-managed, tandem parking program for the project), and a Variance (to allow a zero setback adjacent to the waterfront pedestrian promenade and a reduction in the northerly, side yard setback to allow a 7½-foot side yard, in lieu of the Code-required 10-foot side yard). No amendments to the certified LCP are required for this project component and the previous tract map application for timeshare units has been withdrawn. For the proposed hotel and associated ancillary uses, emphasis has been placed on a design that balances public and private views of the Marina and enhances the pedestrian experience adjacent to the water. A major feature that integrates the adjacent residential units to the north, the proposed hotel, the public wetland and upland park and the adjacent private and public marina components is a pedestrian walkway between the buildings and the anchorages, the "Waterfront Stroll Promenade." Located along the waterside perimeter of Marina Basins B and C, the 28-foot-wide Waterfront Stroll Promenade would feature color-patterned paving, pedestrian seating and marina-styled fencing and lighting and would total 2,023 feet in length (1,437 feet associated with Parcel 10R, 386 feet associated with the Reduced-Scale Project and adjacent public wetland and upland park on Parcel 9U, and an additional 200 feet associated with Parcel 14, totaling nearly 0.5 mile in length). The segment of the Waterfront Stroll Promenade along the Reduced-Scale Project's marina frontage would also include a water taxi shelter, matching sheltered entrance to the hotel from the promenade, bicycle racks, and a stroller access ramp. Intermittently along its length, the Waterfront Stroll Promenade would also feature landscaped planters, benches, decorative light standards, drinking fountains and potential other pedestrian amenities constructed adjacent to the open promenade. The entire length of the Waterfront Stroll Promenade, including the portion along the proposed Reduced-Scale Project marina frontage, would be open to the public and would also function as Fire Department access.

2. Reduced-Scale Project Components

Figure 2, *Proposed and Approved Parcel 9U Improvements*, below, provides a conceptual illustration of the Reduced-Scale Project and the adjacent approved Wetland Park. As noted, the Reduced-Scale Project is situated on the northern portion of Parcel 9U and consists of one building containing a five-story hotel wing and a six-story hotel wing with 288 hotel rooms, studios, and suites and an assortment of accessory patron- and/or visitor-serving uses, including two meeting rooms, a restaurant and bar/lounge, an exercise room, an outdoor pool and spa, and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities. The building, which, as noted, would be developed with two distinct hotel wings (one for the five-story Courtyard brand and one for the six-story Residence Inn brand), would also feature a common ground-floor outdoor terrace as well as a large second floor outdoor deck with a pool and spa, both of which would overlook the waters of the Marina. A minimum of 212 valet-only, tandem parking spaces would be provided in a single-level subterranean parking garage for the proposed hotel and accessory uses, as well as 21 parking spaces reserved for the

adjacent Wetland Park (four public "self-park" surface parking spaces and 17 garage spaces with valet service).

The site plan concentrates development on the northern portion of Parcel 9U Project site and preserves the southern portion of Parcel 9U as a restored public wetland and upland park. All ground floor uses would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the Wetland Park, and the off-site public-serving boat spaces combine to create an interactive public node. As noted, consistent with the certified LCP, height of the hotel structure would not exceed approximately 72 feet (exclusive of appurtenances, screened roof-top equipment, parapets and architectural features) when measured from the finished grade. The structure would front Via Marina and would be located northeast of the intersection of Via Marina and Tahiti Way.

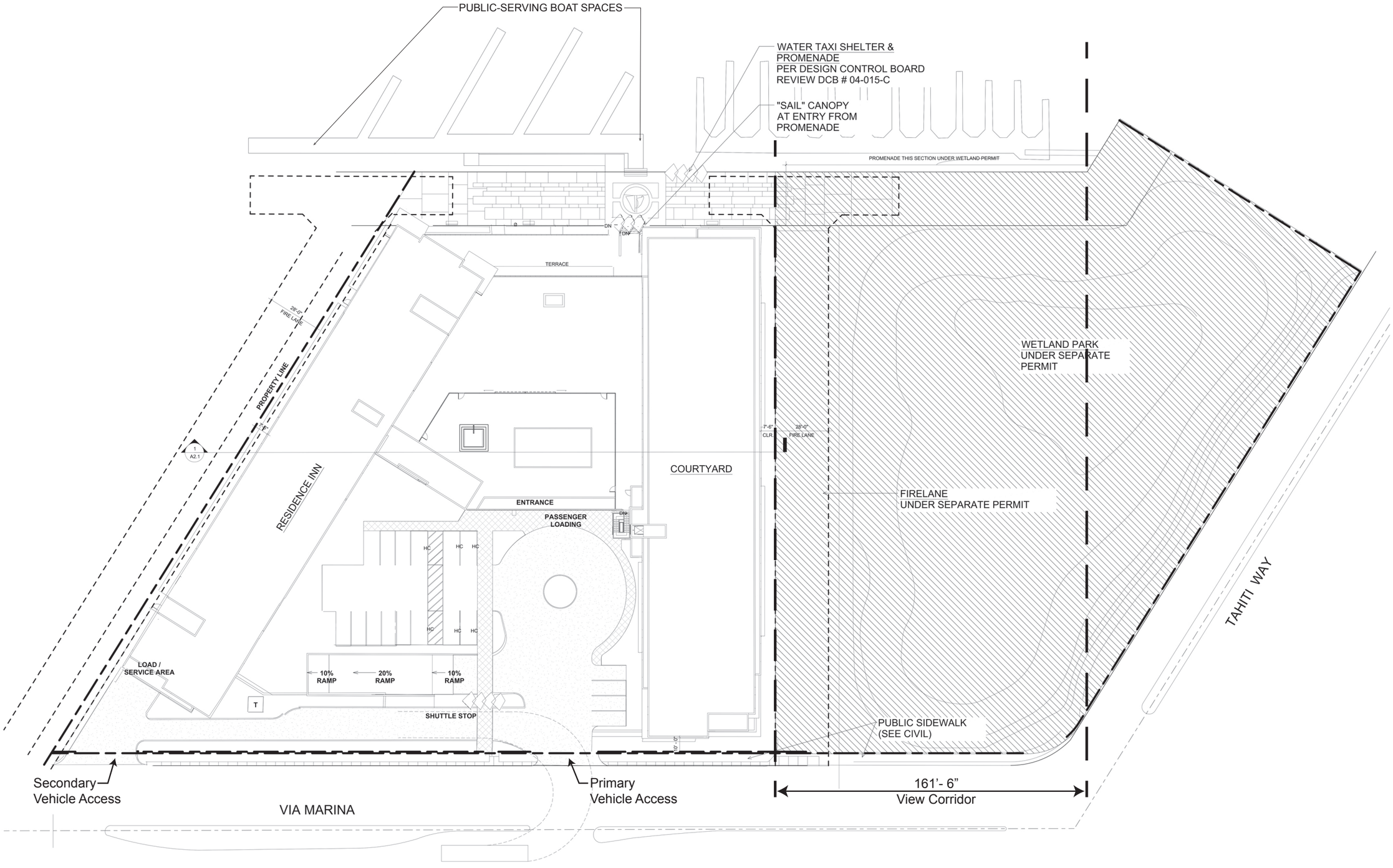
3. Reduced-Scale Project Building Layout

The ground floor of the Reduced-Scale Project would include the lobby and registration/reception area, two elevator bays (one for each hotel wing, including two elevators for Courtyard wing and three elevators for Residence Inn wing), the business center, hotel offices, a restaurant and bar, kitchen, a sitting room with fireplace (the "hearth room") and breakfast room (Residence Inn wing), two meeting rooms, public restrooms, as well as guest rooms (studio rooms in the Residence Inn wing and 1-bedroom and standard king/double queen guest rooms in the Courtyard wing). Refer to **Figure 3**, *Reduced-Scale Project – First Floor Plan*, below, for an illustration of ground floor improvements. The exterior of the ground floor of the hotel would provide for hotel ancillary uses consisting of outdoor patio/terrace dining area, the motor court (drop-off and valet parking area), the entrance to the subterranean parking level, and service docks for truck loading.

Second floor uses are illustrated below in **Figure 4**, *Reduced-Scale Project – Second Floor Plan*. As shown in Figure 4, second floor uses would include studio and one-bedroom guest rooms in the Residence Inn wing; one-bedroom and standard king/double queen guest rooms, and guest laundry facility in the Courtyard wing, as well as the pool with spa, pool equipment room, fitness center, and fire pit on the second floor outdoor terrace between the two hotel towers.

Figure 5, *Reduced-Scale Project – Third Floor Plan*, illustrates the proposed development on the third level of each of the hotel wings. The floor plan for levels four through six are nearly identical to that for the third floor, with the Courtyard wing having king/double queen and one-bedroom guest rooms on levels four and five, and the Residence Inn wing having studio and one-bedroom guest rooms on levels four through six. Roof elements, which would be screened from view, include mechanical equipment and a stairwell to the roof for maintenance and Fire Department access.

Building elevations illustrating the proposed hotel structure are provided below in **Figure 6**, *Reduced-Scale Project East and West Elevations*, **Figure 7**, *Courtyard Wing North and South Elevations*, and **Figure 8**, *Residence Inn Wing North and South Elevations*. As shown in Figures 6 through 8, the proposed hotel would include balconies for all guest rooms, which would be oriented toward the site interior, adjacent marina, and Wetland Park. Proposed building façades would include large windows and glazing, stainless steel, aluminum, painted plaster, stone cladding, and concrete surfaces, as also shown in Figures 6 through 8.



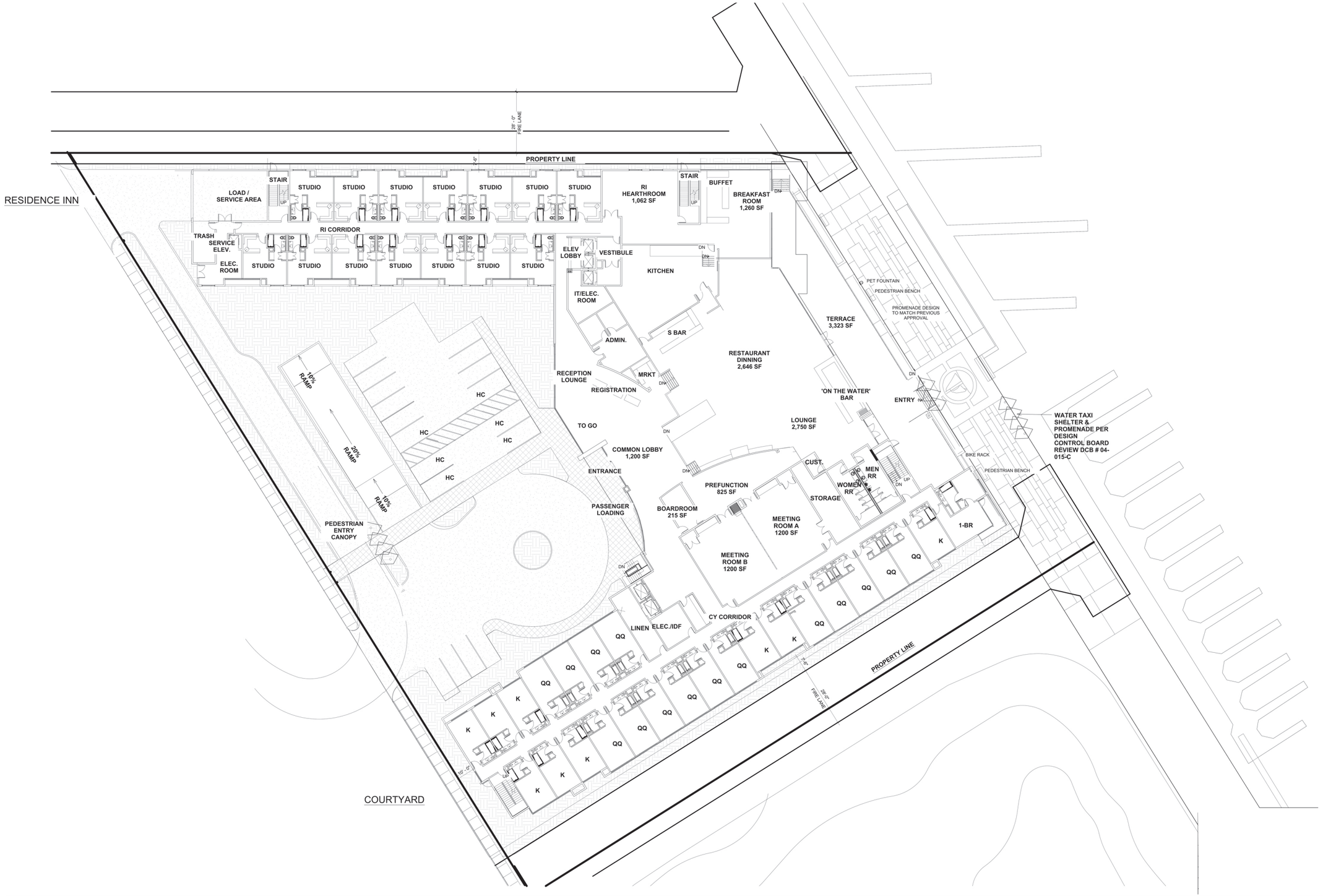
0 80 Feet

Proposed and Approved Parcel 9U Improvements

Marina del Rey Marriott Courtyard and Residence Inn Project

Source: Awbrey Cook McGill Architects, 2014.

FIGURE **2**



0 64 Feet

Reduced-Scale Project - First Floor Plan

Marina del Rey Marriott Courtyard and Residence Inn Project

Source: Gillrspie Moody Patterson, Inc., 2014.

FIGURE 3

PCR

N

0 64 Feet

Reduced-Scale Project - Second Floor Plan

Marina del Rey Marriott Courtyard and Residence Inn Project

Source: Awbrey Cook McGill Architects, 2013.

FIGURE

4

PCR

N

0 64 Feet

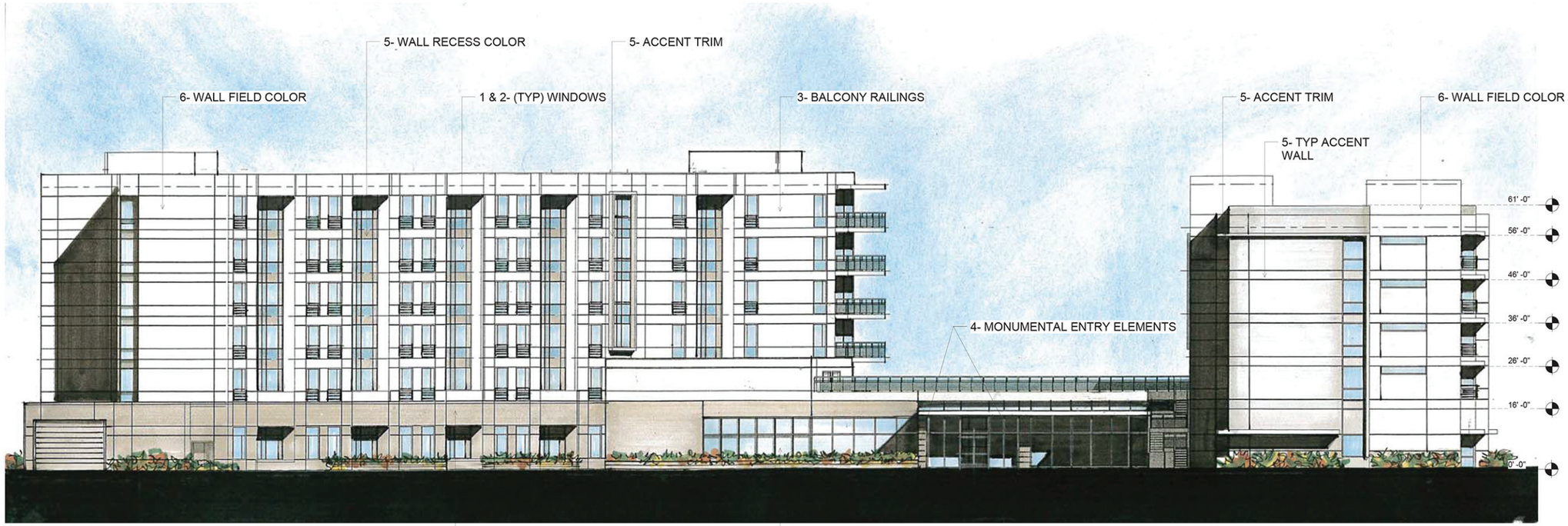
Reduced-Scale Project - Third Floor Plan

Marina del Rey Marriott Courtyard and Residence Inn Project

Source: Awbrey Cook McGill Architects, 2013.

FIGURE

5



1 ENTRY FRONT ELEVATION
3/32" = 1'-0"

2 PROMENADE ELEVATION
3/32" = 1'-0"

PCR

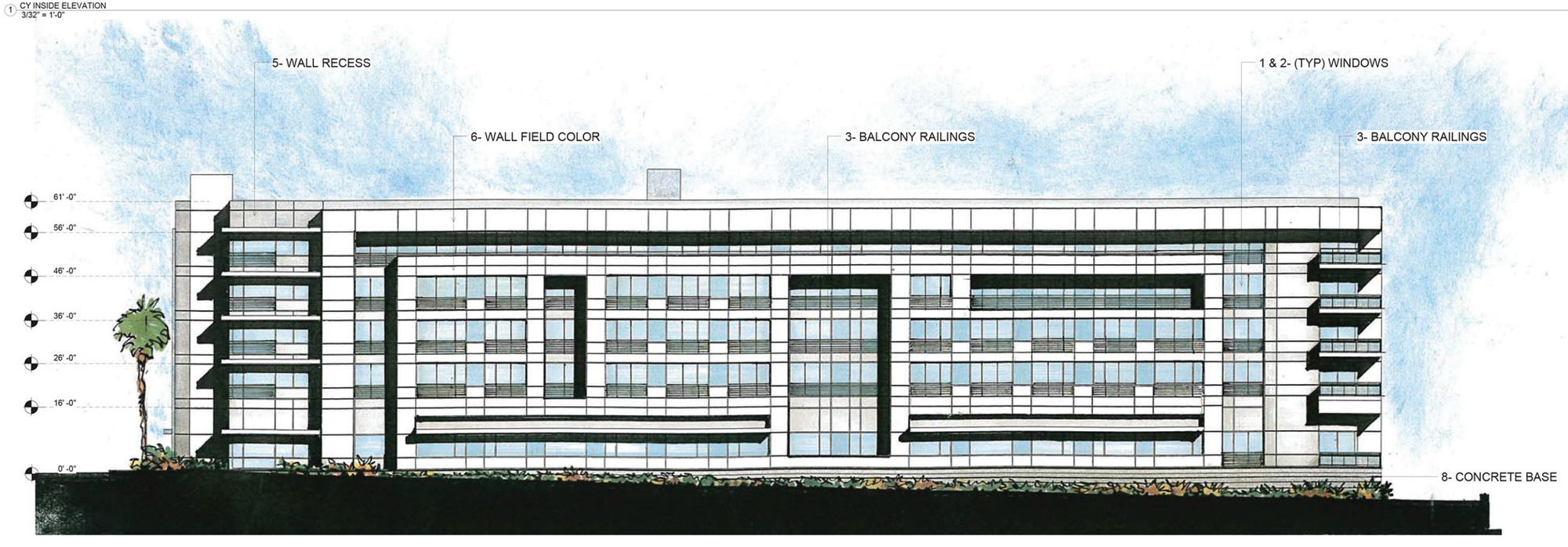
0 64 Feet

Reduced-Scale Project East and West Elevations

Marina del Rey Marriott Courtyard and Residence Inn Project
Source: Awbrey Cook McGill Architects, 2013.

FIGURE
6

1 CY INSIDE ELEVATION
3/32" = 1'-0"



2 CY OUTSIDE ELEVATION
3/32" = 1'-0"

PCR

0 64 Feet

Courtyard Wing North and South Elevations

Marina del Rey Marriott Courtyard and Residence Inn Project
Source: Awbrey Cook McGill Architects, 2013.

FIGURE
7

1 RI INSIDE ELEVATION
3/32" = 1'-0"

2 RI OUTSIDE ELEVATION
3/32" = 1'-0"

PCR

0 64 Feet

Residence Inn Wing North and South Elevations

Marina del Rey Marriott Courtyard and Residence Inn Project
Source: Awbrey Cook McGill Architects, 2013.

FIGURE
8

This page is intentionally blank.

4. Hotel Rooms

In total, 288 hotel guest rooms are proposed as part of the Reduced-Scale Project, which is the same number of total hotel rooms proposed as part of the Original Project (see **Table 1**, *Hotel Room Types and Number*). There are four general types of hotel rooms proposed for the building: one-bedroom (578 square feet); queen (315 square feet) or double queen (354 square feet) guest rooms; studio rooms (431 square feet); and one-bedroom guest rooms (614 to 639 square feet). As proposed, there would be 76 standard king rooms, 74 standard double queen rooms, and 9 one-bedroom suites in the Courtyard wing, and 114 studios and 15 one-bedroom units in the Residence Inn wing. The "dual-brand" hotel would be a select-service hotel with a single set of support facilities (check-in desk, reception, restaurants, cocktail lounge, etc.) for both Courtyard and Residence Inn hotel users. Therefore, there would be no substantial distinction in terms of services between Courtyard and Residence Inn patrons, aside from the hearth room and breakfast buffet room that would be Residence Inn-only facilities. The Reduced-Scale Project would enhance visitor-serving uses by providing needed additional overnight accommodations through provision of the proposed hotel uses, which is consistent with the certified LCP.

Table 1

Hotel Room Types and Number

	Courtyard			Residence Inn		
	Queen (315 sq. ft.)	Double Queen (354 sq. ft.)	One-Bedroom (578 sq. ft.)	Studio (431 sq. ft.)	One-Bedroom (614-639 sq. ft.)	Total
Floor 1	12	12	1	14	0	**39**
Floor 2	16	15	2	20	3	**56**
Floor 3	16	16	2	20	3	**57**
Floor 4	16	16	2	20	3	**57**
Floor 5	16	15	2	20	3	**56**
Floor 6	0	0	0	20	3	**23**
Total	**76**	**74**	**9**	**114**	**15**	**288**

Source: PCR Services Corporation, 2014

5. Guest and Visitor Amenities

The Reduced-Scale Project would feature a variety of visitor-serving and recreational amenities for hotel guests and visitors, including a restaurant and bar, a business center, meeting rooms, and fitness center. Outdoor amenities would include a ground floor patio/dining terrace and second floor pool and whirlpool spa and fire pit area overlooking the Waterfront Stroll Promenade and the Marina.

6. Public Amenities

A major feature of the project that unifies and integrates the hotel uses with the Marina is the continuation of the Waterfront Stroll Promenade from Legacy Partners' Parcel 10R Project across the entire waterfront extent of Parcel 9U. The Waterfront Stroll Promenade is an improvement to an existing narrow

(approximately eight-foot-wide) concrete sidewalk that occurs adjacent to the Marina. The proposed 28-foot-wide public Waterfront Stroll Promenade, to be located along the waterside perimeter of the proposed hotel and public Wetland Park at Parcel 9U, would feature special color-patterned paving, landscaping, pedestrian seating and marina-styled fencing and lighting and would also serve as fire access.

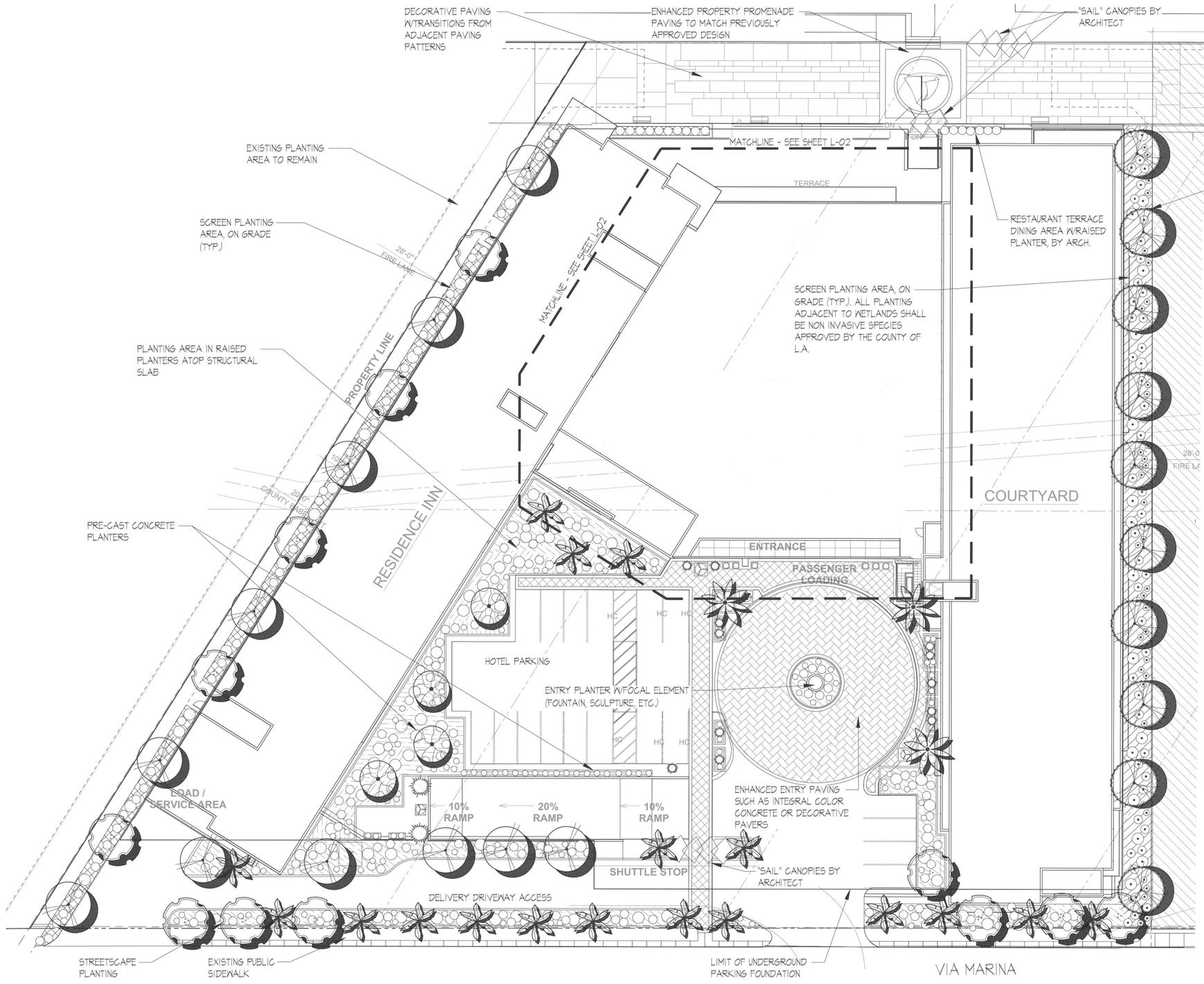
The length of the Waterfront Stroll Promenade on Parcel 9U is approximately 386 feet. The hotel would feature landscaped planters and other features such as benches, a water fountain, lights, and bicycle racks constructed immediately adjacent to but separated from the public Waterfront Stroll Promenade, as well as a water taxi waiting shelter immediately adjacent to the Marina waterfront within the public promenade. Landscaped areas are also proposed along the northern, western, and southern perimeters of the Reduced-Scale Project and in various outdoor spaces on the first and second floors of the hotel structure. Refer to **Figure 9**, *Landscaping Plan*, for an illustration of proposed landscaping for the Reduced-Scale Project. During project operation, public access to the Marina and the Waterfront Stroll Promenade would be available at all times via a 20-foot-wide fire lane, which would also function as a public walkway along the southeastern side of the building. As stated previously, all ground floor uses of the hotel, aside from guest rooms and service and loading areas, would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the Wetland Park (which includes the restored wetland and an upland park) and the public-serving boat spaces combine to create an interactive public node.

7. Access and Parking

Vehicular access to and from the Reduced-Scale Project would be provided at two locations along Via Marina (see Figure 2 for vehicle access locations). The primary access driveway would provide ingress and egress for the motor court roundabout, hotel guest loading area, valet drop-off and pickup area, and parking garage, as well as ingress for hotel shuttles and delivery/service vehicles. Access to the primary project driveway from southbound Via Marina would require a "cut" in the existing median for left-turn vehicles entering the site. The secondary access driveway would be located north of the primary access driveway adjacent to the proposed loading and service area, and would provide right-turn-only egress for all delivery/service vehicles and hotel shuttles, as well as optional egress for passenger vehicles. Parking for the hotel would be provided in a single-level subterranean parking structure and 19 ground-level parking spaces, six of which would be handicapped-accessible. Refer to **Figure 10**, *Reduced-Scale Project – Subterranean Parking Garage*, for an illustration of the proposed parking garage. Figure 2, *Proposed and Approved Parcel 9U Improvements*, depicts the grade level parking for the Wetlands Park public self-park spaces. Up to 212 parking spaces would be provided within this subterranean parking level to serve the proposed hotel and accessory uses, all of which would be "valet only" and would utilize tandem parking to maximize parking capacity. Additionally, 21 parking spaces to be reserved, four on the ground floor and 17 within the parking garage, would be open to the public for Wetland Park users (the four surface parking spaces would be "self-park" and 17 parking garage spaces would be valet serviced).

8. View Corridors

The Reduced-Scale Project, as was the case for the Original Project, incorporates one expansive view corridor over the southerly portion of Parcel 9U, as shown above in Figure 2. This view corridor allows vistas of Marina del Rey Basin B from Via Marina through the Parcel 9U public park/wetland. The northerly portion of Parcel 9U (where the hotel structure is situated) is designated as Building Height Category 5 (Planning and Zoning Code Section 22.46.1810), which allows a building height not to exceed 140 feet with provision of a 20% view corridor (Planning and Zoning Code Section 22.46.1060.E.5.e). Per requirements of



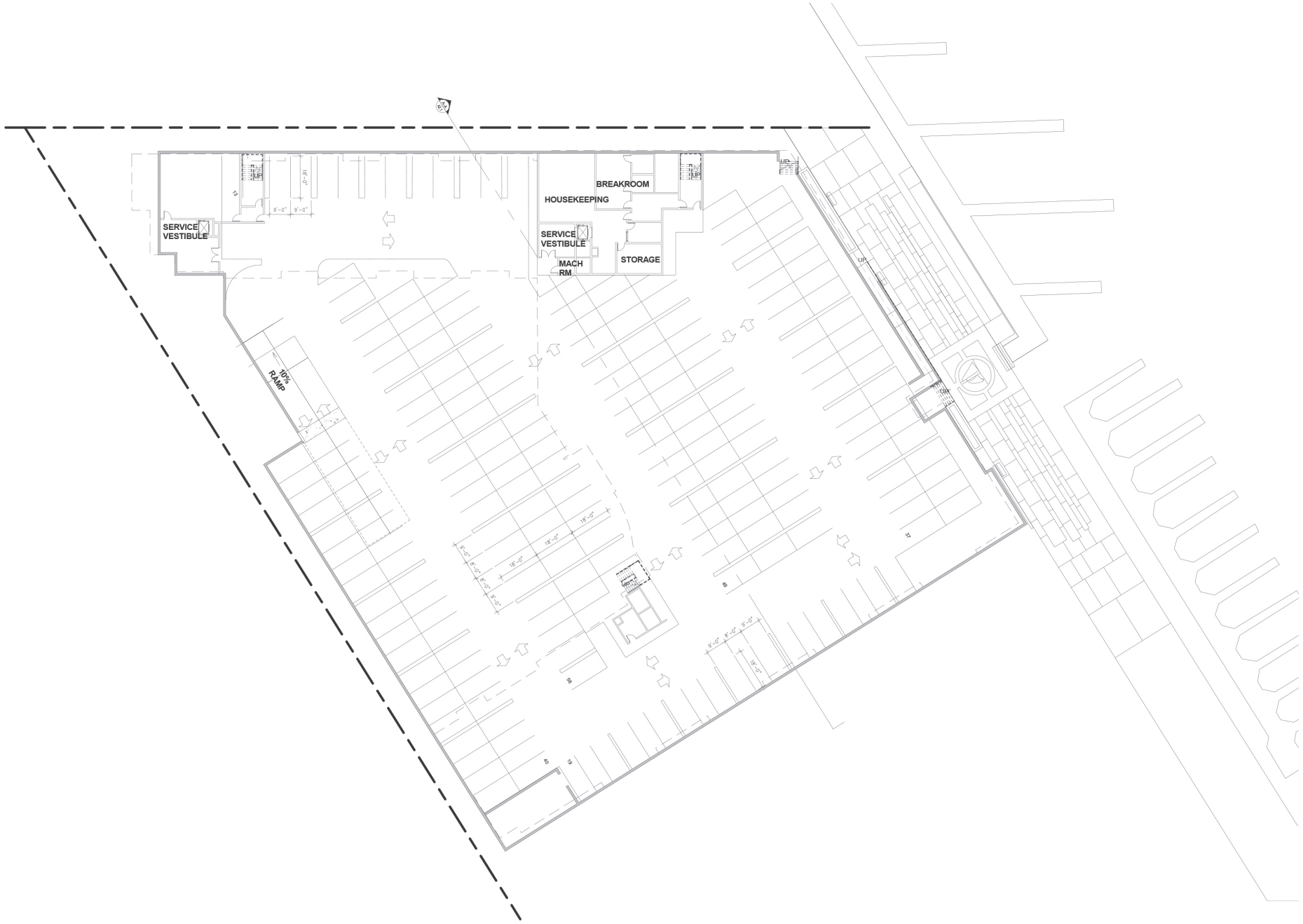
LANDSCAPE DEVELOPMENT PLANT PALETTE

	LOCATION		BOTANICAL NAME/COMMON NAME	FORM	FUNCTION	SIZE
TREES						
	PROJECT ENTRY	1)	PHOENIX DACTYLIFERA 'MEDJOOL' / DATE PALM	UPRIGHT (15'-25' SPREAD)	FORMAL EVERGREEN ENTRY ACCENT PALM	100%/22' BTH
	COURTYARDS / LIGHT WELLS	2) 3) 4)	ARCHONTOPHOENIX CUNNINGHAMIANA / KING PALM HOWEA FORSTERIANA / KENTIA PALM TRACHYCARPUS FORTUNEI / WINDMILL PALM	UPRIGHT (15'-25' SPREAD)	FORMAL EVERGREEN ACCENT PALM	100%/20' BTH
	COURTYARDS	5)	WASHINGTONIA FILIFERA/CALIFORNIA FAN PALM	UPRIGHT (10'-20' SPREAD)	FORMAL EVERGREEN ACCENT PALM	100%/22' BTH
	SMALL FLOWERING ACCENT TREE	6) 7)	ARBUTUS MARINA / STRAWBERRY TREE LAGERSTROEMIA SPECIES / CRAPE MYRTLE	BROADLEAF (20'-40' SPREAD)	FLOWERING DECID. CANOPY TREES	100%/24" BOX
	WETLAND BUFFER TREE	6) 8)	ARBUTUS MARINA / STRAWBERRY TREE QUERCUS AGRIFOLIA / COAST LIVE OAK	BROADLEAF (20'-40' SPREAD)	WETLAND BUFFER CANOPY TREES	100%/24" BOX
	EVERGREEN SCREEN TREE	9) 10)	TRISTANIA CONFERTUS / BRISBANE BOX MELALEUCA QUINQUINERVIA	BROADLEAF (20'-40' SPREAD)	FORMAL EVERGREEN CANOPY SHADE TREES	100%/36" BOX
	LARGE FLOWERING ACCENT TREE	11)	ERIOBOTRYA DEFLEXA / BRONZE LOQUAT	BROADLEAF (20'-40' SPREAD)	WINTER SUN/SUMMER SHADE CANOPY TREES	100%/24" BOX
	SMALL VERTICAL ACCENT TREE	12)	PODOCARPUS 'MAKI' / SHRUBBY YEW PINE	EVERGREEN (5'-6' HEIGHT)	LARGE FOUNDATION / SCREENING SHRUBS	100% /15 GAL.
	MEDIUM VERTICAL ACCENT TREE	13)	CORDYLINE FRUTICOSA / HAWAIIAN TI PLANT	EVERGREEN, VERTICAL (6'-15' HEIGHT)	COLUMNAR FOCAL SHRUBS	100% /15 GAL.

GROUND LEVEL ENTRANCE SHRUBS & GROUNDCOVER	FORM	FUNCTION	SIZE	SPACING
BOTANICAL NAME / COMMON NAME				
AEONIUM SPECIES / AEONIUM ANIGOZANTHOS SPECIES / KANGAROO PAW BOUGAINVILLEA SPECIES / BOUGAINVILLEA CANNA SPECIES / CANNA LILY CLIVIA MINIATA / KAFFIR LILY CODIAEUM VARIEGATUM PICTUM / CROTON COLOCASIA ESCULENTA 'BLACK MAGIC' / BLACK MAGIC ELEPHANT EAR CORDYLINE FRUTICOSA / HAWAIIAN TI PLANT DIANELLA CAERULEA / CASSA BLUE DIETES BICOLOR / FORTNIGHT LILY ECHEVERIA SPECIES / HENS AND CHICKS KNIPHOFIA UVARIA / RED HOT POKER LAVANDULA ANGUSTIFOLIA / ENGLISH LAVENDER NEOREGELIA CAROLINAE / BLUSHING BROMELIAD PHILODENDRON 'XANADU' / XANADU PHILODENDRON PHOENIX ROEBELENII / PYGMY DATE PALM PHORMIUM SPECIES / NEW ZEALAND FLAX PITTOSPORUM SPECIES / MOCK ORANGE ROSMARINUS SPECIES / ROSEMARY SANSEVIERIA TRIFASCATA / MOTHER-IN-LAWS TONGUE STRELITZIA SPECIES / BIRD OF PARADISE WESTRINGIA FRUTICOSA / COAST ROSEMARY	VARIES, EVERGREEN & DECIDUOUS PLANTS FROM 1' TO 10'+	ACCENT SHRUBS, FOUNDATION SHRUBS	25%/1 GAL. 50%/5 GAL. 25%/15 GAL.	3' ON CENTER AVG. SPACING
CAREX SPECIES / SEDGE LIRIOPE SPECIES / MONDO GRASS SEDUM SPECIES / SEDUM SENECIO MANDRALISCAE / BLUE CHALK STICKS	EVERGREEN	FLOWERING GROUNDCOVER	100%/FLATS	12" ON CENTER AVG. SPACING

NORTH PERIMETER SHRUBS & GROUNDCOVER	FORM	FUNCTION	SIZE	SPACING
BOTANICAL NAME / COMMON NAME				
ANIGOZANTHOS SPECIES / KANGAROO PAW DIANELLA CAERULEA / CASSA BLUE DIETES BICOLOR / FORTNIGHT LILY LAVANDULA ANGUSTIFOLIA / ENGLISH LAVENDER LIRIOPE GIGANTEA / GIANT LILY TURF PHILODENDRON 'XANADU' / XANADU PHILODENDRON PHOENIX ROEBELENII / PYGMY DATE PALM PHORMIUM SPECIES / NEW ZEALAND FLAX PITTOSPORUM SPECIES / MOCK ORANGE RHAPHOLEPIS SPECIES / INDIAN HAWTHORN ROSMARINUS SPECIES / ROSEMARY SALVIA SPECIES / SAGE STRELITZIA SPECIES / BIRD OF PARADISE WESTRINGIA FRUTICOSA / COAST ROSEMARY	VARIES, EVERGREEN & DECIDUOUS PLANTS FROM 1' TO 10'+	ACCENT SHRUBS, FOUNDATION SHRUBS	25%/1 GAL. 50%/5 GAL. 25%/15 GAL.	3' ON CENTER AVG. SPACING
CAREX SPECIES / SEDGE LIRIOPE SPECIES / MONDO GRASS PELARGONIUM PELTATUM / IVY GERANIUM SEDUM SPECIES / SEDUM SENECIO MANDRALISCAE / BLUE CHALK STICKS		FLOWERING GROUNDCOVER		12" ON CENTER AVG. SPACING

WETLAND PERIMETER SHRUBS & GROUNDCOVER	FORM	FUNCTION	SIZE	SPACING
BOTANICAL NAME / COMMON NAME				
CEANOTHUS 'EBBETS FIELD' / DWARF WILD LILAC FESTUCA CALIFORNICA / CALIFORNIA FESCUE IRIS DOUGLASIANA / DOUGLAS IRIS RHUS INTEGRIFOLIA / LEMONADE BERRY SALVIA SPATHACEA / HUMMINGBIRD SAGE	VARIES, EVERGREEN & DECIDUOUS PLANTS FROM 1' TO 10'+	ACCENT SHRUBS, FOUNDATION SHRUBS	25%/1 GAL. 50%/5 GAL. 25%/15 GAL.	3' ON CENTER AVG. SPACING
CAREX SPECIES / SEDGE FESTUCA CALIFORNICA / CALIFORNIA FESCUE		EVERGREEN GROUNDCOVER		12" ON CENTER AVG. SPACING



PCR

N

0 64 Feet

Reduced-Scale Project - Subterranean Parking Garage

Marina del Rey Marriott Courtyard and Residence Inn Project

Source: Awbrey Cook McGill Architects, 2013.

FIGURE

10

the certified LCP, a view corridor totaling 20 percent of the parcel's water frontage is required for the proposed not to exceed 72-foot-tall hotel. The subject parcel contains 386 feet of water frontage; therefore, per the certified LCP's view corridor requirements, a minimum view corridor comprising 78 linear feet of the parcel's water frontage is required. The Reduced-Scale Project provides 159 linear feet of view corridor through the Parcel 9U public park/wetland situated south of the hotel structure (see Figure 2), which is 81 linear feet in excess of the view corridor required by the certified LCP.

Because the Reduced-Scale Project provides substantially more view corridor (159 linear feet) than required per the certified LCP (78 linear feet), the proposed hotel is consistent with provisions of the certified LCP calling for public and private views of the Marina from perimeter roadways. Conceptual drawings of the Reduced-Scale Project as viewed from the Via Marina project frontage and the public promenade project frontage are provided in **Figure 11**, *Reduced-Scale Project Rendering – Via Marina Frontage*, and **Figure 12**, *Reduced-Scale Project Rendering – Marina Promenade Frontage*, respectively.

9. Infrastructure Improvements

As was the case for the Original Project, all infrastructure and utilities needed to serve the Reduced-Scale Project are located in close proximity to the Project site in Via Marina and Tahiti Way. The Reduced-Scale Project would construct or participate in the construction of all improvements necessary to serve its proposed uses, including improvements to off-site facilities. Improvements proposed for Parcel 9U consist of a new fire main connecting to the existing 12-inch water main located on Tahiti Way. Given these improvements, the existing and proposed water mains would have the capacity to adequately service the Reduced-Scale Project. Proposed sewer improvements associated with project would require approximately 210 linear feet of new 8-inch sewer to service the Reduced-Scale Project. The precise alignment of the proposed sewer has not been defined, but would occur within existing site boundaries. These improvements, which are comparable to those required for the Original Project, are discussed in detail in Section 5.8 of the Certified EIR. Other on-site improvements would involve the construction of the storm water drainage network and utility systems. All infrastructure would be designed and constructed in accordance with the policies and standards set forth by the County of Los Angeles Department of Public Works.

10. Demolition and Construction

Given that Parcel 9U is currently vacant, no demolition is required. However, re-abandonment of an existing oil well, removal of existing soldier beams along the north and west property lines of Parcel 9U, as well as site clean-up and minor fine grading would be required prior to the initiation of grading activities. Construction of the Reduced-Scale Project would occur in one single phase development. Construction is anticipated to take approximately 24 months, beginning no earlier than April 2015. Given this schedule, anticipated buildout of the Reduced-Scale Project would occur by May 2017.

Following minor fine grading necessary to clear the Project site, installation of concrete foundation columns would be completed to address liquefaction hazards at the site, after which excavation for the parking garage would commence. Construction of the parking garage may require de-watering during excavation. During construction, de-watering wells and pumps would be placed as needed to draw down the water table as necessary. If necessary, groundwater would be pumped to settling basins, filtered, and then pumped to the existing storm water drain system. These actions will require the applicant to obtain a separate National

Pollutant Discharge Elimination System (NPDES) Permit for Ground Water Discharge from the Regional Water Quality Control Board (RWQCB). This permit ensures that water ultimately discharged to the small-craft harbor meets all NPDES requirements for suspended solids, organic material, and other water quality parameters. Permanent de-watering is not proposed.

Once excavation is complete, the entire subterranean parking garage and support facilities would be constructed, as well as shoring for the basement walls. After construction of the basement, the westerly portion of the basement would be used for material staging for the construction of the above-grade improvements. A small tower crane to be used for material hauling would be erected near the lobby entrance in the low rise building area (central portion of the site between the proposed Courtyard wing and Residence Inn wing).

Delivery of the material to the site would occur parallel to the site on Via Marina. The promenade deck facing the Marina would be built last. After construction of the hotel and promenade deck is completed, then construction of the Wetland Park would be initiated. Staging for the construction of the Wetland Park would be done on the designated "park" property outside of the existing wetland area.

11. Green Building Program

The County of Los Angeles has adopted by reference the 2013 California Green Building Standards Code as changed or modified in Title 31 of the Los Angeles County Code of Ordinances. Title 31, referred to as the Green Building Standards Code, is intended to "improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices."[1]. The Reduced-Scale Project would be required to comply with the applicable mandatory provisions of the California Green Building Standards Code, as described in Chapter 5 (Nonresidential Mandatory Measures). As the Reduced-Scale Project would result in the development of greater than 25.000 square feet of building floor area, the Project would be required to comply with the applicable California Green Building Standards Code Tier 1 measures as described in Section A5.601.2.4 (Voluntary Measures for CALGreen Tier 1). With the incorporation of the specific design features listed below, the Reduced-Scale Project would benefit from a reduction in energy consumption of at least 15 percent below California Energy Code requirements (based on the 2008 Energy Efficiency Standards). The following project design features would be incorporated into the final building plans: alternative transportation considerations such as encouraging bicycle transit and fuel efficient vehicles; restore wetland habitat within dedicated open space area; reduce stormwater runoff through incorporation of best management practices; use of roofing materials with high solar reflectance index; water efficient landscaping through use of drought-tolerant species and smart irrigation controllers; use of high efficient toilets; use of energy efficient equipment and appliances; use of non-ozone depleting refrigerants; incorporation of recycled and rapidly renewable building materials; monitoring of ventilation systems; development of indoor air quality management plans; use of low-emitting volatile organic compound materials (e.g., in sealants and paints); and provision of individual control for lighting and comfort control systems.

[1] *Los Angeles County Code of Ordinances, Title 31, Section 101.2.*

PCR

Reduced-Scale Project Rendering - Via Marina Frontage

Marina del Rey Marriott Courtyard and Residence Inn Project
Source: Awbrey Cook McGill Architects, 2013.

FIGURE
11

PCR

Reduced-Scale Project Rendering - Marina Promenade Frontage

Marina del Rey Marriott Courtyard and Residence Inn Project
Source: Awbrey Cook McGill Architects, 2013.

FIGURE
12

12. Project Applications

Section 15124(d)(b) of the State CEQA Guidelines indicates that the project description shall include a list of permits and other approvals required to implement the project. A listing, by project component, of project applications required by the County of Los Angeles Department of Regional Planning is below.

- Coastal Development Permit – Hotel construction and operation within the Coastal Zone.
- Conditional Use Permit – Hotel parking, sale of alcoholic beverages for on-site consumption, and building signage.
- Parking Permit – Valet-managed, commercial tandem parking.
- Variance – Zero setback along pedestrian promenade and reduced setback to 7.5 feet (in lieu of 10 feet) along the north parcel boundary.

13. Decision-Making Agencies

Section 15124(d)(a) of the State CEQA Guidelines indicates that the project description shall include a list of agencies that are expected to use the EIR in their decision making. Agencies are limited to the County of Los Angeles and the California Coastal Commission (note that the California Coastal Commission would not routinely consider the Reduced-Scale Project unless the County's approval action on the Reduced-Scale Project Coastal Development Permit application is appealed to that body).

IV. ENVIRONMENTAL IMPACT ANALYSIS

As described above, the Reduced-Scale Project would result in a substantially reduced height and building mass as compared to the Original hotel. As described below, a revised shade-shadow study has been prepared to analyze the potential shading effects resulting from the revised hotel design proposed in the Reduced-Scale Project (please see the seasonal shadow exhibits depicted as **Figures 14-17** below in **Section IV.6** *Visual Quality*).

The Certified EIR concluded that the Original Project would generate unavoidable significant impacts in the following environmental impact areas: noise (short-term construction-related noise and vibration and cumulative noise and vibration); air quality (short-term construction-related air quality for NO_X, and localized PM_{10}, $PM_{2.5}$ and NO_2 and cumulative construction air quality); visual resources (project-specific and cumulative visual character); cumulative construction-related and operational traffic; cumulative operational solid waste disposal; cumulative population and housing growth, and cumulative land use and planning. The Reduced-Scale Project is anticipated to generate comparable unavoidable significant impacts in these environmental impact areas.

As discussed below, for the following environmental impact areas, potential impacts of the Reduced-Scale Project would be the same as or similar to those of the Original Project: geotechnical and soil resources; operational noise; hydrology and drainage; operational air quality (including greenhouse gas emissions and wind impacts), biota, project-specific traffic/access, public services (education, police protection, fire protection, libraries, parks and recreation), views, shade and shadow, and glare, and utilities and service systems (sewer service and water service), solid waste during construction, project-specific population and housing, and project-specific land use and planning. The Certified EIR concluded that, with implementation

of mitigation measures prescribed in the Certified EIR, there would not be significant impacts for these environmental impact areas; likewise, with the implementation of mitigation measures prescribed in the Certified EIR, the Reduced-Scale Project's impacts for these environmental impact areas would also be less than significant.

The Certified EIR concluded that the Original Project would result in a significant visual resource impact because its proposed 225-foot height was considered to be out of character with existing development in the immediate vicinity. The Reduced-Scale Project's height is approximately 72 feet or less, which is compatible with existing and approved development in the area, it will result in a less than significant visual quality impact.

IV.1 Geotechnical and Soil Resources

With mitigation, the Original Project would not significantly impact the geologic environment during either site construction or operation. Impacts would occur in the form of development in a region where severe ground shaking can occur, adverse effects of liquefaction on building foundations, and minor impacts associated with wind and water erosion. However, mitigation measures are incorporated that would reduce these impacts to levels that are not considered significant. Cumulative geotechnical and soils impacts would also be less than significant given the localized and site-specific nature of geotechnical hazards. Based on the five significance thresholds for geotechnical and soil resources impacts, the Original Project would have less than significant impacts with the implementation of mitigation measures or have no impact. The Reduced-Scale Project would require less grading and excavation and would implement the same mitigation measures as required by the Original Project. It would therefore have the same or lesser impacts in association with geotechnical and soil resources. As such, like the Original Project, the Reduced-Scale Project can be concluded as having a less than significant cumulative and project-specific impact. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to geotechnical and soil resources.

As required by the Los Angeles County Department of Building and Safety and Los Angeles County Building Code Section 110.4, buildings or structures adjacent to or within 200 feet (60.96 meters) of active, abandoned, or idle oil or gas well(s) shall be provided with methane gas-protection systems. For soil gas safety, the recommendations in the April 18, 2009 Carlin Environmental Consulting report and the August 23, 2006 and May 3, 2008 Methane Specialist reports, included as Appendix 5-1 to the Draft EIR, shall be implemented.

IV.2 Noise

a. Construction Impacts

1. Construction Equipment Noise

The Certified EIR for the Original Project evaluated construction-related noise impacts relative to County's Noise Control Ordinance standards for construction equipment. Construction of the Original Project would result in increases in ambient noise levels in the project area on an intermittent basis. As described in the Certified EIR, construction would temporarily increase noise depending on the type of construction activity, equipment type and duration of use, the distance between the noise source and receptor, and the presence or absence of noise attenuation barriers. The Certified EIR includes mitigation measures that would reduce

construction noise impacts. Nonetheless, the Certified EIR concluded that the Original Project would have significant and unavoidable project-specific and cumulative construction noise impacts. The Original Project included the development of a hotel tower 225 feet in height with hotel suites and timeshare units as well as hotel amenities and parking. The Reduced-Scale Project would result in the development of two hotel towers at a maximum of approximately 72 feet in height. The Reduced-Scale Project would not change the number of hotel units (288 units). The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of the ballroom, banquet kitchen and spa facilities under the Reduced-Scale Project. The Marriott Courtyard restaurant would have a smaller dining area than the Original Project restaurant by 504 square feet. The Marriott Residence Inn would have its own dining area of 1,250 square feet (note this "breakfast room" would cater only to Residence Inn's guests and would not provide food available for purchase; Residence Inn's patrons would be able to have a buffet-style breakfast within this room, but it would not be open to the general public or to Courtyard Inn's patrons). The Reduced-Scale Project would also reduce the amount of excavated and exported soil from approximately 44,000 cubic yards (cy) cut (42,200 cy exported) to approximately 30,000 cy cut (28,000 cy exported) as compared to the Original Project. The reduction in the amount of excavated and exported soil would reduce noise associated with haul trucks, which is discussed in the next section.

With respect to on-site construction-related noise, the increase in construction activity associated with the increase in restaurant floor area would be offset by a reduction in the floor area for meeting rooms and ballrooms and the reduction in excavated and exported soil. As a result, the number of type of construction-equipment used for the Reduced-Scale Project would be the same or similar to the equipment considered in the EIR for the Original Project, and would include tractors (dozers), loaders, concrete mixers, cranes and smaller equipment including jackhammers, pneumatic tools, saws, and hammers as described in the EIR for the Original Project. Noise levels generated by heavy equipment under the Reduced-Scale Project would be the same or similar to the Original Project and would range from approximately 76 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. Although the construction noise under the Reduced-Scale Project would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance, the nearest sensitive receptors located approximately 125 feet west of the Project site long Via Marina and other nearby locations with an uninterrupted line of sight to the construction activity would be temporarily exposed to exterior noise levels that could exceed the County's Noise Control Ordinance standards for construction equipment noise levels. Construction of the Reduced-Scale Project would comply with the required construction-related mitigation measures as identified in the Certified EIR. However, like the Original Project, the Reduced-Scale Project would have significant and unavoidable project-specific and cumulative construction noise impacts. Therefore, the construction-related noise associated with the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

2. Haul Route and Construction Worker Noise

The Certified EIR for the Original Project evaluated noise impacts to sensitive receptors from haul trucks transporting materials to and from the Project site. The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. The Reduced-Scale Project

would modestly increase restaurant floor area but would substantially reduce the floor area for meeting rooms, spa facilities, and ballrooms. The increase in restaurant floor area would be more than offset by the reduction in floor area for meeting rooms, spa facilities, and ballrooms. Thus, no additional construction building material trips would occur under the Reduced-Scale Project as compared to the Original Project since the total building floor area would be substantially reduced. As noted, the Reduced-Scale Project would reduce the amount of excavated and exported soil from approximately 44,000 cy cut (42,200 cy exported) to approximately 30,000 cy cut (28,000 cy exported) as compared to the Original Project. As a result, while a single haul truck traveling on a roadway passing a sensitive land use would result in similar noise levels under the Reduced-Scale Project as that considered in the EIR for the Original Project, fewer total haul truck trips would occur given the reduction in the amount of excavated soil. However, like the Original Project, the Reduced-Scale Project would have significant and unavoidable project-specific and cumulative impact associated with delivery- and haul truck-related noise. Therefore, the delivery- and haul truck-related noise associated with the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

Construction workers, who would generally arrive to the construction site at the beginning of the workday and leave at the end of the workday, could contribute to increases in vehicular noise along roadways in the project study area. Construction worker traffic, which would be largely comprised of passenger vehicles and light pick-up trucks, would not represent a substantial percentage of peak hour volumes in the area and would not cause an audible increase in community noise levels. The Reduced-Scale Project would utilize a similar number of construction workers and therefore would result in construction worker trip volumes similar to the Original Project and project-specific and cumulative impacts would also be less than significant. Therefore, the construction worker trip noise associated with the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

3. Vibration

The Certified EIR for the Original Project evaluated vibration impacts to sensitive receptors from pile drivers during foundation construction as well as lesser vibration impacts that could result from the use of other heavy construction equipment and haul trucks passing on streets adjacent to sensitive receptors. As discussed previously, the number and type of construction-equipment used for the Reduced-Scale Project would be the same or similar to the equipment considered in the EIR for the Original Project. Furthermore, no additional construction building material trips would occur under the Reduced-Scale Project as compared to the Original Project since the total building floor area would be similar. The Reduced-Scale Project would reduce the amount of excavated and exported soil from approximately 44,000 cy cut (42,200 cy exported) to approximately 30,000 cy cut (28,000 cy exported) as compared to the Original Project. As a result, while a single haul truck traveling on a roadway passing a sensitive land use would result in similar vibration levels under the Reduced-Scale Project as that considered in the EIR for the Original Project, fewer total haul truck trips would occur given the reduction in the amount of excavated soil. However, like the Original Project, the Reduced-Scale Project would have significant and unavoidable project-specific and cumulative impact associated with vibration from haul trucks. Therefore, vibration associated with the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

b. Operational Impacts

1. Point Source Noise

As discussed in the Certified EIR for the Original Project, occupation of the Project site would result in intermittent sounds associated with human activity similar to a residential use, such as people talking, doors slamming, and lawn care equipment operation. The Certified EIR found that the Original Project would result in less than significant project-specific and cumulative noise impacts with respect to point source noise.

The Reduced-Scale Project would include the same number of rooms and the same uses as the Original Project. It would not introduce new point sources of noise as compared to the Original Project. Therefore, like the Original Project, the Reduced-Scale Project's project-specific and cumulative impacts with respect to point source noise would be less than significant and would not result in any new significant point source noise impacts or substantially increase the severity of any previously identified significant impacts.

2. Mobile Source Noise

Like the Original Project, operation of the Reduced-Scale Project would generate mobile sources of noise as a result of normal day-to-day vehicle trips to and from the Project site. A supplemental traffic impact analysis ("Supplemental TIA") was prepared for the Reduced-Scale Project by Crain & Associates Transportation Planning & Traffic Engineering ("Crain") in January 2014, which is included as Appendix B of this Addendum. The Supplemental TIA assesses the change in vehicle trips associated with the Reduced-Scale Project as compared to the Original Project. The updated traffic analysis indicates that vehicle trips associated with the Reduced-Scale Project would be the same as or similar to those associated with the Original Project and that the baseline and future traffic conditions adequately describe the existing traffic conditions, Project traffic conditions, and future plus Project traffic conditions.

Since the number of vehicle trips would be the same or similar under the Reduced-Scale Project as compared to the Original Project, the Reduced-Scale Project would result in the same or similar mobile source noise levels. Therefore, like the Original Project, the Reduced-Scale Project's project-specific and cumulative impacts with respect to mobile source noise would be less than significant. As a result, mobile source noise levels associated with the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

IV.3 Hydrology and Drainage

Implementation of the hydrology/drainage mitigation measures identified for the Original Project in the Certified EIR would continue to reduce the Reduced-Scale Project's erosion, sedimentation, and water quality impacts to less than significant levels, in accordance with LACDPW and RWQCB requirements. Therefore, no unavoidable significant project-specific impacts are anticipated. Cumulative impacts would also be less than significant.

Based on the three significance thresholds for hydrology and drainage impacts, the Certified EIR concluded the Original Project would result in less than significant impacts or less than significant impacts with the implementation of mitigation measures. As noted, the Reduced-Scale Project would involve less grading and less excavation, would result in a similar amount of impervious surface, and would implement the same

mitigation measures as required by the Original Project. It would therefore have the same or lesser impacts in association with hydrology and drainage, and, like the Original Project, the Reduced-Scale Project would have a less than significant project-specific and cumulative impact. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to hydrology and drainage.

IV.4 Air Quality

a. Construction Air Quality Impacts

1. Regional Construction Emissions

The Certified EIR for the Original Project evaluated construction-related criteria pollutant emissions relative to the South Coast Air Quality Management District (SCAQMD) thresholds of significance. The Certified EIR includes mitigation measures that would reduce emissions of diesel exhaust and fugitive dust. Nonetheless, the Certified EIR concluded that the Original Project would result in temporary significant and unavoidable project-specific and cumulative impacts with respect to regional nitrogen oxides (NO_X), emissions.

Like the Original Project, construction of the Reduced-Scale Project would generate criteria air pollutant emissions from a variety of stationary, area, and mobile sources. Fugitive dust emissions (respirable particulate matter [PM_{10}] and fine particulate matter [$PM_{2.5}$]) would be generated by on-site construction activities such as site excavation and grading. Emissions of volatile organic compounds (VOCs), NO_X, carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, and $PM_{2.5}$ would be generated by on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles and generators. The daily construction emissions of these air pollutants for the Original Project and the Reduced Scale Project were estimated using the SCAQMD-approved California Emissions Estimator Model (CalEEMod) and are shown in **Table 2,** *Estimated Regional Construction Emissions – Original Project and Reduced Scale Project.*

Table 2

Estimated Regional Construction Emissions – Original Project and Reduced Scale Project

	Emissions in Pounds per Day					
Project	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Original Project [a]						
- *Maximum Emissions in Any Year*	65.48	25.59	100.45	0.02	5.85	5.33
Reduced Scale Project [b]						
- *Maximum Emissions in Any Year*	75.51	30.89	97.24	0.12	7.18	4.90
SCAQMD Thresholds	550	75	100	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

[a] *Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project EIR, Section 5.6, Air Quality, (State Clearinghouse #2007031114).*

[b] *Emissions estimated using CalEEMod. Detailed calculations are provided in Appendix C of this Addendum.*

Source: PCR Services Corporation, 2014.

The Original Project included the development of a hotel tower 225 feet in height with hotel suites and timeshare units as well as hotel amenities and parking. The Reduced-Scale Project would result in the development of two hotel towers at approximately 61 feet and 72 feet, respectively. The Reduced-Scale Project would not change the number of hotel room (288 rooms). The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. The Reduced-Scale Project would also reduce the amount of excavated and exported soil from approximately 44,000 cubic yards (cy) cut (42,200 cy exported) to approximately 30,000 cy cut (28,000 cy exported). The reduction in the amount of excavated and exported soil would reduce emissions associated with haul trucks.

With respect to construction-related emissions, the increase in construction activity associated with the increase in restaurant floor area would be offset by a reduction in the floor area for meeting rooms and ballrooms and the reduction in excavated and exported soil. As a result, maximum construction-related emissions for the Reduced-Scale Project would not be substantially different than the emissions considered in the Certified EIR as shown in **Table 2**. Emissions of CO, SO_X, and PM_{10} are slightly higher for the Reduced-Scale Project as compared to the Original Project primarily due to the use of updated emission factors in the OFFROAD2011 model, which is the current emissions factor model for off-road equipment. For some equipment, the OFFROAD2011 model has higher emission factors for CO, SO_X, and PM_{10} than the prior OFFROAD2007 model, which was the current model at the time that the Original Project was assessed. In addition, CalEEMod contains updated estimates of the number of vendor trips associated with building construction. For commercial and residential projects, CalEEMod estimates a greater number of vendor trips than the previously approved model at the time the Original Project was assessed. Vendor trips result in combustion and fugitive road dust (i.e., PM_{10}) emissions. Emissions of VOCs are slightly higher for the Reduced-Scale Project as compared to the Original Project primarily due to improvements in the emissions model that allows for the input of more project-specific data to more accurately estimate the amount of interior and exterior surface area that could require architectural coating, which results in off-gassing emissions of VOCs. Nonetheless, as shown, emissions from the Reduced-Scale Project would be below the SCAQMD thresholds of significance. Construction of the Reduced-Scale Project would comply with the required construction-related mitigation measures as identified in the EIR. Therefore, the construction-related emissions associated with the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

2. Localized Significant Impacts

The Certified EIR for the Original Project evaluated localized construction impacts in accordance with the SCAQMD's Final Localized Significance Threshold Methodology (LST Methodology). The Certified EIR concluded that the Original Project would result in temporary project-specific and cumulative impacts with respect to NO_2, PM_{10}, and $PM_{2.5}$ emissions. As explained above, construction-related emissions for the Reduced-Scale Project would not be substantially different than the emissions considered in the EIR for the Original Project. As noted previously, emissions of CO, SO_X, and PM_{10} are slightly higher for the Reduced-Scale Project as compared to the Original Project primarily due to the use of updated emission factors in the OFFROAD2011 model that, for some equipment, has higher emission factors for CO, SO_X, and PM_{10} than the prior OFFROAD2007 model. In addition, CalEEMod contains updated estimates of the number of vendor trips associated with building construction that results in a greater number of vendor trips than the previously approved model at the time the Original Project was assessed. In addition, emissions of VOCs are

slightly higher for the Reduced-Scale Project as compared to the Original Project primarily due to improvements in the emissions model that allows for the input of more project-specific data to more accurately estimate the amount of interior and exterior surface area that could require architectural coating. Construction of the Reduced-Scale Project would comply with the required construction-related mitigation measures as identified in the EIR. Therefore, on-site emissions would not be substantially different than the emissions considered in the EIR for the Original Project, and like the Original Project, temporary project-specific and cumulative impacts with respect to localized NO_2, PM_{10}, and $PM_{2.5}$ would be significant and unavoidable. As a result, construction-related emissions associated with the Reduced-Scale Project would not result in any new localized significant impacts and would not substantially increase the severity of the previously identified localized significant impacts.

3. Toxic Air Contaminants

Construction of the Reduced-Scale Project would generate diesel particulate matter (DPM) emissions, which the California Air Resources Board (CARB) has identified as a toxic air contaminant (TAC). The Certified EIR found that the Original Project would result in less than significant project-specific and cumulative impacts with respect to TACs. As explained above, construction-related emissions for the Reduced-Scale Project would not be substantially different than the emissions considered in the Certified EIR for the Original Project, although emissions during the grading phase could be lower given the reduction in the number of haul trucks. Construction of the Reduced-Scale Project would comply with the required construction-related mitigation measures identified in the Certified EIR. Therefore, DPM emissions from the Reduced-Scale Project would not be substantially different than the DPM emissions generated by the Original Project. As a result, project-specific and cumulative impacts from TAC emissions associated with the Reduced-Scale Project would be the same or less than the Original Project and also less than significant. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to TAC emissions.

b. Operational Air Quality Impacts

1. Operational Emissions

Operational emissions would be generated primarily by area and mobile sources as a result of normal day-to-day activities on the Project site after occupation. Area source emissions are associated with natural gas combustion for heating and cooking, landscaping emissions, and volatile emissions from the reapplication of architectural coatings and the use of consumer products. The Certified EIR found that the Original Project would result in less than significant project-specific and cumulative impacts with respect to operational emissions.

The building floor area of the Reduced-Scale Project would be similar to the Original Project. The Reduced-Scale Project would not change the number of hotel rooms. The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. As a result, area source emissions for the Reduced-Scale Project would be similar to those generated by the Original Project.

As noted, a Supplemental TIA (in **Appendix B**) was prepared to assess the change in vehicle trips associated with the Reduced-Scale Project. The Supplemental TIA indicates that vehicle trips associated with the

Reduced-Scale Project would be the same as or similar to those of the Original Project and that the baseline and future traffic conditions set forth in the Certified EIR adequately describe the existing traffic conditions, Project traffic conditions, and future plus Project traffic conditions.

As shown in the Certified EIR, the majority of the Original Project's operational emissions are from mobile sources. Similar to the Original Project, the majority of the operational emissions would be from mobile sources. The daily operational emissions for the Original Project and the Reduced Scale Project are shown in **Table 3,** *Estimated Regional Operational Emissions – Original Project and Reduced Scale Project*. As shown, the operational emissions under the Reduced Scale Project would be similar or less than the Original Project and would be less than the SCAQMD thresholds of significance. Therefore, the operational-related emissions associated with the Reduced-Scale Project would be less than significant and would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts.

Table 3

Estimated Regional Operational Emissions – Original Project and Reduced Scale Project

	Emissions in Pounds per Day					
Project	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Original Project [a]						
- Total Emissions	115.20	11.22	17.34	0.15	24.12	4.69
Reduced Scale Project [b]						
- Mobile Sources	41.97	4.75	9.99	0.09	6.14	1.73
- Area Sources	0.03	5.15	0.00	0.00	0.00	0.00
- Energy (Natural Gas)	0.97	0.13	1.16	0.01	0.09	0.09
Total Emissions	42.97	10.03	11.15	0.10	6.23	1.82
SCAQMD Thresholds	550	55	55	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

[a] *Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project EIR, Section 5.6, Air Quality, (State Clearinghouse #2007031114).*

[b] *Emissions estimated using CalEEMod. Detailed calculations are provided in Appendix C of this Addendum.*

Source: PCR Services Corporation, 2014.

2. Carbon Monoxide Hotspots

Localized areas where ambient CO concentrations exceed state and/or federal standards are termed CO "hotspots." Traffic congested roadways and intersections have the potential to generate localized high levels of CO. The Certified EIR evaluated the Original Project's potential for CO hotspots and found that the Original Project would not result in traffic congestion that would cause or contribute to the formation of CO hotspots in excess of the significance thresholds.

As the Reduced-Scale Project would result in the same or similar vehicle trips as compared to the Original Project, the Reduced-Scale Project's project-specific and cumulative CO hotspot impacts would remainthe same as the Original Project and would be less than significant. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to CO hotspot impacts.

3. Odors

As discussed in the Certified EIR, the proposed uses of the Original Project would not generate objectionable odors that would impact sensitive receptors and would not be subject to off-site sources of objectionable odors. The Reduced-Scale Project would consist of the same uses and would not introduce any new sources of odors. Like the Original Project the Reduced-Scale Project would have less than significant project-specific and cumulative impacts with respect to odors. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to odors.

4. Toxic Air Contaminants (TACs)

As discussed in the Certified EIR, the proposed uses of the Original Project would not use hazardous materials or emit TACs in appreciable quantities aside from any incidental emissions from the use of household cleaning products. The Reduced-Scale Project would consist of the same uses and would not introduce any new sources of hazardous material or TACs. As a result, the Reduced-Scale Project would not result in any new significant TAC impacts. Like the Original Project the Reduced-Scale Project would have a less than significant project-specific and cumulative impacts with respect to TAC Impacts. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to TAC impacts

5. Wind

As discussed in the Certified EIR, Rowan Williams Davies & Irwin, Inc. (RWDI) prepared a wind study in 2004 for the Original Project to assess the potential impact of the development and/or building placement on wind patterns within the marina, loss of surface winds used by birds and sailboats and general air circulation.[2] The report was provided in Appendix 5.4 of the EIR and concluded that the Original Project would not affect the general air circulation patterns and the use of surface winds by birds and sailboats and that the wind conditions would be similar under the Project as compared to existing conditions.

The Reduced-Scale Project would result in the development of two hotel towers at approximately 61 feet and 72 feet, respectively, down from the 225 feet height for the single-tower design in the Original Project. In 2011, RWDI prepared an assessment of a "two-wing" hotel design, with each hotel wing having a height of 70 feet (included as **Appendix A** to this Addendum). RWDI concluded that the building heights of the two wings would be similar in height as the existing buildings to the west of the Project site, which is the prevailing wind direction in the area. As a result, the general air circulation patterns and the use of surface winds by birds and sailboats in Marina del Rey would not be affected by the development. As the Reduced-Scale Project would include a two-wing design with similar building heights to those considered in RDWI's

[2] *Rowan Williams Davies & Irwin, Inc., Wind Study, Woodfin Suite Hotel and Vacation Ownership Resort, Marina del Rey, California, (2004). Document is included in Appendix 5.4 of the Certified EIR for the Original Project.*

2011 assessment, the conclusions presented in the 2011 assessment would also apply to the Reduced-Scale Project. Thus, the Reduced-Scale Project's project-specific and cumulative wind impacts would be less than significant. The Reduced-Scale Project would not result in any new significant wind impacts and would not substantially increase the severity of any previously identified significant impacts.

c. Greenhouse Gas Emissions

The Certified EIR for the Original Project evaluated construction- and operational-related greenhouse gas (GHG) emissions from direct and indirect sources. Construction of the Original Project would generate GHG emissions from a variety of stationary, area, and mobile sources, such as heavy-duty construction vehicles, construction worker vehicles and generators. Operational emissions would be generated primarily by area and mobile sources as a result of normal day-to-day activities on the Project site after occupation. Direct sources of GHG emissions are associated with natural gas combustion for heating and cooking, landscaping emissions, and mobile sources traveling to and from the Project site. Indirect sources of GHG emissions are associated with electricity use to provide building energy and water and from the decomposition of generated solid waste. The Certified EIR found that the Original Project would result in less than significant project-specific and cumulative impacts with respect to GHGs and climate change.

The Original Project included the development of a hotel tower 225 feet in height with hotel suites and timeshare units as well as hotel amenities and parking. The Reduced-Scale Project would result in the development of a single hotel structure containing two hotel wings with a height of approximately 61 feet and 72 feet, respectively. The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. The Reduced-Scale Project would also reduce the amount of excavated and exported soil from approximately 44,000 cubic yards (cy) cut (42,200 cy exported) to approximately 30,000 cy cut (28,000 cy exported). The reduction in the amount of excavated and exported soil would reduce emissions associated with haul trucks.

With respect to construction-related GHG emissions, the increase in construction activity associated with the increase in restaurant floor area for the Reduced-Scale Project would be offset by a reduction in the floor area for meeting rooms and ballrooms and the reduction in excavated and exported soil. As a result, construction-related GHG emissions for the Reduced-Scale Project would not be substantially different than the GHG emissions considered in the Certified EIR. The construction GHG emissions for the Original Project and the Reduced Scale Project are shown in **Table 4,** *Estimated Construction GHG Emissions – Original Project and Reduced Scale Project*.

The Reduced-Scale Project would not change the number of hotel rooms (288 rooms). However, the Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. As a result, GHG emissions associated with natural gas, electricity, water, and waste for the Reduced-Scale Project would be similar those associated with the Original Project.

As noted, an updated traffic analysis has been prepared to assess the change in vehicle trips associated with the Reduced-Scale Project. The traffic analysis indicates that vehicle trips associated with the Reduced-Scale

Table 4

Estimated Construction GHG Emissions – Original Project and Reduced Scale Project

Project	GHG Emissions (Metric Tons CO_2e)
Original Project [a]	
- Total GHG Emissions	1,774
- Amortized over Project Lifetime (30 years)	59
Reduced Scale Project [b]	
- Construction Year 2015	825
- Construction Year 2016	1,193
- Construction Year 2017	301
- Amortized over Project Lifetime (30 years)	77

[a] *Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project EIR, Section 5.6, Air Quality, (State Clearinghouse #2007031114).*

[b] *Emissions estimated using CalEEMod. Detailed calculations are provided in Appendix C of this Addendum.*

Source: PCR Services Corporation, 2014.

Project would be the same or similar to those from the Original Project and that the baseline and future traffic conditions described in the Certified EIR adequately describe the existing traffic conditions, Project traffic conditions, and future plus Project traffic conditions. Consequently, mobile source operational GHG emissions under the Reduced-Scale Project would be the same as or similar to those from the Original Project.

As was discussed in the Certified EIR, the County of Los Angeles has adopted the 2013 California Green Building Standards Code as changed or modified in Title 31 of the Los Angeles County Code of Ordinances. As would be the case with the Original Project, the Reduced-Scale Project would comply with the applicable provisions of the County's Green Building Standards. With the incorporation of certain design features, the Reduced-Scale Project will benefit from a reduction in energy consumption consistent with the requirements of the Green Building Standards. The following project design features would be incorporated into the final building plans for the Reduced-Scale Project: alternative transportation considerations such as encouraging bicycle transit and fuel efficient vehicles; restore wetland habitat within dedicated open space area; reduce stormwater runoff through incorporation of best management practices; use of roofing materials with high solar reflectance index; water efficient landscaping through use of drought-tolerant species and smart irrigation controllers; use of high efficient toilets; use of energy efficient equipment and appliances; use of non-ozone depleting refrigerants; incorporation of recycled and rapidly renewable building materials; monitoring of ventilation systems; development of indoor air quality management plans; use of low-emitting volatile organic compound materials (e.g., in sealants and paints); and provision of individual control for lighting and comfort control systems. Moreover, the Reduced-Scale Project would implement all of the mitigation measures in the Certified EIR to reduce GHG emissions. As with the Original Project, these measures would reduce the Reduced-Scale Project's impacts from GHG emissions to less than significant.

The GHG emissions for the Original Project and the Reduced Scale Project are shown in **Table 5,** *Comparison of Certified and Addendum EIR Operational GHG Emissions*. In addition, Table 5 also provides GHG emissions

Table 5

Comparison of Certified and Addendum EIR Operational GHG Emissions

	Emissions (Metric Tons CO_2e per Year)
Original Project [a]	
- Total GHG Emissions	3,792
Reduced Scale Project [b]	
- Amortized Construction	77
- Mobile Sources	1,240
- Area	0.01
- Energy (Electricity)	447
- Energy (Natural Gas)	231
- Waste	72
- Water	37
- Total GHG Emissions	2,103
Business-As-Usual (Reduced Scale Project) [b]	
- Amortized Construction	77
- Mobile Sources	1,589
- Area	0.01
- Energy (Electricity)	481
- Energy (Natural Gas)	264
- Waste	72
- Water	39
- Total GHG Emissions	2,522
Draft SCAQMD Tier 4 Indicator (percent reduction target)	15.8%
Net Change from BAU (Reduced Scale Project) ($MTCO_2e$)	(418)
Net Change from BAU (Reduced Scale Project) (%)	(16.6%)
Exceeds Significance Indicator?	No

[a] *Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project EIR, Section 5.6, Air Quality, (State Clearinghouse #2007031114). Emissions estimated using the approved air quality model and GHG emission factors available at the time of the analysis (e.g., Urban Emissions Model (URBEMIS2007)).*

[b] *Emissions estimated using CalEEMod. Detailed calculations are provided in Appendix C of this Addendum.*

Source: PCR Services Corporation, 2014.

from a representative business-as-usual (BAU) project of similar size and land use relative to the Reduced Scale Project.

For the purposes of GHG emissions, CARB has defined BAU as GHG emissions that would occur in the absence of GHG emission reduction measures. As required under AB 32, CARB projected a 2020 GHG emissions forecast for California, which would occur in 2020 if no mitigation actions were taken (i.e., BAU

conditions).[3] In the original CARB *Climate Change Scoping Plan* (2008), it was estimated that the 2020 BAU GHG emissions would be 596 $MMTCO_2e$. CARB estimated the 1990 level GHG emissions at 427 $MMTCO_2e$. Since AB 32 requires that the state achieve 1990 level GHG emissions by 2020, the emission reduction measures proposed in the Scoping Plan would require a total reduction of 169 $MMTCO_2e$, or a reduction of GHG emissions by 28.4 percent, to enable California to attain the 2020 emissions limit of 427 $MMTCO_2e$. CARB updated their 2020 GHG emissions BAU estimate based on more recent economic forecasts (i.e., as influenced by the 2007-2009 economic downturn) and emission reduction measures in place, replacing its prior 2020 BAU emissions inventory. CARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the state's average emissions data from 2006–2008. Specific emission reduction measures included are the million-solar-roofs program, the 33 percent Renewable Energy Portfolio Standard, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the Low Carbon Fuels Standard.[4] CARB's revised 2020 BAU emissions inventory is 507 $MMTCO_2e$. Therefore, the emission reductions necessary to achieve the 2020 emissions target of 427 $MMTCO_2e$ would be 80 $MMTCO_2e$, or a reduction of GHG emissions by 15.8 percent, below the estimated BAU levels. As shown in Table 5, the project would be consistent with the AB 32 reduction goal of 15.8 percent below BAU. Like the Original Project, the Reduced-Scale Project would have a less than significant project-specific and cumulative impacts with respect to GHGs and climate change. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to GHGs and climate change.

IV.5 Biota

Biota impacts from the Original Project would occur in the form of increased turbidity and human presence in the marine environment. With implementation of mitigation measures prescribed, the Certified EIR concluded the Original Project would not significantly impact biota, either during site construction or operation. Cumulative impacts were also found to be less than significant.

Based on the four significance thresholds for biota impacts, the Certified EIR found the impacts of the Original Project to be less than significant or less than significant with the implementation of mitigation measures. The Reduced-Scale Project would have a similar footprint, would involve similar construction activity, would restore the existing degraded wetland, and would implement the same mitigation measures as required of the Original Project. It would therefore have the same or lesser impacts regarding biota. Like the Original Project the Reduced-Scale Project would have less than significant project-specific and cumulative impacts with respect to biota. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to biota.

IV.6 Visual Quality

The Original Project is consistent with the 225-foot building height limit allowed with an expanded view corridor for the northerly 2.2 acres of Parcel 9U in the certified LCP (the Original Project on Parcel 9U would

[3] *California Air Resources Board, Greenhouse Gas Inventory – Archived 2020 Forecast, http://www.arb.ca.gov/cc/inventory/archive/forecast_archive.htm (accessed October 1, 2012).*

[4] *Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 to 2016. Pavley I could potentially result in 27.7 $MMTCO_2e$ reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 $MMTCO_2e$.*

not exceed 225 feet from the finished pad elevation, exclusive of appurtenant, screened roof-top equipment, parapets and architectural features). The Original Project provides all required view corridors; and the Original Project was reviewed and conceptually approved by the Marina del Rey Design Control Board ("DCB"). The Original Project's proposed height, at 225 feet, was deemed in the Certified EIR to be out of character with existing development in the immediate vicinity of Parcel 9U, and from a limited perspective at two more distant locations, Mother's Beach and Fisherman's Village, although there are also several other high-rise buildings visible on the horizon from those locations. The Certified EIR also found cumulative impacts in conjunction with tree removals associated with the Venice Dual Force Main Project to be significant. Therefore, project-specific and cumulative visual impacts associated with the Original Project were considered significant and unavoidable in the Certified EIR.

The Original Project would utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, the Original Project design was reviewed and approved by the DCB, as required in the certified LCP. The Original Project's shade and shadow and light and glare impacts were considered less than significant in the Certified EIR, as were cumulative impacts with respect to these issues.

Like the Original Project, the Reduced-Scale Project will utilize a variety of exterior surface treatment that will be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, the Original Project design was reviewed and conceptually approved January, 22, 2014 by the DCB, as required in the certified LCP. Therefore, the impacts of the Reduced-Scale Project with respect to light and glare would, like the Original Project, be less than significant.

Like the Original Project, the Reduced-Scale Project (a) provides one percent more than the 40% required view corridor, (b) has been conceptually approved by the DCB, and (c), would implement the same mitigation measures as the Original Project, which include the following:

- A deed restriction shall be placed on the southern portion of Parcel 9U requiring that the wetland park be retained as natural open space.
- On the street level of the project landscaping, to the satisfaction of the County of Los Angeles Design Control Board, shall be implemented to reduce visual impacts of the project when viewed from adjacent rights of way. Further, if approved by the Design Control Board, areas of landscaping shall be included on terraces and balconies incorporated into the design of the hotel structure and associated parking structure.
- Articulation and variations in color or building materials shall be incorporated into the lower levels of the hotel and parking structure to reduce visual impacts on Via Marina.

The overall height and bulk of the Reduced-Scale Project is substantially less than the Original Project, as shown in **Figure 13**, *Original Project vs. Reduced-Scale Project Comparison*. The Reduced-Scale Project would represent a sizeable reduction in potential view obstruction from surrounding locations and would involve considerably less building mass. The reduced height and bulk of the Reduced-Scale Project would result in an incremental reduction in shade and shadow effects on surrounding shade-sensitive land uses. As shown below in **Figure 14**, *Winter Solstice Shadows*, **Figure 15**, *Spring Equinox Shadows*, **Figure 16**, *Summer Solstice Shadows*, and **Figure 17**, *Fall Equinox Shadows*, the Reduced-Scale Project would not result in significant

shade effects on surrounding properties. As such, the Reduced-Scale Project's shade and shadow impacts would be less than the Original Project and also less than significant.

The Reduced-Scale Project would be at a much lower maximum height (72 feet) than the Original Project (225 feet). Unlike the Original Project, the height of the Reduced-Scale Project would be similar to the height of existing and proposed development in the vicinity of Parcel 9U. Therefore, the Reduced-Scale Project's impacts with respect to views would be substantially less than the Original Project and less than significant. However, as with the Original Project, it is conservatively concluded that in conjunction with tree removals associated with the Venice Dual Force Main Project, cumulative impacts to visual character would remain significant and unavoidable. Therefore, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to light and glare, shade and shadows, views or visual character.

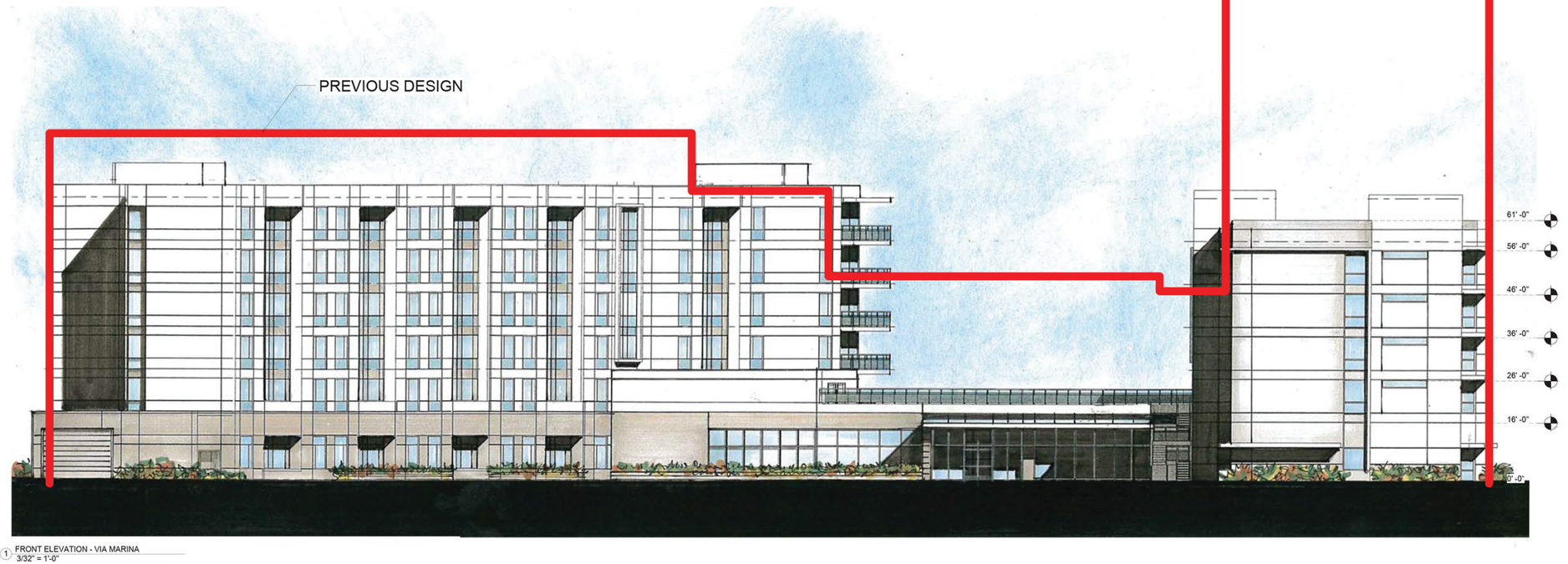
IV.7 Traffic/Access

As noted, a Supplemental TIA has been prepared for the Reduced-Scale Project. The following summarizes the results of the Supplemental TIA and evaluates impacts of the Reduced-Scale Project in comparison with those of the Original Project.

a. Construction Traffic

As discussed in the Certified EIR, short-term traffic impacts would occur throughout construction activities, but the duration of such impacts would be incrementally reduced under the Reduced-Scale Project based on the reduced development square footage. The County will require the Reduced-Scale Project to obtain building permits and other construction period permits (e.g. haul route approvals by Departments of Public Works and Regional Planning) for this construction activity. The impacts of the construction will be minimized by conditions placed upon these permits. For instance, the approved haul routes will include conditions that restrict the routing and layover areas for trucks involved in the site excavation as condition of permit approval that will be required. Additionally, Worksite Traffic Control Plans will be developed and approved for activities in the public rights-of-way to assure that construction activity does not unduly interfere with traffic on the adjacent public roadways. Notwithstanding the above standard requirements, an analysis was conducted in support of the Certified EIR to assure that the short-term traffic impacts during the construction period would not be significant and would not exceed the long-term impacts following project completion and occupancy.

Construction on four individual sites was considered in the Certified EIR – Parcel 14, Parcel 10R, Parcel 9U (hotel) and Parcel 9U (Wetland Park). The construction on each of the four sites was assumed to be independent, but adjacent to each other and with overlapping time periods. Furthermore, the extent to which the Reduced-Scale Project involves concurrent construction with the other three sites is also addressed by the Certified EIR. Therefore, the construction impacts were considered in a single analysis. The first step in the analysis was to determine the level of activity anticipated on each site during each of the three standard phases of construction – Demolition/Excavation, Exterior Construction, and Interior Construction. The two major traffic impacts of construction activity are truck activities to and from the site (removal and delivery of construction materials) and automobile trips by construction workers (commute or otherwise). The numbers of trips from these two sources were estimated for each construction phase for each project component through a detailed process. Given that the Reduced-Scale Project would involve



1 FRONT ELEVATION - VIA MARINA
3/32" = 1'-0"

PCR

Original Project vs. Reduced-Scale Project Comparison

Marina del Rey Marriott Parcel 9U EIR Addendum
Source: Awbrey Cook McGill Architects, 2013.

FIGURE
13

NOTE:
CEQA Thresholds Guide Standard:

A significant impact would occur if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between early November and mid-March), or for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between mid-March and early November.)[1]

[1] As of 2007, as the result of the Energy Policy Act of 2005, most of the United States and Canada observe Daylight Saving Time between the second Sunday in March and the first Sunday in November. Previously, between 1987 and 2006, the start and end dates for Daylight Saving Time were the first Sunday in April and the last Sunday in October.

Reduced-Scale Project Shadows

Original Project Shadows

PCR

Winter Solstice Shadows - December 21
(Pacific Standard Time)

Marina del Rey Marriott Parcel 9U EIR Addendum

Source: PCR Services Corporation and Awbrey Cook Mcgill Architects, November 2013.

FIGURE
14

NOTE:
CEQA Thresholds Guide Standard:

A significant impact would occur if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between early November and mid-March), or for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between mid-March and early November.)[1]

[1] As of 2007, as the result of the Energy Policy Act of 2005, most of the United States and Canada observe Daylight Saving Time between the second Sunday in March and the first Sunday in November. Previously, between 1987 and 2006, the start and end dates for Daylight Saving Time were the first Sunday in April and the last Sunday in October.

Reduced-Scale Project Shadows

Original Project Shadows

PCR

Spring Equinox Shadows - March 21
(Pacific Daylight Saving Time)

Marina del Rey Marriott Parcel 9U EIR Addendum

Source: PCR Services Corporation and Awbrey Cook Mcgill Architects, November 2013.

FIGURE
15

NOTE:

CEQA Thresholds Guide Standard:

A significant impact would occur if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between early November and mid-March), or for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between mid-March and early November.)[1]

[1] As of 2007, as the result of the Energy Policy Act of 2005, most of the United States and Canada observe Daylight Saving Time between the second Sunday in March and the first Sunday in November. Previously, between 1987 and 2006, the start and end dates for Daylight Saving Time were the first Sunday in April and the last Sunday in October.

Reduced-Scale Project Shadows

Original Project Shadows

PCR

Summer Solstice Shadows - June 21
(Pacific Daylight Saving Time)

Marina del Rey Marriott Parcel 9U EIR Addendum

Source: PCR Services Corporation and Awbrey Cook Mcgill Architects, November 2013.

FIGURE
16

NOTE:
CEQA Thresholds Guide Standard:

A significant impact would occur if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between early November and mid-March), or for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between mid-March and early November.)[1]

[1] As of 2007, as the result of the Energy Policy Act of 2005, most of the United States and Canada observe Daylight Saving Time between the second Sunday in March and the first Sunday in November. Previously, between 1987 and 2006, the start and end dates for Daylight Saving Time were the first Sunday in April and the last Sunday in October.

Reduced-Scale Project Shadows

Original Project Shadows

PCR

Fall Equinox Shadows - September 21
(Pacific Daylight Saving Time)

Marina del Rey Marriott Parcel 9U EIR Addendum

Source: PCR Services Corporation and Awbrey Cook Mcgill Architects, November 2013.

FIGURE
17

This page is intentionally blank.

considerably less development square footage and therefore a reduced construction schedule, construction-related traffic impacts in this regard would be less than those evaluated in the Certified EIR.

As discussed in the Certified EIR, during much of the construction period, the short-term trip generation for the four combined sites would be much lower than that analyzed for the long-term traffic impacts of the completed project, of which the Original Project is a part. Overall projected peak level of construction activity during the Spring through Fall of 2012 (as analyzed in the Certified EIR), would remain the peak construction level of traffic during the revised construction schedule beginning in April 2015 through build out of May 2017, the total construction generation would remain below the analyzed level for the completed project on a daily basis as well as during both peak hours. Therefore, given the reduction in overall construction intensity under the Reduced-Scale Project, impacts would remain less than significant.

During the construction of the project-serving sewer infrastructure within Marquesas Way (for the Parcel 10R project component), travel on Marquesas Way will for a limited time be periodically restricted to a single travel lane. However, the County will review and approve a construction management plan to control traffic flow during construction and export of the cut materials so that no significant delays or detours would occur. In addition to the project infrastructure improvements, there exists the possibility for the Venice Dual Force Sewer Main upgrade to be under construction while the Reduced-Scale Project is under demolition or construction. These simultaneous construction activities could cause access disruption along both Via Marina and Marquesas Way. The Venice Dual Force Marina project would be constructed in Via Marina, the consequence of which would be the reduction to a single travel lane in each direction, which may result in delays during the peak commuting periods. While inconvenient, this is not considered a significant impact because it would be a relatively short duration and haul trucks would use the roadways during off peak times, as would be required under a traffic construction management plan.

Therefore, based on the discussion above, the Reduced-Scale Project would not result in any new significant impacts and would not substantially increase the severity of any previously identified significant impacts with respect to construction traffic.

b. Operational Traffic

1. Baseline Traffic Conditions

Traffic counts to establish current traffic conditions were conducted in November 2013 for the AM and PM peak periods for a subset of the 17 study intersections analyzed in the December 2007 traffic study. The subset was selected to be representative of the full study area, while not including intersections affected by the ongoing construction activities in Marina del Rey. Specifically, construction was ongoing along the majority of Admiralty Way in November 2013. Therefore, to assess if traffic may have shifted from Admiralty Way to other Marina del Rey roadways, current traffic volume data were collected at eight of the study intersections located on the periphery of the study area. These volumes are still considered conservative given that they may include some temporarily shifted traffic that would have otherwise utilized Admiralty Way. The eight locations were selected in consultation with County staff and included the most northerly, southerly, easterly, and westerly study intersections included in the December 2007 traffic study. The eight intersections are listed in **Table 6**, *Baseline Traffic Comparison Traffic Study (2007) vs. 2013 Traffic Volumes*, and the detailed traffic count worksheets are included in Attachment A of the Supplemental TIA. Existing AM and PM peak-hour traffic volumes at the study intersections are shown graphically in

Table 6

Baseline Traffic Comparison Traffic Study (2007) vs. 2013 Traffic Volumes

No.	Intersection	Peak Hour	Existing (2007) Traffic Volumes	Existing (2013) Traffic Counts	2007 to 2013 Volume Change	2007 to 2013 Percent Change
1	Via Marina/	AM	1,101	944	-157	-14.3%
	Tahiti Way	PM	1,016	908	-108	-10.6%
2	Via Marina/	AM	1,411	1,347	-64	-4.5%
	Marquesas Way	PM	1,387	1,324	-63	-4.5%
5	Washington Boulevard/	AM	3,085	2,797	-288	-9.3%
	Ocean Avenue-Via Marina	PM	3,158	2,910	-248	-7.9%
8	Lincoln Boulevard/	AM	6,101	6,542	441	7.2%
	Washington Boulevard	PM	9,263	6,259	-3,004	-32.4%
9	Lincoln Boulevard/	AM	4,774	5,165	391	8.2%
	Marina Expressway (SR-90)	PM	5,298	5,372	74	1.4%
12	Lincoln Boulevard/	AM	5,141	4,985	-156	-3.0%
	Fiji Way	PM	5,828	5,436	-392	-6.7%
16	Marina Expressway (SR-90) WB/	AM	2,460	3,615	1,155	47.0%
	Mindanao Way	PM	2,971	3,524	553	18.6%
17	Marina Expressway (SR-90) EB/	AM	2,822	3,560	738	26.2%
	Mindanao Way	PM	3,259	3,769	510	15.6%
	Total		**59,075**	**58,457**	**-618**	**-1.0%**

Source: Crain & Associates, 2014

Attachments B and C of the Supplemental TIA for 2007 and 2013 conditions, respectively. The 2013 existing traffic volumes were compared to the existing traffic volumes reported in the December 2007 study, and the results of the comparison are shown in Table 6.

As shown in Table 6, the total of the current AM and PM peak-hour counts from 2013 is slightly lower than the traffic volumes used in the December 2007 traffic study. Based on the comparison, it was determined that the baseline traffic conditions analyzed in the December 2007 traffic study still adequately describe current traffic conditions in 2013.

2. Project Features and Analysis Assumptions

Portions of the Original Project traffic section from the December 2007 traffic study (including traffic generation, distribution, and access) have been included in Attachment D of the Supplemental TIA (**Appendix B** of this Addendum). There has been little change to the Parcel 9U existing use or project description since the December 2007 traffic study, and the minor changes were determined not to affect the Project trip generation or distribution. Therefore, the magnitude of the resulting Project traffic impacts was determined not to have changed. The only substantive change relates to the type of hotel rooms planned for the Reduced-Scale Project. In the December 2007 traffic study, the 288 rooms were planned to be composed of 152 conventional hotel suites and 136 timeshare suites under the Original Project. Under the Reduced-Scale Project, the 288 hotel rooms are now intended to be hotel rooms only, with no timeshares. Although the detailed hotel room classification has changed, that change does not alter the anticipated Project trip

generation. Additionally, the overall square footage of hotel ancillary uses would be substantially decreased as well, which would incrementally reduce vehicle trips associated with those on-site uses. As shown in Attachment D of the Supplemental TIA, the certified LCP's trip rates specific to the Marina del Rey community used for the hotel land use in the December 2007 traffic study, and still applicable today, do not distinguish between conventional hotel suites and timeshare suites; further, the Reduced-Scale Project would include a considerable reduction in hotel-related ancillary uses (e.g., restaurant, bar/lounge, meeting rooms, etc.) such that trips associated with these components would not be increased relative to the Original Project. No additional land-use changes to the development programs for Parcel 10R and Parcel 14 have been proposed. Therefore, the trip generation estimate for the Reduced-Scale Project remains the same as that analyzed for the Original Project in the December 2007 traffic study.

Additionally, the Reduced-Scale Project's access plan is unchanged from that of the Original Project analyzed in the December 2007 traffic study, in terms of the number and general location of driveways. Since the Reduced-Scale Project's land-use categories and access are the same as previously analyzed, it was assumed that the Project trip distribution patterns would remain as analyzed. In summation, the Original Project analyzed in the December 2007 traffic study still adequately describes the currently proposed Reduced-Scale Project in 2013 for traffic impact purposes.

3. Cumulative Traffic Growth

In order to estimate future traffic volumes at the study intersections, two components of cumulative traffic growth were utilized in the December 2007 traffic study: ambient traffic growth and related project traffic growth. An annual traffic growth factor of 0.6 percent, compounded annually, was first conservatively applied to existing (2007) baseline traffic volumes for the six-year increment between the existing and Project buildout years in order to develop future baseline traffic volumes. Secondly, the traffic volumes associated with related projects within an approximate three-mile radius of the Project site were superimposed on these future baseline traffic volumes. Listings of potential related projects were obtained from the Los Angeles County Department of Regional Planning, Los Angeles County Department of Beaches & Harbors, City of Los Angeles Department of Transportation, City of Santa Monica, and City of Culver City. The related projects section from the December 2007 traffic study has been included in Attachment E of the Supplemental TIA (Appendix B of this Addendum).

In order to determine if the level of cumulative traffic growth analyzed in the December 2007 traffic study is adequate relative to 2013 traffic conditions, the ambient traffic growth factor and related projects trip generation values were compared. The County has determined that the application of an ambient traffic growth factor is no longer appropriate. Rather, the County has concluded that cumulative traffic volume growth is more accurately represented by the anticipated traffic from the proposed, planned, and under-construction development projects that constitute the related projects database used in their traffic impact studies. A current related projects database was developed using information obtained in November and December 2013. The related projects analysis used the same three-mile radius around the Project site in order to provide a direct comparison between 2007 and 2013 conditions. Based on the obtained information, the current related projects location map and trip generation table were developed and have been included in Attachments F and G, respectively, of the Supplemental TIA (Appendix B of this Addendum).

A related project trip generation comparison of 2007 and 2013 conditions was then performed, and the results have been summarized below in **Table 7**, *Related Projects Trip Growth Comparison 2007 Conditions*

Table 7

Related Projects Trip Growth Comparison 2007 Conditions vs. 2013 Conditions

Heading	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
December 2007 Traffic Study	94,062	3,148	4,238	7,386	4,915	5,137	10,052
2013 Current Related Projects	46,699	3,320	3,114	6,434	4,305	3,963	8,268
2007-to-2013 Generation Change	-47,363	172	-1,124	-952	-610	-1,174	-1,784
2007-to-2013 Percent Change	-50.4%	5.5%	-26.5%	-12.9%	-12.4%	-22.9%	-17.7%

Source: Craig & Associates, 2014

vs. 2013 Conditions. As shown in Table 7, the current related projects would generate fewer trips than the related projects identified in the December 2007 traffic study, independent of the Reduced-Scale Project. Additionally, as outlined above, an ambient traffic growth factor is no longer applied when analyzing future traffic conditions based on current County traffic study policies. Thus, it is reasonable to assume that the future conditions analyzed in the December 2007 traffic study are conservative in light of currently anticipated cumulative traffic growth.

4. Project-Specific Mitigation

In order to determine if the Project-specific mitigation measures proposed in the December 2007 traffic study are still available and feasible, a review of current field conditions and the Circulation section of the Marina del Rey Land Use Plan (February 8, 2012) was performed. The Project-specific mitigation section from the December 2007 traffic study has been included in Attachment H of the Supplemental TIA (Appendix B of this Addendum). The following is a summary of the current availability/feasibility of the recommended Project-specific mitigation measures:

- **Admiralty Way and Via Marina** -- The proposed mitigation, consisting of providing triple westbound left-turn lanes on Admiralty Way and two eastbound departure lanes on Admiralty Way with a right-turn merge lane from northbound Via Marina, is still identified as a Category 1 improvement in the Marina del Rey Specific Plan Transportation Improvement Plan (TIP). These improvements have not already been implemented and are being assessed along with the Category 3 improvement of reconstructing the intersection, with Admiralty Way and the Via Marina south leg becoming a continuous loop through roadway, in order to determine a preferred alternative;
- **Washington Boulevard and Via Marina/Ocean Avenue** -- The proposed mitigation consisted of improving traffic flow through the intersection by improving the nearby intersection of Washington Boulevard and Palawan Way. This improvement would provide additional egress from Marina del Rey and thus reduce traffic volumes on Via Marina. The improvements consisted of signalizing the intersection of Washington Boulevard and Palawan Way, while providing dual northbound left-turn lanes on Palawan Way. Although not included in the Marina del Rey TIP, this improvement is still available for implementation;

- **Lincoln Boulevard and Mindanao Way** -- The proposed mitigation consisted of widening the west side of Lincoln Boulevard and relocating the median island in order to provide an exclusive northbound right-turn-only lane on Lincoln Boulevard. This improvement, identified in the Marina del Rey TIP as a Category 1 improvement, has been completed. As a result, we have reanalyzed this location assuming the current geometric/signal configuration, and the Project would no longer have a significant traffic impact at this location. The revised analysis utilized the December 2007 traffic study volumes, which were shown to be conservative. The revised analysis results are summarized below in **Table 8**, *Critical Movement Analysis (CMA) Summary Future With Project Plus Mitigation Conditions*, while the level of service (LOS) worksheets are provided in Attachment I of the Supplemental TIA; and

Table 8

Critical Movement Analysis (CMA) Summary Future With Project Plus Mitigation Conditions

			With Ambient Growth		With Ambient Growth Plus Project			With Project Plus Mitigation		
No.	Intersection	Peak Hour	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
11.	Lincoln Boulevard and	AM	0.676	B	0.704	C	0.028	--	--	--
	Mindanao Way	PM	0.800	C	0.819	D	0.019	--	--	--
14.	Admiralty Way and	AM	0.576	A	0.608	B	0.032	0.608	B	0.032
	Mindanao Way	PM	0.743	C	0.784	C	0.041 *	0.734	C	-0.009

[a] *indicates significant project traffic impact, prior to mitigation, per Los Angeles County Department of Public Works "Traffic Impact Analysis Report Guidelines ", January 1, 1997.*

Source: Crain & Associates, 2014

- **Admiralty Way and Mindanao Way** -- The proposed mitigation consisted of installing dual southbound left-turn lanes on Admiralty Way and modifying the traffic signal to provide right-turn overlap phasing for the Mindanao Way westbound approach. The dual southbound left-turns were previously approved as part of the County Department of Public Works Admiralty Way Street Improvement project and were in the process of being installed at the time of preparation of the Supplemental TIA. The westbound right-turn overlap phasing, however, had already been implemented. As a result, we have reanalyzed this location assuming the current geometric/signal configuration, with the results shown in **Table 8** (and LOS worksheets provided in Attachment I of the Supplemental TIA). Although the presence of westbound right-turn overlap phasing does not eliminate the Project's significant traffic impact under the Future With Project condition, the available dual southbound left-turn mitigation would reduce the Project's impact to a less-than-significant level. Therefore, it is recommended that the Reduced-Scale Project be required to make a fair share payment for these improvement measures, consistent with the Certified EIR Traffic Mitigation Measure 5.7-1.

Based on the above mitigation analysis, it appears that all Project-specific impacts can be reduced to less-than-significant levels with available and feasible mitigation measures.

In summary, the mitigation is to be implemented using the same standard implementation/fair share payment procedures specified in the 2007 study. To address the impact at Washington Boulevard and Via Marina/Ocean Avenue, the developer would be required to pay the fair share contribution to implement the measure to:

- Install a signal and additional second northbound left-turn lane at Washington Boulevard and Palawan Way.

The developer would pay a fair share for the measures at:

- Admiralty Way and Via Marina;
- Lincoln Boulevard and Mindanao Way; and
- Admiralty Way and Mindanao Way

It should be noted that the improvements at Admiralty Way and Mindanao Way were to have been installed by the Original Project, with fair share payments by others, but have subsequently been assigned for implementation by others with approved entitlements, so the Reduced-Scale Project would make fair share payments towards that installation.

5. Cumulative Impacts

The County has updated the Marina del Rey Transportation Improvement Program (TIP), as part of the LCP amendment approval process, between the December 2007 traffic study and preparation of the Supplemental TIA. It is recommended that, as in the December 2007 report, the Project be required to pay the fee enacted to fund that program to address cumulative traffic impacts.

6. Operational Traffic Impact Conclusions

The analysis herein confirmed the following regarding the December 2007 traffic study for the proposed Project:

- The baseline traffic conditions analyzed in the December 2007 traffic study still adequately describe existing traffic conditions as described in the January 9, 2014 Supplemental TIA;
- The Project description analyzed in the December 2007 traffic study still adequately describes the currently proposed Project for traffic impact purposes;
- The future conditions estimated in the December 2007 traffic study are conservative in light of currently anticipated cumulative traffic growth and current County guidelines; and
- All Project-specific impacts can be reduced to less-than-significant levels with available and feasible mitigation measures; however, significant impacts would remain if implementation of the prescribed mitigation measures are delayed or the measures are not implemented.
- Cumulative impacts can be reduced with implementation of available cumulative mitigation measures; however, cumulative operational traffic impacts would remain significant and unavoidable.

Therefore, the December 2007 traffic study is considered conservative and valid for determining the traffic impacts of the currently proposed Reduced-Scale Project. As such, the Reduced-Scale Project would not result in any new significant impacts or increase the severity of impacts already identified in the Certified EIR.

c. Parking Impacts

The Original Project was concluded in the Certified EIR to have a less than significant impact with regard to parking supply based on the conclusions of a Project-specific shared parking analysis that determined a peak a parking demand of 345 spaces, which would be exceeded by the 360 on-site spaces provided. The Reduced-Scale Project would not trigger the need for a shared parking analysis, as the on-site parking supply of 231 spaces (210 for hotel uses and 21 for the previously approved Wetland Park) would exceed the County Code parking requirement of 165 spaces, inclusive of parking to serve the hotel uses (144 spaces required) and the previously approved Wetland Park (21 spaces required; these parking spaces would be provided as four self-park surface spaces and 17 valet spaces within the parking garage). As such, the Reduced-Scale Project would not result in any new significant impacts or increase the severity of impacts already identified in the Certified EIR with regard to parking supply.

IV.8 Sewer Service

With mitigation, the Certified EIR concluded the Original Project would not significantly impact sewer services during construction or operation. The Certified EIR also determined the Original Project's cumulative impacts to sewer service to be less than significant.

The Reduced-Scale Project would involve similar construction activity and during operation would generate less wastewater than the Original Project, due to the elimination or reduction in the amount of certain uses that are ancillary to the hotel use. The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. It would also implement the same mitigation measures as the Original Project. Therefore, the Reduced-Scale Project would have the same or lesser impacts regarding sewer service as the Original Project, including project-specific and cumulative impacts, and can be concluded as having a less than significant impact.

IV.9 Water Service

With mitigation, the Certified EIR concluded the Original Project would not significantly impact water service during construction or operation. The Certified EIR also determined the Original Project's cumulative impacts to water service to be less than significant.

The Reduced-Scale Project would involve similar construction activity and during operation would consume less water than the Original Project due to the elimination or reduction in the amount of certain uses that are ancillary to the hotel use. The Reduced-Scale Project would result in an overall decrease of 7,637 square feet in ancillary hotel uses (e.g., restaurant, meeting space, bar/lounge, etc.) compared to the Original Project, from 21,436 square feet to 13,799 square feet, which is primarily due to the elimination of ballroom and spa facilities under the Reduced-Scale Project. As a result of the Reduced-Scale Project hotel room selection, the

Reduced-Scale Project would result in at least 1,360 gallons per day of reduced water demand (approximately 1.5 acre-feet per year in water savings). It would also implement the same mitigation measures as the Original Project. Therefore, the Reduced-Scale Project would have the same or lesser impacts regarding water service as the Original Project, including project-specific and cumulative impacts. Although California is currently experiencing extended drought conditions, water supplies to the Marina del Rey Water System, maintained by the Department of Public Works as Waterworks District No. 80, are provided by the West Basin Municipal Water District (WBMWD), which has various mechanisms in place to ensure that adequate water deliveries are provided to meet ongoing demands within its service area even through multiple-dry years (refer to WBMWD's 2010 Urban Water Management Plan).[5] Therefore, the Reduced-Scale Project can be concluded as having a less than significant impact.

IV.10 Solid Waste

The Certified EIR determined that construction and operation of the Original Project would generate an increase in demand for solid waste collection services in the County. While there is currently sufficient landfill capacity to accommodate solid waste generated by the project, an adequate supply of landfill space in the County has not yet been approved for beyond 2017. As a result, the Original Project and cumulative projects could contribute to a decline in landfill capacity, resulting in a significant impact unless additional landfill space or other disposal alternatives are approved. There are no known mitigation measures that would mitigate these potentially project-specific and cumulative significant impacts of the Original Project to a less than significant level.

It is conservatively concluded that the Original Project would result significant solid waste impacts even with the implementation of mitigation measures. The Reduced-Scale Project would involve similar construction activity and during operation would generate less solid waste than the Original Project due to the elimination or reduction in the amount of certain uses that are ancillary to the hotel use. It would also implement the same mitigation measures as required by the Original Project. The Reduced-Scale Project design would have the same or lesser impact in association with solid waste, and project-specific impacts in this regard would be less than significant. However, a significant cumulative impact is conservatively concluded for the Reduced-Scale Project.

IV.11 Education

Construction and operation of the Original Project would not increase the number of students attending local schools. Although the Original Project would not be required to pay substantial school impact fees because it is not a residential project, the Los Angeles Unified School District ("LAUSD") assesses a non-residential school impact fee of $0.47 per square foot to account for indirect population growth associated with commercial and industrial projects. With payment of requisite school impact fees to LAUSD, there would be no impact to education services, and cumulative impacts would also be less than significant.

Like the Original Project, the Reduced-Scale Project would not directly increase the number of students attending local schools but would be required to pay school impact fees for non-residential development in order to offset indirect population growth and associated student generation. Therefore, given payment of

[5] *West Basin Municipal Water District. "2010 Urban Water Management Plan," Draft. April 2011. http://www.westbasin.org/files/planning-UWMP/west-basin-draft-UWMP-2010-with-appendices.pdf. Accessed September 2014.*

requisite LAUSD fees, the Reduced-Scale Project's impact with respect to schools would be the same as the Original Project and, like the Original Project, would have no impact.

IV.12 Police Protection

With mitigation, the Certified EIR determined the Original Project would not significantly impact police protection services for the Project site during construction or operation. The County Sheriff's Department could see an increase in demand for police protection services. However, the additional revenues generated by the Original Project and the related projects will enable the County to increase police protection as needed to reduce the potential impacts to less than significant levels. Cumulative impacts were also determined in the Certified EIR to be less than significant.

The Reduced-Scale Project would involve generally the same construction activities and would have the same number of hotel rooms. It would also implement the same mitigation measures as required of the Original Project. Therefore, the Reduced-Scale Project can be concluded as having a less than significant impact, and its contribution to cumulative impacts would not be considerable.

IV.13 Fire Protection

With mitigation, the Certified EIR determined the Original Project would not significantly impact fire protection services for the Project site during construction or operation. The County Fire Department could see an increase in the demand for fire protection services. However, implementation of the recommended mitigation measures is considered full and complete mitigation of fire protection-related impacts. Cumulative impacts were also determined in the Certified EIR to be less than significant.

The Reduced-Scale Project would involve generally the same construction activities and would have the same number of hotel rooms. It would also implement the same mitigation measures as required of the Original Project. The Reduced-Scale Project would comply with all current applicable codes and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants. Therefore, the Reduced-Scale Project can be concluded as having a less than significant impact, and its contribution to cumulative impacts would not be considerable.

IV.14 Libraries

The Certified EIR determined the Original Project would not impact the library serving the Project site during operation. The Lloyd Taber – Marina del Rey Library would not be expected to see an increase in demand for services. Cumulative impacts were also determined in the Certified EIR to be less than significant.

Like the Original Project, the Reduced-Scale Project would not include any land uses that could increase demand for library services. Therefore, the Reduced-Scale Project would have the same impact on libraries as the Original Project and can be concluded as having no impact. The Reduced-Scale Project's contribution to cumulative impacts would not be considerable.

IV.15 Parks and Recreation

The Certified EIR determined the Original Project would not displace existing or proposed public parkland, nor create a new demand on parkland use. The creation of the wetland and upland park on Parcel 9U would increase the amount of public parkland. Therefore, no impacts to parks and recreation would occur. Cumulative impacts were also determined in the EIR to be less than significant.

Like the Original Project, the Reduced-Scale Project would not include any land uses that could increase demand for parks and recreation and would fund a portion of the Wetland Park on the balance of Parcel 9U. Therefore, the Reduced-Scale Project would have the same impact on parks and recreation as the Original Project and can be concluded as having no impact. The Reduced-Scale Project's contribution to cumulative impacts would not be considerable.

IV.16 Population and Housing

The Certified EIR determined construction of the Original Project would not increase area population or create a demand for housing. The Original Project would not significantly impact population or housing in the Westside Cities subregion, but it would contribute to a considerable cumulative impact on housing growth within the Westside Cities.

The Reduced-Scale Project would generally include the same or reduced land uses. Therefore, the Reduced-Scale Project would have the same or lesser impact regarding population and housing as the Original Project and can be concluded as having a less than significant project-specific impact. Because the Reduced-Scale Project would not add any permanent population and therefore would not have the potential to have significant population and housing impacts, the Reduced-Scale Project would not contribute to a significant cumulative impact with respect to population and housing.

IV.17 Land Use and Planning

As indicated in the Land Use and Planning section of the Certified EIR, the Original Project was determined to be consistent with land use policies defined in the Marina del Rey LUP. Therefore, project impacts on the land use environment were not considered significant.

The three significance thresholds for land use and planning are all less than significant because the project can be found to be consistent with the Marina del Rey LUP. The Reduced-Scale Project in conjunction with other reasonable foreseeable development would have the same or lesser impact in association with land use and planning and can also be concluded as having a less than significant impact at the project level, but would still contribute to a significant unavoidable cumulative impact, for which there are no known mitigation measures capable of reducing this cumulative impact to a less than significant level.

V. CONCLUSION

The Reduced-Scale Project would not alter the impact findings and mitigation measures for any of the environmental issues presented in the EIR, with the exception of visual resources impacts, which are concluded to be less than significant under the Reduced-Scale Project. With implementation of the prescribed mitigation measures in the EIR, where applicable, there would be no new significant impacts and

no substantial increase in the severity of environmental impacts resulting from the Reduced-Scale Project compared to those impacts previously identified in the Certified EIR for the Original Project. No new mitigation measures are required for the proposed Reduced-Scale Project. Therefore, the County has determined the impacts for the Reduced-Scale Project are within the scope of impacts identified in the Certified EIR, inclusive of the unavoidable significant impacts on construction air quality, construction noise, visual resources and solid waste, and unavoidable significant cumulative impacts on construction air quality, construction noise, traffic, land use, and solid waste disposal, for which no known mitigation measures are available.

Based on the above, pursuant to State CEQA Guidelines Section 15164(b), the County determines an Addendum is the appropriate CEQA document for the Reduced-Scale Project, because none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration are applicable. This Addendum has appropriately disclosed the potential impacts from the Reduced-Scale Project and will be included as part of the CEQA record for the Reduced-Scale Project.

APPENDIX A: Revised Wind Assessment

Tel: 519.823.1311
Fax: 519.823.1316

Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West
Guelph, Ontario, Canada
N1K 1B8
Email: solutions@rwdi.com

April 25, 2011

Aaron Clark
Armbruster Goldsmith & Delvac LLP
11611 San Vicente Blvd.
Suite 900
Los Angeles, CA
USA 90049
Aaron@agd-landuse.com

Re: Wind Assessment
Woodfin / Courtyard Development
Marina del Rey, California
RWDI Reference No. 1101573

Dear Aaron,

For the then proposed Woodfin Suites Hotel development at the northeast corner of the intersection of Via Marina and Tahiti Way in Marina del Rey, California, Rowan Williams Davies & Irwin Inc. (RWDI) conducted a wind-tunnel study to fulfill the wind study requirements of the Los Angeles County Zoning Code, including an assessment of the effects of the proposed development on wind patterns with the marina, loss of surface winds used by sailboats and birds and general air circulation. A photo of the wind tunnel model is shown in Image 1. The final report was issued on October 21, 2005 and is attached at the end of this letter for reference.

It was concluded that "the proposed Woodfin Suites Hotel will not affect the existing wind conditions over a majority of the areas in Basins A, B and C of Marina del Rey. There will be areas of altered wind speed and direction in Basin B adjacent to the proposed development, most notably when winds are from the southwest. Due to the localized nature of the proposed development, the general air circulation patterns and the use of surface winds by birds within Basins A, B and C of Marina del Rey will not be affected."

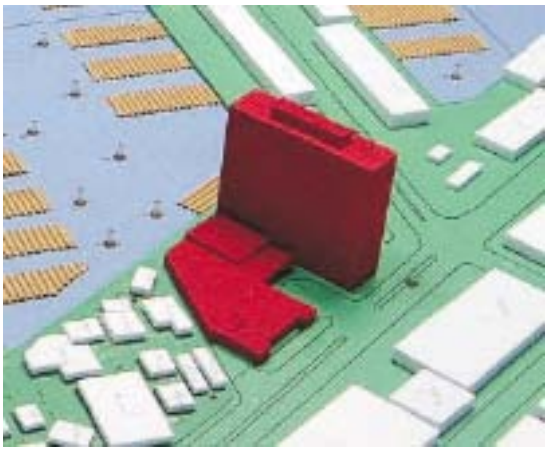


Image 1: Wind-tunnel model of the proposed Woodfin Suites Hotel in 2005

The originally proposed building design has since been significantly revised. According to the design drawings by Gin Wong Associates dated April 8, 2011, the current Courtyard development on the same site consists of two 70 ft tall rectangular buildings (see Images 2a and 2b on next page), down from 225 ft in the previous single-tower design (Image 1). This is a significant reduction in building heights. The distance between the building and the basins still remains to be the same.

With a reduced building height, the proposed development will have a similar height as the existing buildings (four storeys) to the west, which is the prevailing wind direction in the area. The potential influence created by the current development on the wind patterns within the adjacent marinas is expected to be reduced considerably from what that was predicted in our wind tunnel study in 2005. It is our opinion that the general air circulation patterns and the use of surface winds by birds in Marina del Rey will not be affected by the proposed development.

Image 2a: Current site plan

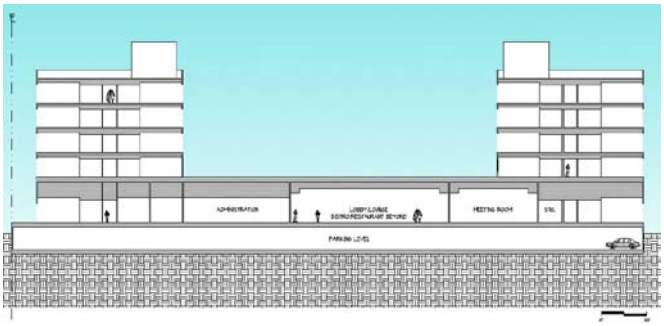


Image 2b: Current building section

The above assessment is based on the past wind tunnel results and our understanding of wind flows around buildings. We trust this is adequate for your current needs. If you have any questions or need additional information, please feel free to contact us at your convenience.

Yours very truly,

ROWAN WILLIAMS DAVIES & IRWIN

Dan Bacon
Senior Project Manager / Associate

Hanqing Wu, Ph.D., P.Eng.
Project Director / Associate

RWDI REPORT

WIND STUDY
WOODFIN SUITES HOTEL
MARINA DEL REY, CALIFORNIA

Project Number: 06-1023

October 21, 2005

SUBMITTED TO:

Mr. Mark Rousseau
Senior Vice President, Development
Woodfin Suite Hotels, LLC
12730 High Bluff Drive, Suite 250
San Diego, CA 92130

By Email/Courier: Aaron@ag-lanuse.com

SUBMITTED BY:

Rowan Williams Davies & Irwin Inc.
Consulting Engineers & Scientists
650 Woodlawn Road West
Guelph, Ontario N1K 1B8
P: (519) 823-1311
F: (519) 823-1316

Project Engineer: Tahrana Lovlin, P.Eng.
Project Manager: Dan Bacon
Project Director: Bill F. Waechter, C.E.T.

1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was requested by the Woodfin Suite Hotels, LLC to undertake a detailed wind study on the proposed Woodfin Suites Hotel (Parcel 9U) in Marina del Rey, California. The study addressed the wind study requirements of the Los Angeles County Zoning Code, including an assessment of the effects of the proposed developments and/or building placement on wind patterns within the marina, loss of surface winds used by sailboats and birds and general air circulation.

2. TEST METHODOLOGY

Wind tunnel tests were conducted on a scale model of a section of Marina del Rey to determine the impact on the wind conditions resulting from the proposed Woodfin Suites Hotel and future developments. This report provides a summary of the results of these wind tunnel tests on Basins A, B, C, and on land-based locations.

A 1:500 scale model of the study area and the proposed developments were assembled as shown in Figures 1a, 1b and 1c. Tests were conducted to simulate and measure wind conditions:

Existing Configuration: as they existed for the base study year (circa 1998) (Figure 1a);

Proposed Configuration: after the proposed Woodfin Suites Hotel is constructed (Figure 1b); and,

Future Configuration: with the proposed developments and the expected future developments (Figure 1c).

The results presented in this report pertain to the model of the proposed Woodfin Suites Hotel constructed using the architectural design drawings received by RWDI on June 28 and 29, 2005, and other in-house information, such as city maps and aerial photos.

The wind tunnel model was instrumented with a total of 47 wind sensors located in Basins A, B and C, and at land locations along Marquesas Way and Tahiti Way, as well as near the proposed development. It was tested in RWDI's boundary layer wind tunnel for the predominant wind directions, which are west, west-southwest, southwest and east. The sensors were developed by RWDI for use on scale models and are capable of measuring both changes in wind speed and wind direction, at a full scale height of approximately 15 ft.

The wind tunnel results for all predominant wind directions in the Los Angeles area have been examined in detail and are presented in this report. The west, west-southwest, southwest and east wind directions together account for winds that occur a majority of the time, as shown on Figure 2. The wind roses on Figure 2 show the percentage of the time that wind blows from each of 16 directions during spring, summer, fall and winter for the hours of 7:00 am through 9:00 pm, when most sailing would occur. All of the tests were conducted for the above four wind directions.

Information on the changes in wind speed and direction recorded at each sensor location can be obtained from Figures 3 through 6 for the four wind directions tested for the Existing, Proposed and Future development conditions. Each figure presents local wind direction data at each location for one of the four approaching wind directions tested. The length of the arrows is proportional to the speed of the wind at each location. In each figure there are three colour coded arrows at each sensor location: black to indicate the local wind direction for existing site conditions, red for the proposed Woodfin Suites Hotel, and green for the configuration with the proposed and future developments present.

The wind analysis considered if the proposed development would result in changes to the local wind direction or mean speed between adjacent sensors that are greater than the difference presently experienced between any two adjacent sensors. Until criteria are established by the County of Los Angeles, this is the best method of assessing the impact of the proposed developments on the sailing conditions in the marina.

3. EFFECTS ON SAILING CONDITIONS

3.1 Locations On Water (Locations 1 through 8, 19 through 37 and 41 through 47)

In Basin C (Locations 1 through 8), for the southwest, west-southwest and west winds, the red arrows (Proposed Configurations) are aligned closely with the black arrows (Existing Configuration) and have a similar length at all measurement locations in Basin C. The green arrows (Future Configuration) are slightly rotated, particularly with winds from the west (see Figure 3), illustrating the influence of the future buildings around the perimeter of Basin C.

In Basin B (Locations 19 through 37), for the west-southwest and southwest winds, the red and green arrows of the Proposed and Future Configurations are aligned closely with the black arrows of the Existing Configuration (see Figures 4 and 5). Differences in arrow length and direction occur locally at the west end of the basin, near the proposed development. During west winds (see Figure 3), test locations along Basin B show a wind direction shift for most of the basin when the proposed Woodfin Suites Hotel is constructed. With the most obvious shifts occurring near the proposed development (Locations 19 through 22). Changes in the local wind direction between adjacent sensors are similar for the proposed and existing conditions in this area of the basin, while the magnitude of the winds along Basin B remained similar between the Existing, Proposed and Future Configurations. As mariners are in the final stages of docking it is assumed that this is not an issue.

In Basin A (Locations 41 through 47), for the southwest, west-southwest and west winds, the red and green arrows (Proposed and Future Configurations) are aligned closely with the black arrows (Existing Configuration) and have a similar length at all measurement locations on Basin A. Therefore, the wind direction and speed are not affected by the addition of the proposed Woodfin Suites Hotel for these wind directions, which are predominant in the Marina del Rey area.

As shown in Figure 2, the east winds have a relatively low frequency among the four predominant wind directions. The effect of the proposed development is limited to Basin B, adjacent to the proposed development. As mariners who use docks in this area are in the final stages of docking, it is assumed that these localized changes in wind speed and direction will not be an issue.

3.2 Locations on Land (Locations 9 through 18, 38, 39 and 40)

Wind sensors were installed on land (Locations 9 through 18, 38, 39 and 40) to measure changes in general wind flows (wind direction and magnitude) at locations along Marquesas Way, Tahiti Way and Via Marina, which border the proposed Woodfin Suites Hotel and future buildings.

Generally, the results for the land locations showed that changes in wind magnitude and direction were greatest at localized areas closest to proposed and future buildings. Generally, as the distance from the proposed / future buildings increased, the difference in the wind direction and magnitude was minimal between the building configurations.

4. LOSS OF SURFACE WINDS USED BY BIRDS

In order to assess the effects on birds of changes in the surface winds a report was prepared by an expert in the aerodynamics, kinematics and behavior of birds. This report has been attached as Appendix A. The author of the report considered the following issues:

- the types of birds likely to inhabit Marina del Rey;
- the ability of birds to take off and land;
- soaring conditions upwind and downwind of the proposed building;
- effects on local thermal soaring conditions; and,
- changes to flight efficiency due to turbulence.

From our test results, the minimal change on the existing overall wind fields, due to the proposed development, will not result in significant changes to the birds' use of the area.

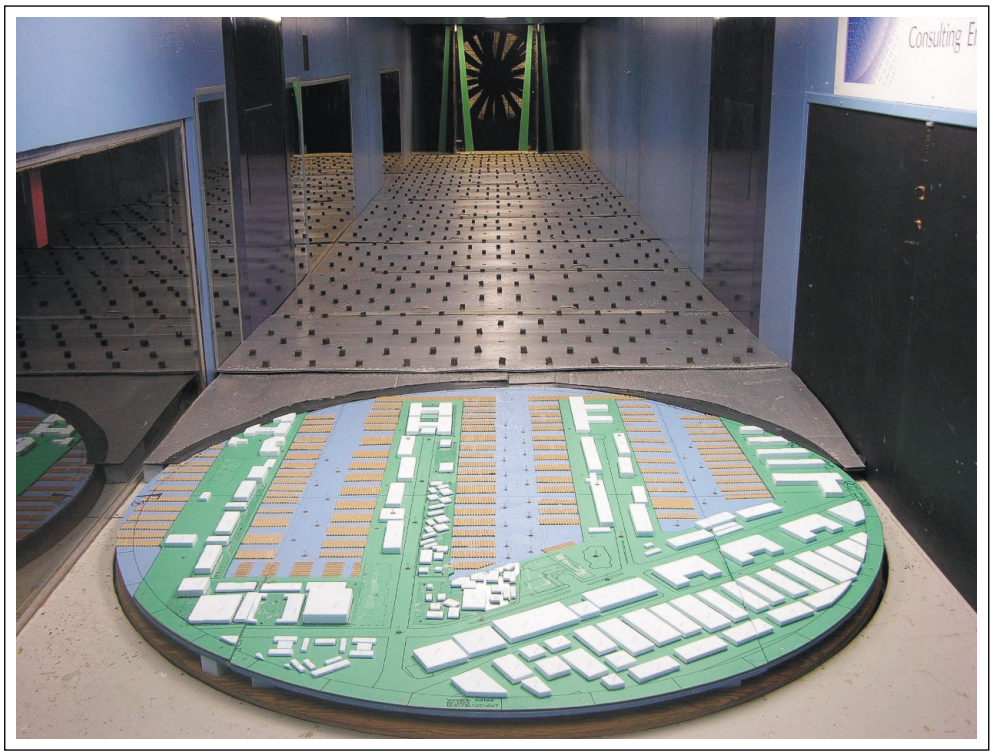
5. GENERAL AIR CIRCULATION PATTERNS

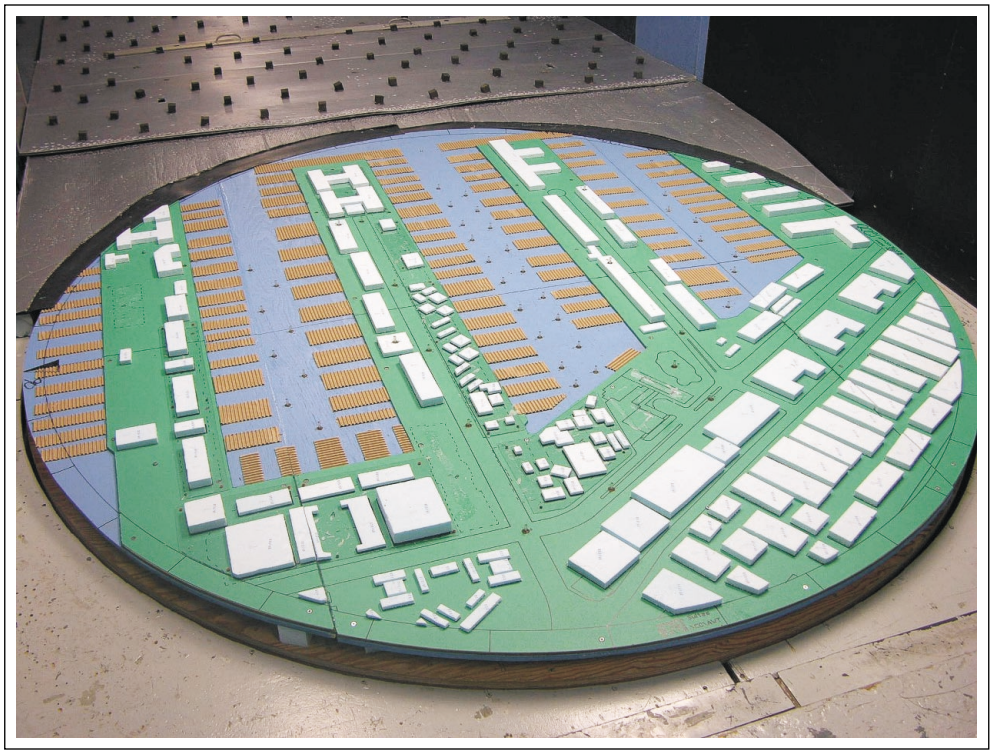
Changes in wind speed and direction were recorded only in the immediate vicinity of the proposed development. Due to the localized nature of these changes there will be no effect on the general air circulation patterns within Basins A, B and C of Marina del Rey.

6. CONCLUSIONS

From the results of this wind study, it has been concluded that the proposed Woodfin Suites Hotel will not affect the existing wind conditions over a majority of the areas in Basins A, B and C of Marina del Rey. There will be areas of altered wind speed and direction in Basin B adjacent to the proposed development, most notably when winds are from the southwest. With the future buildings, there will also be localized areas where changes in wind direction and magnitude occur such as the west end of Basin C. These areas are generally close to the proposed and future developments. Due to the localized nature of these changes, the general air circulation patterns and the use of surface winds by birds within Basins A, B and C of Marina del Rey will not be affected.

FIGURES





Wind Tunnel Study Model
Existing Configuration

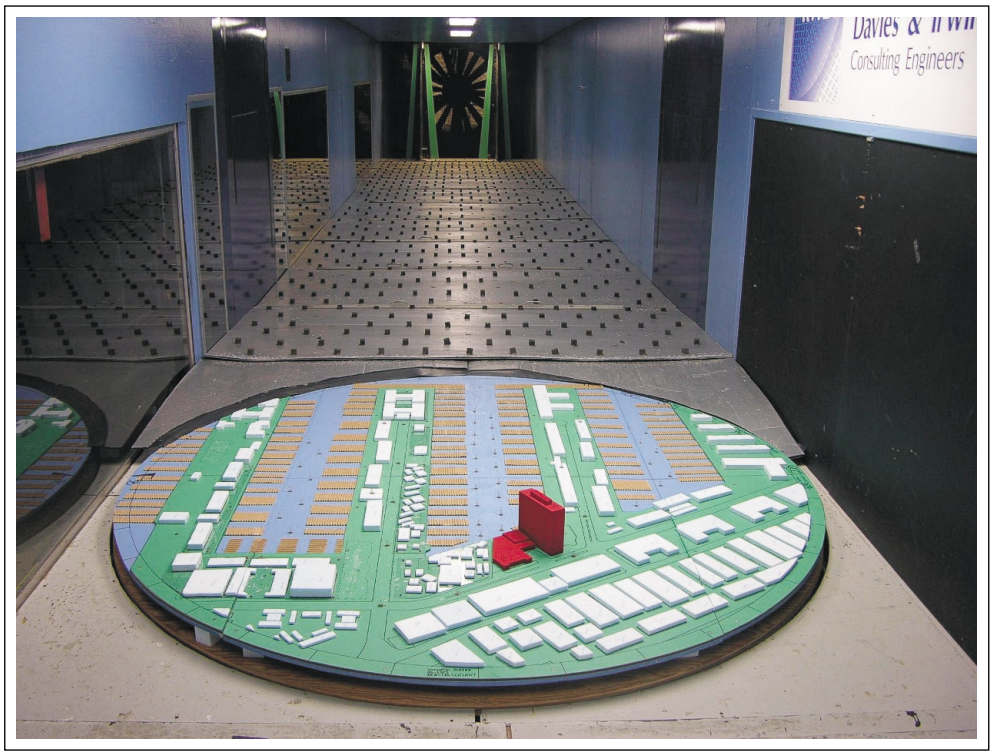
Woodfin Suites Hotel - Marina del Rey, California

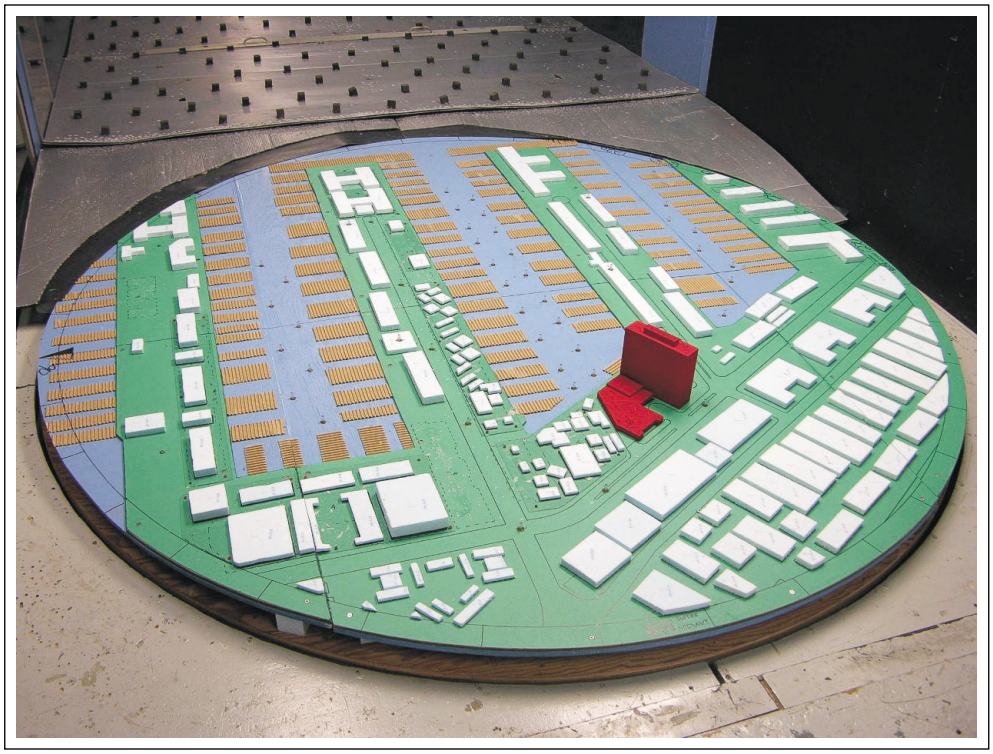
Project #05-1023

Figure No. 1a

Date: October 11, 2005

RWDI





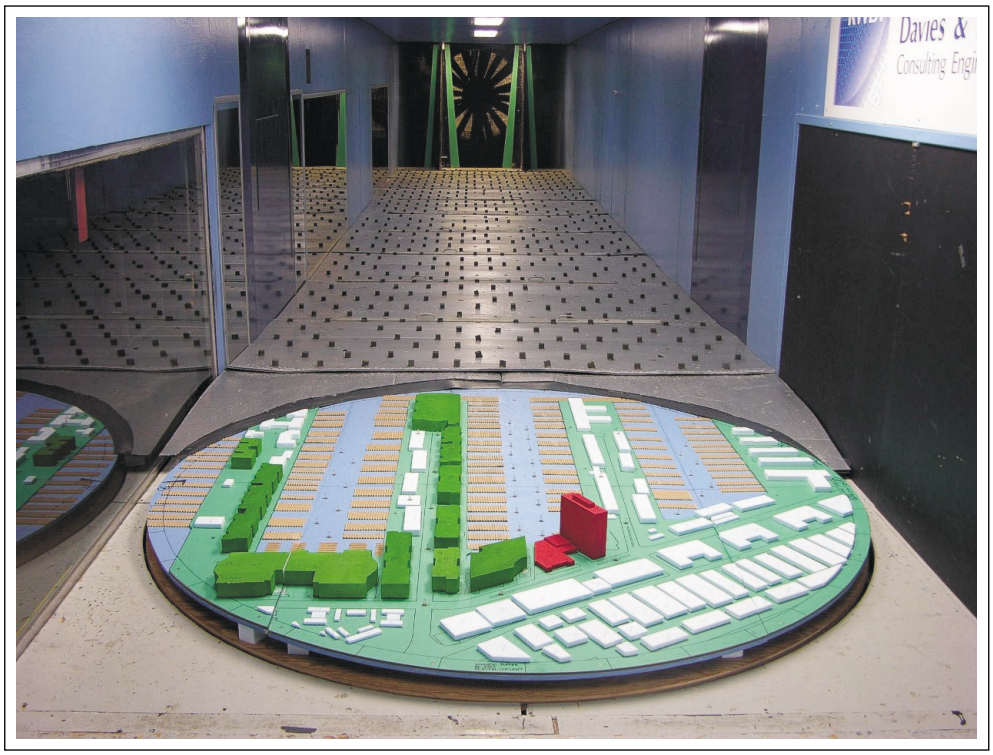
Wind Tunnel Study Model
Proposed Configuration

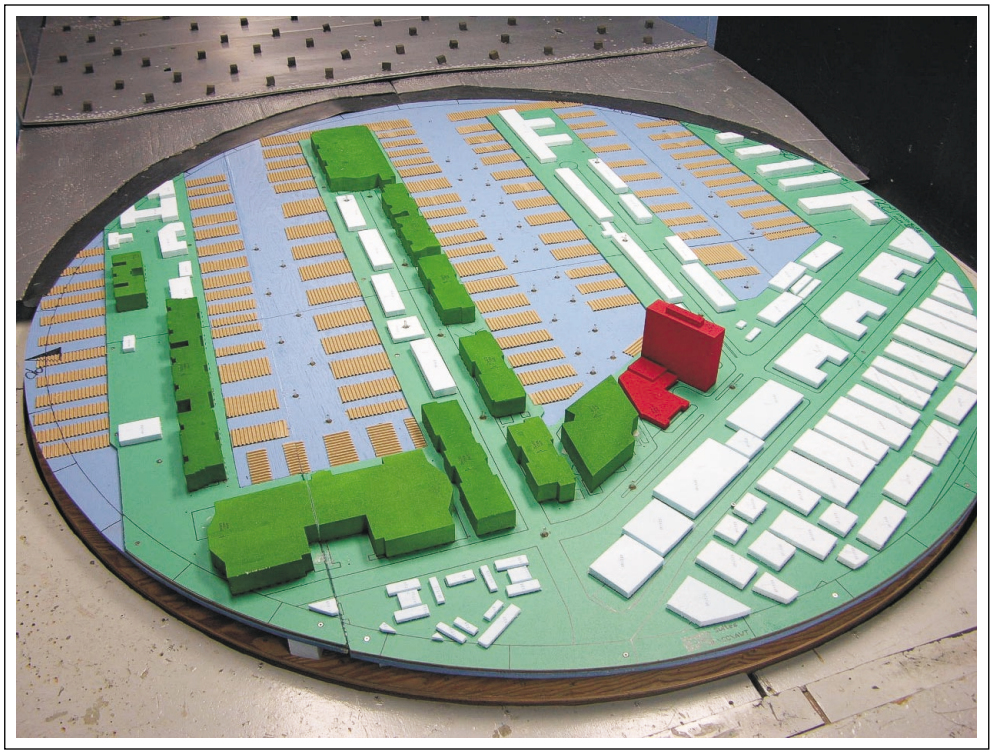
Woodfin Suites Hotel - Marina del Rey, California Project #05-1023

Figure No. 1b

Date: October 11, 2005

RWDI





Wind Tunnel Study Model
Future Configuration

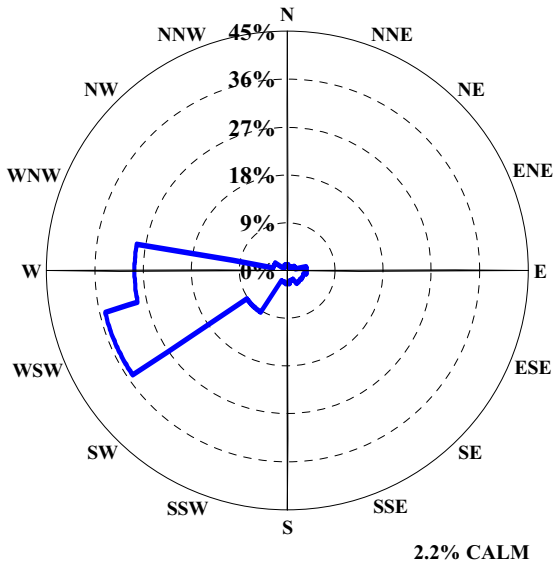
Woodfin Suites Hotel - Marina del Rey, California

Project #05-1023

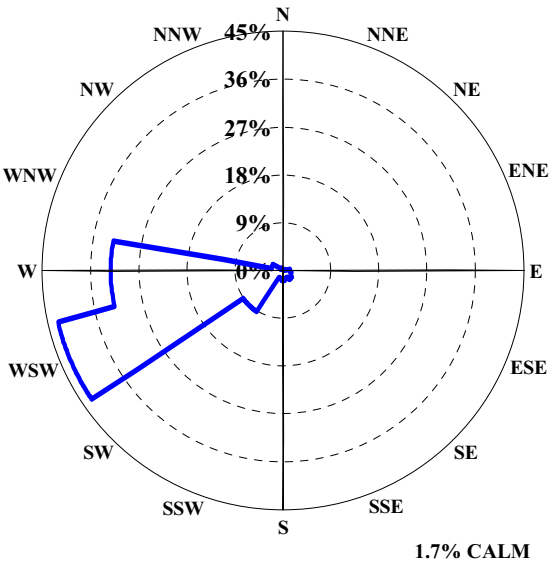
Figure No. 1c

Date: October 11, 2005

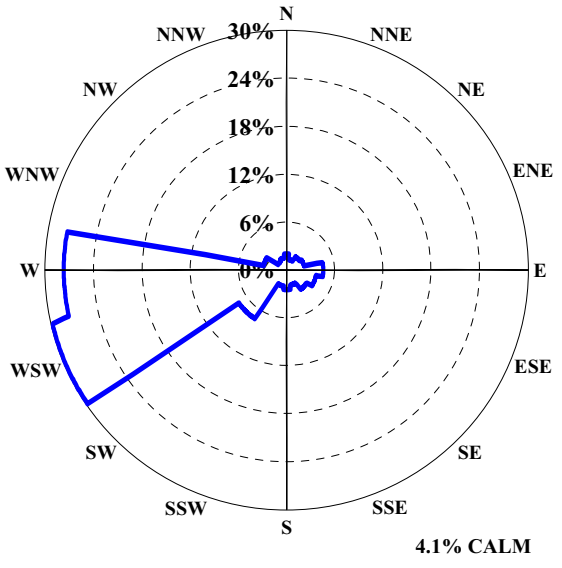
RWDI



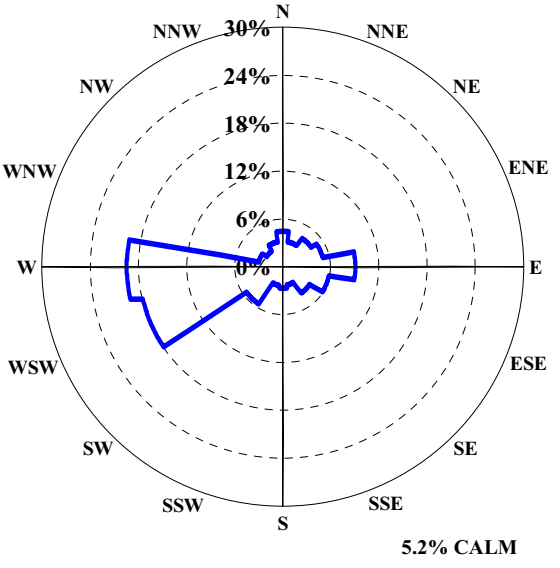
SPRING WINDS
(March, April, May)



SUMMER WINDS
(June, July August)

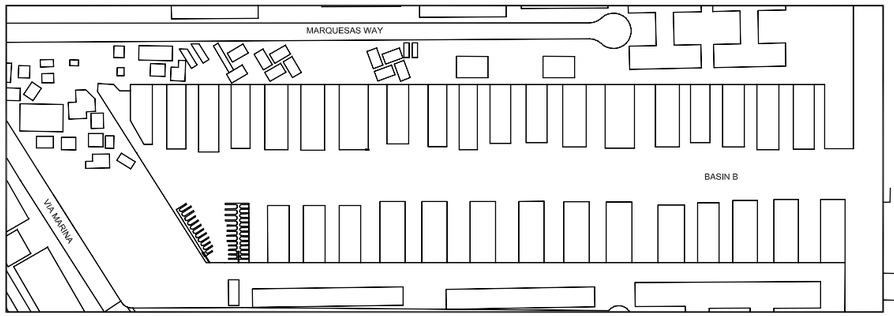


FALL WINDS
(September, October, November)

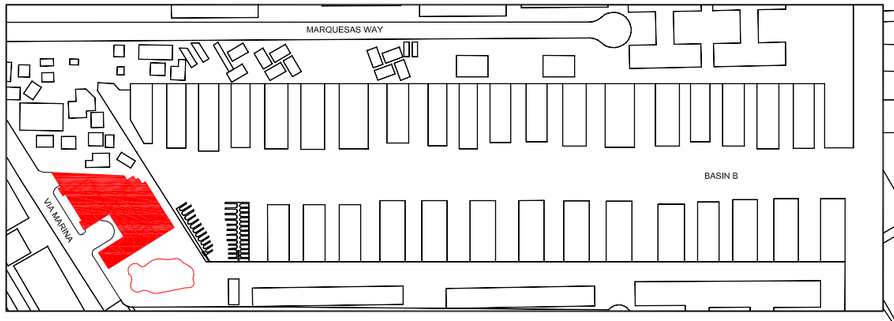


WINTER WINDS
(December, January, February)

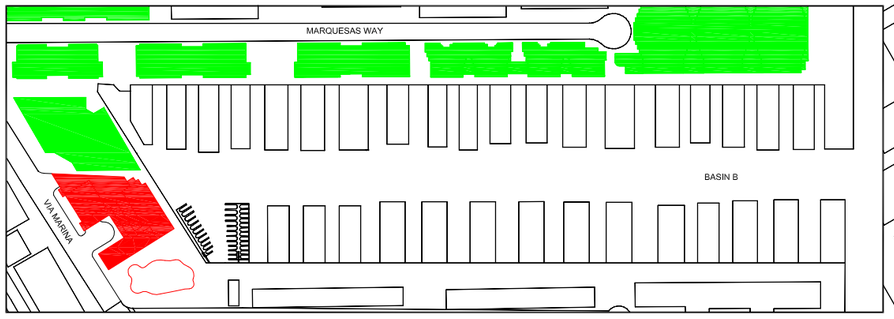
Directional Distribution (%) of Winds (Blowing From) **Station: Los Angeles International Airport, CA (1947 - 2001) 7:00am - 9:00pm** Woodfin Suites Hotel - Marina del Rey, California Project #: 06-1023	Figure No. **2** Date: Sept. 4, 2003	RWDI



EXISTING



PROPOSED



FUTURE

TEST CONFIGURATIONS - N.T.S.

Wind

SENSOR LOCATION:	WIND DIRECTION LEGEND:
Grade Level	WIND SPEED CATEGORIES:
Sensors 8 & 9 and 38 & 39 are on Roofs	EXISTING
	PROPOSED
	FUTURE
	Note: Arrow length is proportional to mean wind speed.

Local Wind Direction - Wind from 270° (West)

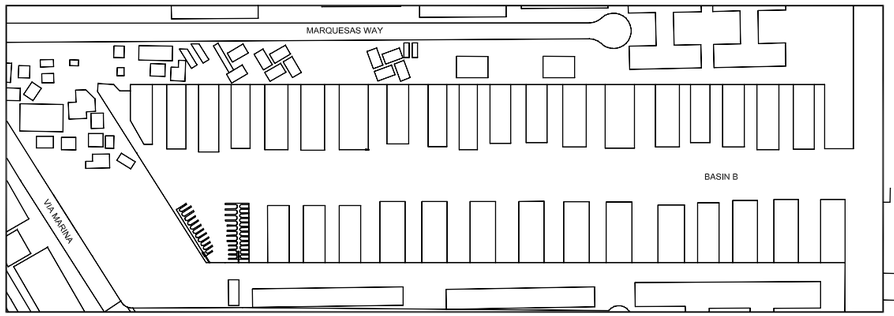
True North

Woodfin Suites Hotel - Marina del Rey, California

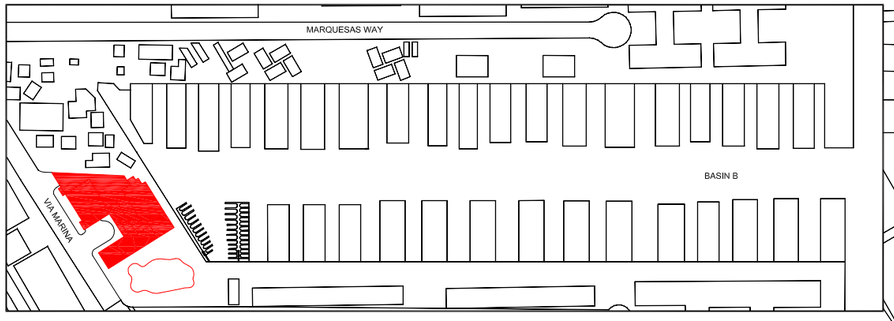
Project #06-1023

Drawn by:	DJM	Figure:	3
Approx. Scale:			1"=300'
Date Revised:			Oct. 11, 2005

RWDI



EXISTING



PROPOSED

FUTURE

TEST CONFIGURATIONS - N.T.S.

Wind

SENSOR LOCATION:

Grade Level

Sensors 8 & 9 and 38 & 39 are on Roofs

WIND DIRECTION LEGEND:

WIND SPEED CATEGORIES:

EXISTING

PROPOSED

FUTURE

Note:
Arrow length is proportional to mean wind speed.

0 150 300ft

Local Wind Direction - Wind from 247° (West-southwest)

True North

Woodfin Suites Hotel - Marina del Rey, California

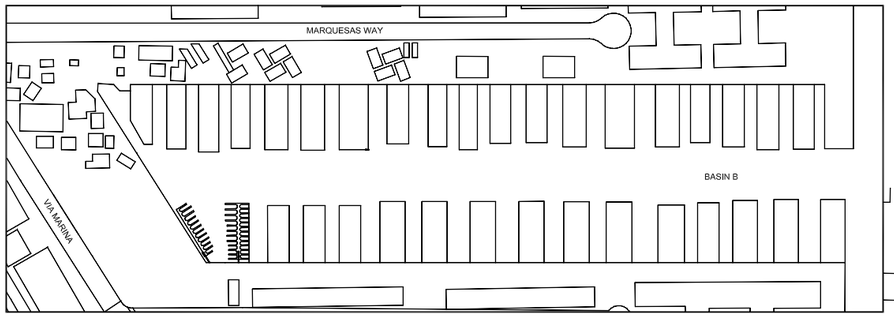
Project #06-1023

Drawn by: DJM | Figure: 4

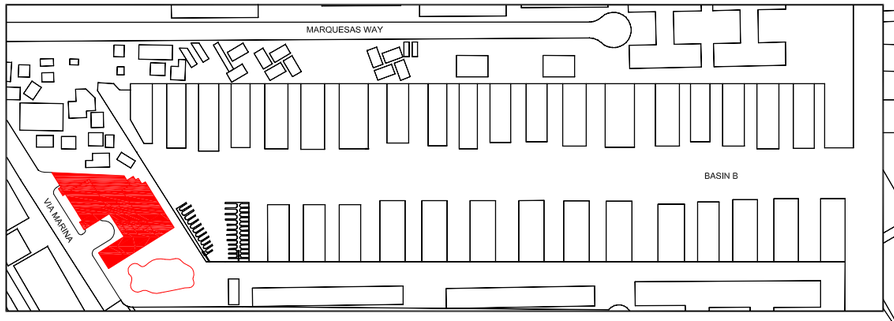
Approx. Scale: 1"=300'

Date Revised: Oct. 11, 2005

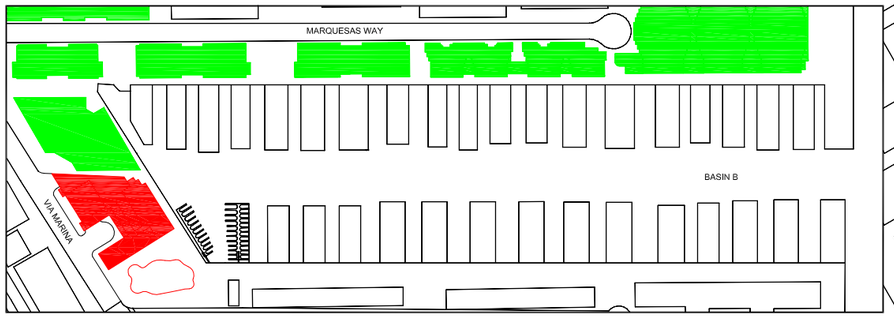
RWDI



EXISTING



PROPOSED



FUTURE

TEST CONFIGURATIONS - N.T.S.

Wind

SENSOR LOCATION:
- Grade Level

Sensors 8 & 9 and 38 & 39 are on Roofs

WIND DIRECTION LEGEND:

WIND SPEED CATEGORIES:
- EXISTING
- PROPOSED
- FUTURE

Note:
Arrow length is proportional to mean wind speed.

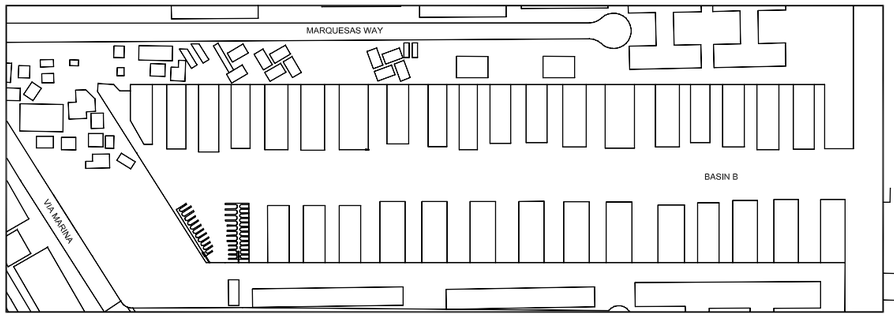
Local Wind Direction - Wind from 225° (Southwest)

True North

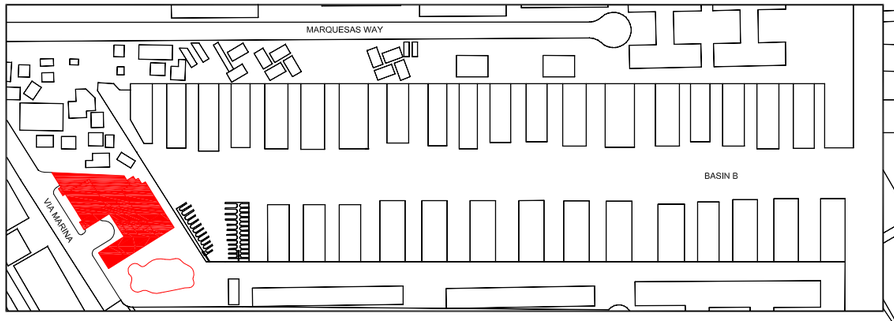
Woodfin Suites Hotel - Marina del Rey, California

Project #06-1023

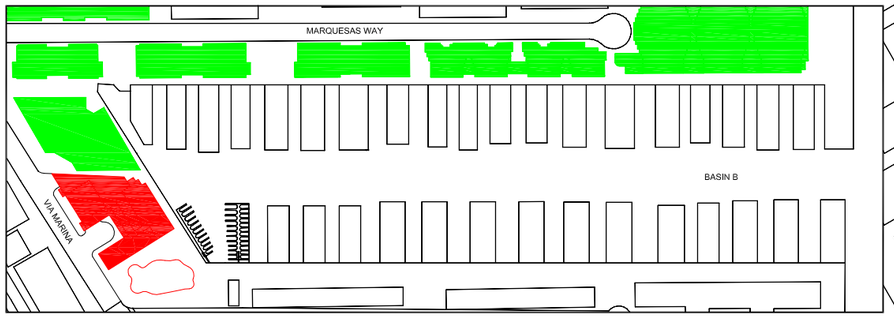
Drawn by: DJM	Figure: 5	RWDI
Approx. Scale: 1"=300'		
Date Revised: Oct. 11, 2005		



EXISTING



PROPOSED



FUTURE

TEST CONFIGURATIONS - N.T.S.

Wind

SENSOR LOCATION:

Grade Level

Sensors 8 & 9 and 38 & 39 are on Roofs

WIND DIRECTION LEGEND:

WIND SPEED CATEGORIES:

EXISTING

PROPOSED

FUTURE

Note:
Arrow length is proportional to mean wind speed.

Local Wind Direction - Wind from 90° (East)

True North

Woodfin Suites Hotel - Marina del Rey, California

Project #06-1023

Drawn by: DJM	Figure: 6	RWDI
Approx. Scale: 1"=300'		
Date Revised: Oct. 11, 2005		

APPENDIX A

Appendix A: List of Drawings and Information Used for Model Construction

The drawings and information listed below were received from Gin Wong Associates and were used to construct the scale model of the proposed Woodfin Suites Hotel development.

Drawing Title	Drawing/File Format	Date Drawn (Last Revision)	Date Received
PARK ELEVATION	PDF	October 3, 2000	June 28, 2005
VIA MARINA ELEVATION	PDF	October 3, 2000	June 28, 2005
SITE PLAN 03-31-05	PDF	March 15, 2005	May 23, 2005

APPENDIX B: Supplemental Traffic Impact Analysis

CRAIN & ASSOCIATES
Transportation Planning / Traffic Engineering

EMAIL TRANSMITTED

January 9, 2014

Jeffrey Pletyak
Senior Civil Engineer
Los Angeles County Department of Public Works
Traffic and Lighting Division, Traffic Studies Section
1000 South Fremont Avenue
Building A-9E, 4th Floor
Alhambra, CA 91803-8800

RE: Marina del Rey Parcel 9U (Woodfin) Project – Supplemental Traffic Impact Analysis

Dear Mr. Pletyak,

Per the scope agreed to in our October 21, 2013 scoping meeting, Crain & Associates has supplemented the traffic impact analysis prepared in December 2007 for the combined Neptune Marina Apartments and Anchorage/Woodfin Suites Hotel and Timeshare Resort (the "Project"). The developments were proposed by Legacy Partners Neptune Marina, LLC ("Legacy Partners") on Parcels 10R and FF and by Woodfin Suites Hotels, LLC ("Woodfin") on Parcel 9U of the County of Los Angeles Marina del Rey community. The Project consists of 526 residential dwelling units and 288 hotel suites, plus has an assortment of accessory patron- and visitor-serving uses, 174 private boat spaces, 7 to 11 public/transient boat spaces with a dinghy moorage area, and a restored public wetland and upland park area. As there are 136 existing apartments and 198 boat spaces presently on-site, implementation of the Project would result in a net increase of 390 apartment units, 288 hotel suites with accessory patron- and visitor-serving uses, 7 to 11 public/transient boat spaces, a 0.47-acre wetland, and 0.99-acre public upland buffer area; and a net decrease of 24 private boat spaces. The County and Coastal Commission have granted all discretionary approvals for all of the Project components except for the hotel component on Parcel 9U.

300 Corporate Pointe
Suite 470
Culver City, CA 90230
310 473 6508 (main)
310 444 9771 (fax)

www.crainandassociates.com

The County of Los Angeles Department of Public Works (DPW) concurred with the December 2007 traffic analysis and issued a traffic impact analysis review letter, dated June 12, 2008, approving the traffic study. Following the 2008 approval, due to unforeseen economic circumstances, the development of the hotel component has been delayed. Additionally, the project description of the Parcel 9U (Woodfin) portion of the Project has been modified slightly, as outlined below.

Per the October 21, 2013 scoping meeting, this supplemental traffic impact analysis is intended to verify the analysis and results of the December 2007 traffic study through a comparative analysis of the following four primary components of the study:

- Baseline traffic conditions – comparison of the existing traffic conditions analyzed in the December 2007 traffic study with current traffic conditions based on 2013 traffic counts;
- Project description – comparison of the Project description (including trip generation, trip distribution patterns, and access) analyzed in the December 2007 traffic study with the currently proposed Project description;
- Cumulative traffic growth – comparison of the projected traffic volume increases due to cumulative traffic growth in the December 2007 traffic study with anticipated cumulative traffic growth in 2013; and
- Project-specific mitigation -- review of the Project-specific mitigation measures included in the December 2007 traffic study and their feasibility under 2013 conditions. If measures have already been implemented, then this supplement identifies if additional measures are needed. If measures have not been implemented but are no longer feasible, this supplement identifies other available mitigations and their effectiveness.

Baseline Traffic Conditions

Traffic counts to establish current traffic conditions were conducted in November 2013 for the AM and PM peak periods for a subset of the 17 study intersections analyzed in the December 2007 traffic study. Construction is ongoing along the majority of Admiralty Way in Marina del Rey. Therefore, to reflect that traffic may have shifted to other Marina del Rey roadways, current traffic volume data were collected at eight of the study intersections located on the periphery of the study area. These volumes are considered conservative given that they may include some temporarily shifted traffic that would otherwise utilize Admiralty Way. The eight locations were selected in consultation with County staff and included the most northerly, southerly, easterly, and westerly study intersections included in the December 2007 traffic study. The eight intersections are listed in Table 1, and the detailed traffic count worksheets are

included in Attachment A. Existing AM and PM peak-hour traffic volumes at the study intersections are shown graphically in Attachments B and C for 2007 and 2013 conditions, respectively. The 2013 existing traffic volumes were compared to the existing traffic volumes reported in the December 2007 study, and the results of the comparison are shown in Table 1.

Table 1
Baseline Traffic Comparison
Traffic Study (2007) vs. Current (2013) Traffic Volumes

No.	Intersection	Peak Hour	Existing (2007) Traffic Volumes	Existing (2013) Traffic Counts	2007-to-2013 Volume Change	2007-to-2013 Percent Change
1	Via Marina/	AM	1,101	944	-157	-14.3%
	Tahiti Way	PM	1,016	908	-108	-10.6%
2	Via Marina/	AM	1,411	1,347	-64	-4.5%
	Marquesas Way	PM	1,387	1,324	-63	-4.5%
5	Washington Boulevard/	AM	3,085	2,797	-288	-9.3%
	Ocean Avenue-Via Marina	PM	3,158	2,910	-248	-7.9%
8	Lincoln Boulevard/	AM	6,101	6,542	441	7.2%
	Washington Boulevard	PM	9,263	6,259	-3,004	-32.4%
9	Lincoln Boulevard/	AM	4,774	5,165	391	8.2%
	Marina Expressway (SR-90)	PM	5,298	5,372	74	1.4%
12	Lincoln Boulevard/	AM	5,141	4,985	-156	-3.0%
	Fiji Way	PM	5,828	5,436	-392	-6.7%
16	Marina Expressway (SR-90) WB/	AM	2,460	3,615	1,155	47.0%
	Mindanao Way	PM	2,971	3,524	553	18.6%
17	Marina Expressway (SR-90) EB/	AM	2,822	3,560	738	26.2%
	Mindanao Way	PM	3,259	3,769	510	15.6%
	Total		**59,075**	**58,457**	**-618**	**-1.0%**

As shown in Table 1, the total of the current AM and PM peak-hour counts from 2013 is slightly lower than the traffic volumes used in the December 2007 traffic study. Based on the comparison, it was determined that the baseline traffic conditions analyzed in the December 2007 traffic study still adequately describe current traffic conditions in 2013.

Project Description

Portions of the Project traffic section from the December 2007 traffic study (including traffic generation, distribution, and access) have been included in Attachment D. Per the latest project

description provided by the Project team to the Los Angeles County Department of Beaches & Harbors Design Control Board in October 2013, there has been little change to the Parcel 9U existing use or project description since the December 2007 traffic study. The only substantive change relates to the type of hotel rooms planned for the Project. In the December 2007 traffic study, the 288 rooms were planned to be composed of 152 conventional hotel suites and 136 timeshare suites. Under the current proposal, the 288 hotel rooms are now intended to be business and extended-stay hotel rooms only, with no timeshares. Although the detailed hotel room classification has changed, that change does not alter the anticipated Project trip generation. As shown in Attachment D, the trip rates specific to the Marina del Rey community used for the hotel land use in the December 2007 traffic study, and still applicable today, do not distinguish between conventional hotel suites and timeshare suites. No additional land-use changes to the development programs for Parcel 10R and FF have been proposed. Therefore, the current Project trip generation estimate remains the same as that analyzed in the December 2007 traffic study.

Additionally, the proposed Project access scheme is unchanged from that analyzed in the December 2007 traffic study in terms of the number and general location of driveways. Since the current Project land-use categories and access are the same as previously analyzed, it was assumed that the Project trip distribution patterns would remain as analyzed. In summation, the Project description analyzed in the December 2007 traffic study still adequately describes the currently proposed Project in 2013 for traffic impact purposes.

Cumulative Traffic Growth

In order to estimate future traffic volumes at the study intersections, two components of cumulative traffic growth were utilized in the December 2007 traffic study: ambient traffic growth and related project traffic growth. An annual traffic growth factor of 0.6 percent, compounded annually, was first conservatively applied to existing (2007) baseline traffic volumes for the six-year increment between the existing and Project buildout years in order to develop future baseline traffic volumes. Secondly, the traffic volumes associated with related projects within an approximate three-mile radius of the Project site were superimposed on these future baseline traffic volumes. Listings of potential related projects were obtained from the Los Angeles County Department of Regional Planning, Los Angeles County Department of Beaches & Harbors, City of Los Angeles Department of Transportation, City of Santa Monica, and City of Culver City. The related projects section from the December 2007 traffic study has been included in Attachment E.

In order to determine if the level of cumulative traffic growth analyzed in the December 2007 traffic study is adequate relative to 2013 traffic conditions, the ambient traffic growth factor and related projects trip generation values were compared. The County has determined that the application of an ambient traffic growth factor is no longer appropriate. A current related projects database was developed using information obtained in November and December 2013. The related projects analysis used the same three-mile radius around the Project site in order to provide a direct comparison between 2007 and 2013 conditions. Based on the obtained information, the current related projects location map and trip generation table were developed and have been included in Attachments F and G, respectively.

A related project trip generation comparison of 2007 and 2013 conditions was then performed, and the results have been summarized in Table 2. As shown in Table 2, the current related projects would generate fewer trips than the related projects identified in the December 2007 traffic study. Additionally, as outlined above, an ambient traffic growth factor is no longer applied when analyzing future traffic conditions based on current County traffic study policies. Thus, it is reasonable to assume that the future conditions analyzed in the December 2007 traffic study are conservative in light of currently anticipated cumulative traffic growth.

Table 2
Related Projects Trip Growth Comparison
2007 Conditions vs. 2013 Conditions

		AM Peak Hour			PM Peak Hour		
	Daily	In	Out	Total	In	Out	Total
December 2007 Traffic Study	94,062	3,148	4,238	7,386	4,915	5,137	10,052
2013 Current Related Projects	46,699	3,320	3,114	6,434	4,305	3,963	8,268
2007-to-2013 Generation Change	-47,363	172	-1,124	-952	-610	-1,174	-1,784
2007-to-2013 Percent Change	-50.4%	5.5%	-26.5%	-12.9%	-12.4%	-22.9%	-17.7%

Project-Specific Mitigation

In order to determine if the Project-specific mitigation measures proposed in the December 2007 traffic study are still available and feasible, a review of current field conditions and the Circulation section of the Marina del Rey Land Use Plan (February 8, 2012) was performed. The Project-specific mitigation section from the December 2007 traffic study has been included in Attachment H. The following is a summary of the current availability/feasibility of the recommended Project-specific mitigation measures:

- Admiralty Way and Via Marina -- The proposed mitigation, consisting of providing triple westbound left-turn lanes on Admiralty Way and two eastbound departure lanes on Admiralty Way with a right-turn merge lane from northbound Via Marina, is still identified as a Category 1 improvement in the Marina del Rey Specific Plan Transportation Improvement Plan (TIP). These improvements have not been implemented and are being assessed along with the Category 3 improvement of reconstructing the intersection, with Admiralty Way and the Via Marina south leg becoming a continuous loop through roadway, in order to determine a preferred alternative. Therefore, the Project would pay TIP fees to allow the County to implement this mitigation measure;

- Washington Boulevard and Via Marina/Ocean Avenue -- The proposed mitigation consisted of improving traffic flow through the intersection by improving the nearby intersection of Washington Boulevard and Palawan Way. This improvement would provide additional egress from Marina del Rey and thus reduce traffic volumes on Via Marina. The improvements consisted of signalizing the intersection of Washington Boulevard and Palawan Way, while providing dual northbound left-turn lanes on Palawan Way. Although not included in the Marina del Rey TIP, this improvement is still available for implementation. As such, the Project would be conditioned to contribute "fair share" funding to this improvement above and beyond the TIP fees;

- Lincoln Boulevard and Mindanao Way -- The proposed mitigation consisted of widening the west side of Lincoln Boulevard and relocating the median island in order to provide an exclusive northbound right-turn-only lane on Lincoln Boulevard. This improvement, identified in the Marina del Rey TIP as a Category 1 improvement, has been completed. As a result, we have reanalyzed this location assuming the current geometric/signal configuration, and the Project would no longer have a significant traffic impact at this location. The revised analysis utilized the December 2007 traffic study volumes, which were shown to be conservative. The revised analysis results are summarized in Table 3, while the level of service (LOS) worksheets are provided in Attachment I. The Project would pay TIP fees for the County's implementation of this measure; and

- Admiralty Way and Mindanao Way -- The proposed mitigation consisted of installing dual southbound left-turn lanes on Admiralty Way and modifying the traffic signal to provide right-turn overlap phasing for the Mindanao Way westbound approach. Based on changes made in the Local Coastal Program (LCP) Amendment, the dual southbound left-turns are now included in the Revised Set of Intersection Improvement Projects for the Marina and have yet to be installed. The westbound right-turn overlap phasing, however, has been implemented. As a result, we have reanalyzed this location assuming

the current geometric/signal configuration, with the results shown in Table 3 (and LOS worksheets provided in Attachment I). Although the presence of westbound right-turn overlap phasing does not eliminate the Project's significant traffic impact under the Future With Project condition, the available dual southbound left-turn mitigation would reduce the Project's impact to a less-than-significant level. Therefore, the Project would pay TIP fees for the County's implementation of these measures.

Based on the above mitigation analysis, it appears that all Project-specific impacts can be reduced to less-than-significant levels with available and feasible mitigation measures.

Table 3
Critical Movement Analysis (CMA) Summary
Future With Project Plus Mitigation Conditions

			With Ambient Growth		With Ambient Growth Plus Project			With Project Plus Mitigation		
No.	Intersection	Peak Hour	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
11.	Lincoln Boulevard and	AM	0.676	B	0.704	C	0.028	--	--	--
	Mindanao Way	PM	0.800	C	0.819	D	0.019	--	--	--
14.	Admiralty Way and	AM	0.576	A	0.608	B	0.032	0.608	B	0.032
	Mindanao Way	PM	0.743	C	0.784	C	0.041 *	0.734	C	-0.009

* indicates significant project traffic impact, prior to mitigation, per Los Angeles County Department of Public Works "Traffic Impact Analysis Report Guidelines ", January 1, 1997.

Cumulative Mitigation

The December 2007 traffic study also listed mitigation measures to address cumulative traffic impacts (the cumulative mitigation section from the December 2007 traffic study has been included in Attachment J). The cumulative measures included the Project-specific mitigation measures identified above, plus other measures from the Marina del Rey TIP with additions. In 2010, the County updated the TIP to address the full build-out of Marina del Rey, including development of the Project. The update considered the December 2007 traffic study and its cumulative mitigation recommendations, and the traffic study conducted for the TIP update (Traffic Study for the Marina del Rey Local Coastal Program Amendment, Raju Associates Inc., April 29, 2010) included all of the December 2007 traffic study locations. Therefore, it is recommended, that the Project be required to pay the fee enacted to fund the updated TIP and contribute "fair share" funding for any additional measures.

Conclusions

The analysis herein confirmed the following regarding the December 2007 traffic study for the proposed Project:

- The baseline traffic conditions analyzed in the December 2007 traffic study still adequately describe current traffic conditions in 2013;
- The Project description analyzed in the December 2007 traffic study still adequately describes the currently proposed Project in 2013 for traffic impact purposes;
- The future conditions estimated in the December 2007 traffic study are conservative in light of currently anticipated cumulative traffic growth and current County guidelines; and
- All Project-specific impacts can be reduced to less-than-significant levels with available and feasible mitigation measures.

Therefore, the December 2007 traffic study is considered conservative and valid for determining the current Project traffic impacts. Please feel free to contact me with any questions.

Sincerely,

George Rhyner, P.E.
Senior Transportation Engineer
(CE 47763, TR 2143)

GR;rk
C21073
attachments

ATTACHMENT A

November 2013 Traffic Count Worksheets

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Tahiti Way
Weather: Clear

File Name : MDR_Via Marina_Tahiti AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

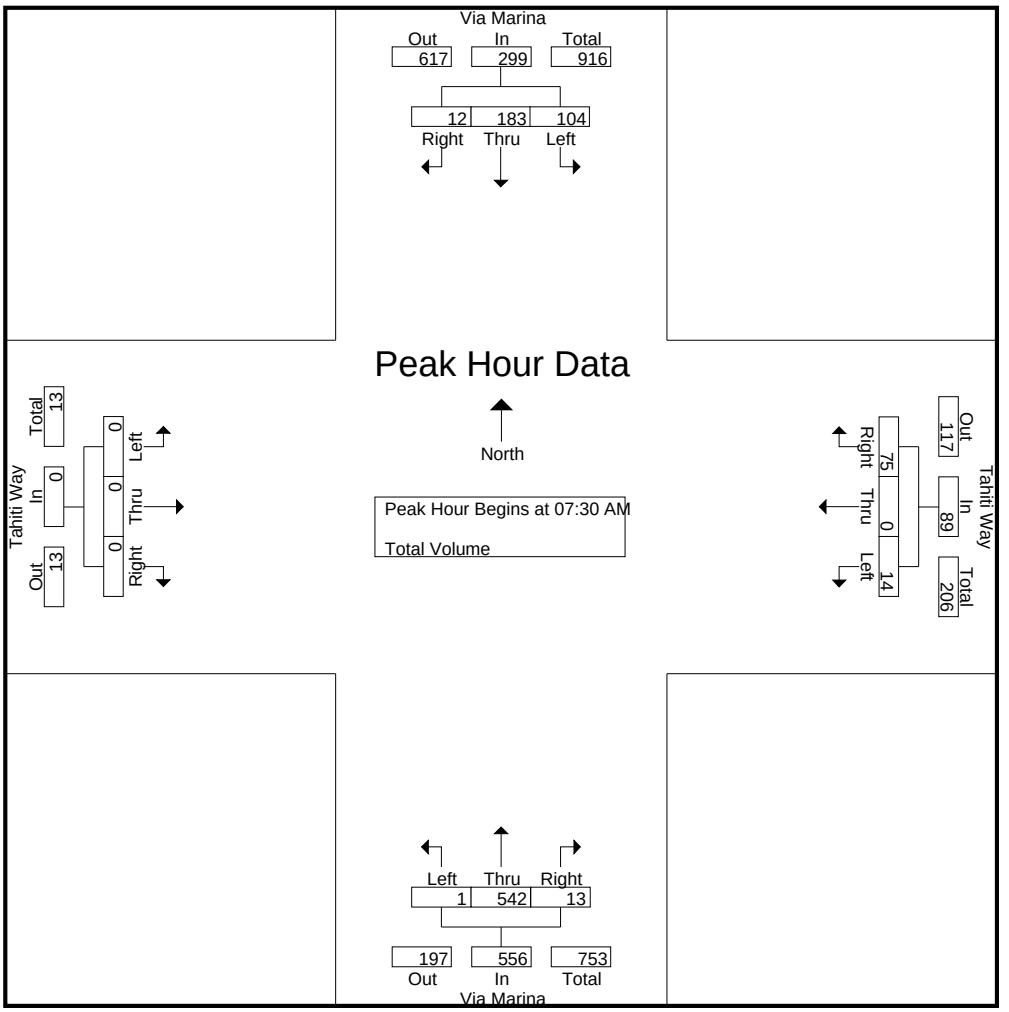
	Via Marina Southbound				Tahiti Way Westbound				Via Marina Northbound				Tahiti Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	32	1	49	0	0	14	14	0	86	1	87	0	0	0	0	150
07:15 AM	28	32	1	61	1	0	10	11	2	92	1	95	0	0	0	0	167
07:30 AM	35	51	2	88	1	0	24	25	0	138	5	143	0	0	0	0	256
07:45 AM	35	42	4	81	0	0	15	15	0	131	6	137	0	0	0	0	233
Total	114	157	8	279	2	0	63	65	2	447	13	462	0	0	0	0	806
08:00 AM	15	44	1	60	8	0	19	27	1	137	2	140	0	0	0	0	227
08:15 AM	19	46	5	70	5	0	17	22	0	136	0	136	0	0	0	0	228
08:30 AM	11	50	1	62	3	0	25	28	1	127	3	131	0	0	0	0	221
08:45 AM	22	47	1	70	5	0	18	23	1	117	0	118	0	0	0	0	211
Total	67	187	8	262	21	0	79	100	3	517	5	525	0	0	0	0	887
Grand Total	181	344	16	541	23	0	142	165	5	964	18	987	0	0	0	0	1693
Apprch %	33.5	63.6	3		13.9	0	86.1		0.5	97.7	1.8		0	0	0		
Total %	10.7	20.3	0.9	32	1.4	0	8.4	9.7	0.3	56.9	1.1	58.3	0	0	0	0	

	Via Marina Southbound				Tahiti Way Westbound				Via Marina Northbound				Tahiti Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**35**	**51**	2	**88**	1	0	**24**	25	0	**138**	5	**143**	0	0	0	0	**256**
07:45 AM	35	42	4	81	0	0	15	15	0	131	**6**	137	0	0	0	0	233
08:00 AM	15	44	1	60	**8**	0	19	**27**	**1**	137	2	140	0	0	0	0	227
08:15 AM	19	46	**5**	70	5	0	17	22	0	136	0	136	0	0	0	0	228
Total Volume	104	183	12	299	14	0	75	89	1	542	13	556	0	0	0	0	944
% App. Total	34.8	61.2	4		15.7	0	84.3		0.2	97.5	2.3		0	0	0		
PHF	.743	.897	.600	.849	.438	.000	.781	.824	.250	.982	.542	.972	.000	.000	.000	.000	.922

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Tahiti Way
Weather: Clear

File Name : MDR_Via Marina_Tahiti AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:30 AM				07:00 AM			
+0 mins.	**35**	**51**	2	**88**	**8**	0	19	27	0	**138**	5	**143**	0	0	0	0
+15 mins.	35	42	4	81	5	0	17	22	0	131	**6**	137	0	0	0	0
+30 mins.	15	44	1	60	3	0	**25**	**28**	**1**	137	2	140	0	0	0	0
+45 mins.	19	46	**5**	70	5	0	18	23	0	136	0	136	0	0	0	0
Total Volume	104	183	12	299	21	0	79	100	1	542	13	556	0	0	0	0
% App. Total	34.8	61.2	4		21	0	79		0.2	97.5	2.3		0	0	0	
PHF	.743	.897	.600	.849	.656	.000	.790	.893	.250	.982	.542	.972	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92880
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Tahiti Way
Weather: Clear

File Name : MDR_Via Marina_Tahiti PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

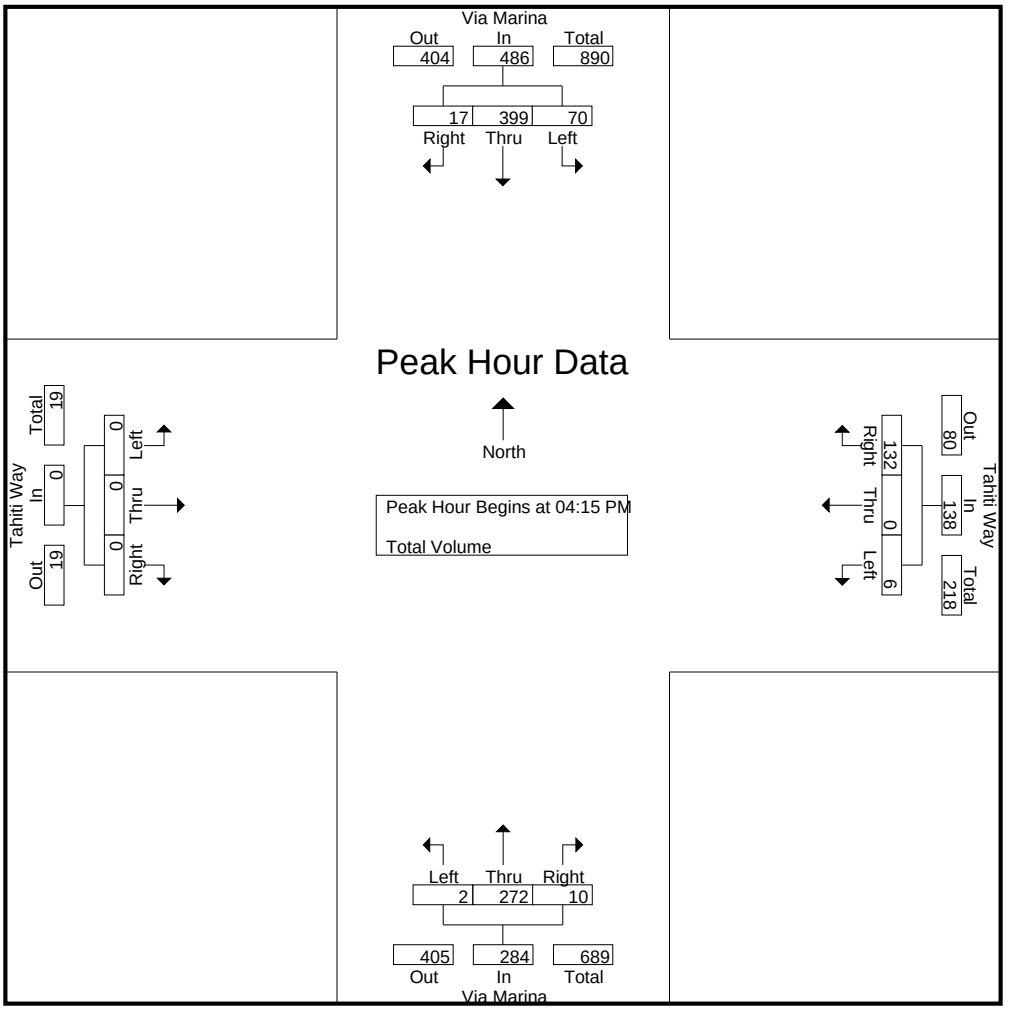
	Via Marina Southbound				Tahiti Way Westbound				Via Marina Northbound				Tahiti Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	79	3	96	2	1	29	32	1	77	2	80	0	0	0	0	208
04:15 PM	21	90	6	117	1	0	43	44	1	63	4	68	0	0	0	0	229
04:30 PM	17	102	3	122	0	0	59	59	0	64	2	66	0	0	0	0	247
04:45 PM	14	86	6	106	3	0	22	25	1	68	1	70	0	0	0	0	201
Total	66	357	18	441	6	1	153	160	3	272	9	284	0	0	0	0	885
05:00 PM	18	121	2	141	2	0	8	10	0	77	3	80	0	0	0	0	231
05:15 PM	19	98	9	126	0	0	8	8	1	72	1	74	0	0	0	0	208
05:30 PM	12	87	5	104	3	0	14	17	1	66	3	70	0	0	0	0	191
05:45 PM	15	98	6	119	0	0	13	13	1	60	0	61	0	0	0	0	193
Total	64	404	22	490	5	0	43	48	3	275	7	285	0	0	0	0	823
Grand Total	130	761	40	931	11	1	196	208	6	547	16	569	0	0	0	0	1708
Apprch %	14	81.7	4.3		5.3	0.5	94.2		1.1	96.1	2.8		0	0	0		
Total %	7.6	44.6	2.3	54.5	0.6	0.1	11.5	12.2	0.4	32	0.9	33.3	0	0	0	0	

	Via Marina Southbound				Tahiti Way Westbound				Via Marina Northbound				Tahiti Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**21**	90	**6**	117	1	0	43	44	**1**	63	**4**	68	0	0	0	0	229
04:30 PM	17	102	3	122	0	0	**59**	**59**	0	64	2	66	0	0	0	0	**247**
04:45 PM	14	86	6	106	**3**	0	22	25	1	68	1	70	0	0	0	0	201
05:00 PM	18	**121**	2	**141**	2	0	8	10	0	**77**	3	**80**	0	0	0	0	231
Total Volume	70	399	17	486	6	0	132	138	2	272	10	284	0	0	0	0	908
% App. Total	14.4	82.1	3.5		4.3	0	95.7		0.7	95.8	3.5		0	0	0		
PHF	.833	.824	.708	.862	.500	.000	.559	.585	.500	.883	.625	.888	.000	.000	.000	.000	.919

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92880
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Tahiti Way
Weather: Clear

File Name : MDR_Via Marina_Tahiti PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	17	102	3	122	2	**1**	29	32	**1**	68	1	70	0	0	0	0
+15 mins.	14	86	6	106	1	0	43	44	0	**77**	**3**	**80**	0	0	0	0
+30 mins.	18	**121**	2	**141**	0	0	**59**	**59**	1	72	1	74	0	0	0	0
+45 mins.	**19**	98	**9**	126	**3**	0	22	25	1	66	3	70	0	0	0	0
Total Volume	68	407	20	495	6	1	153	160	3	283	8	294	0	0	0	0
% App. Total	13.7	82.2	4		3.8	0.6	95.6		1	96.3	2.7		0	0	0	
PHF	.895	.841	.556	.878	.500	.250	.648	.678	.750	.919	.667	.919	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Marquesas Way
Weather: Clear

File Name : MDR_Via Marina_Marquesas AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

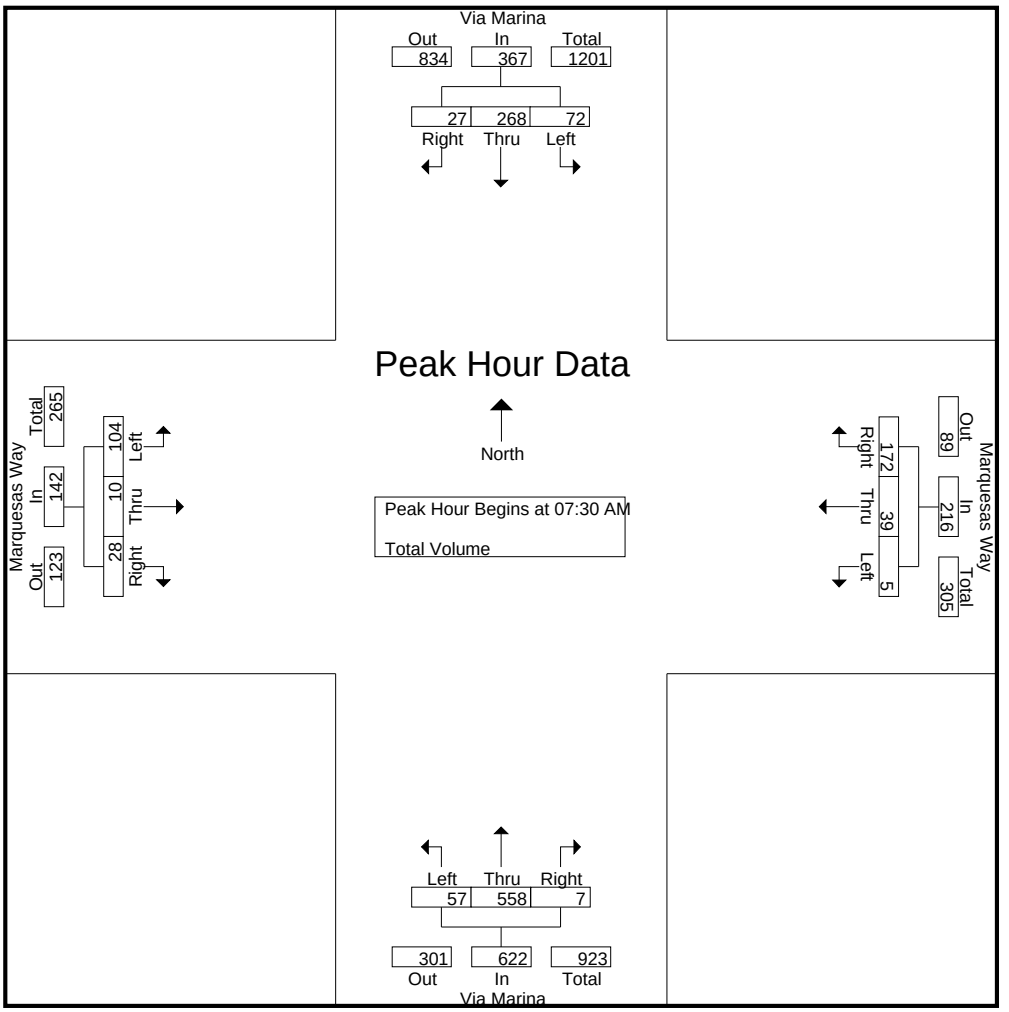
	Via Marina Southbound				Marquesas Way Westbound				Via Marina Northbound				Marquesas Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	44	5	58	3	9	22	34	9	91	2	102	16	1	2	19	213
07:15 AM	7	54	10	71	0	1	37	38	4	99	0	103	26	0	1	27	239
07:30 AM	11	81	6	98	0	11	39	50	16	148	2	166	23	0	7	30	344
07:45 AM	21	73	7	101	2	8	39	49	10	134	2	146	27	1	6	34	330
Total	48	252	28	328	5	29	137	171	39	472	6	517	92	2	16	110	1126
08:00 AM	18	58	7	83	0	8	46	54	15	135	2	152	28	3	5	36	325
08:15 AM	22	56	7	85	3	12	48	63	16	141	1	158	26	6	10	42	348
08:30 AM	17	59	8	84	0	6	46	52	11	145	0	156	19	2	4	25	317
08:45 AM	20	64	17	101	2	17	27	46	12	127	3	142	22	4	5	31	320
Total	77	237	39	353	5	43	167	215	54	548	6	608	95	15	24	134	1310
Grand Total	125	489	67	681	10	72	304	386	93	1020	12	1125	187	17	40	244	2436
Apprch %	18.4	71.8	9.8		2.6	18.7	78.8		8.3	90.7	1.1		76.6	7	16.4		
Total %	5.1	20.1	2.8	28	0.4	3	12.5	15.8	3.8	41.9	0.5	46.2	7.7	0.7	1.6	10	

	Via Marina Southbound				Marquesas Way Westbound				Via Marina Northbound				Marquesas Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	11	**81**	6	98	0	11	39	50	**16**	**148**	**2**	**166**	23	0	7	30	344
07:45 AM	21	73	**7**	**101**	2	8	39	49	10	134	2	146	27	1	6	34	330
08:00 AM	18	58	7	83	0	8	46	54	15	135	2	152	**28**	3	5	36	325
08:15 AM	**22**	56	7	85	**3**	**12**	**48**	**63**	16	141	1	158	26	**6**	**10**	**42**	**348**
Total Volume	72	268	27	367	5	39	172	216	57	558	7	622	104	10	28	142	1347
% App. Total	19.6	73	7.4		2.3	18.1	79.6		9.2	89.7	1.1		73.2	7	19.7		
PHF	.818	.827	.964	.908	.417	.813	.896	.857	.891	.943	.875	.937	.929	.417	.700	.845	.968

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Marquesas Way
Weather: Clear

File Name : MDR_Via Marina_Marquesas AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:30 AM				07:30 AM			
+0 mins.	11	**81**	6	98	2	8	39	49	**16**	**148**	**2**	**166**	23	0	7	30
+15 mins.	21	73	**7**	**101**	0	8	46	54	10	134	2	146	27	1	6	34
+30 mins.	18	58	7	83	**3**	**12**	**48**	**63**	15	135	2	152	**28**	3	5	36
+45 mins.	**22**	56	7	85	0	6	46	52	16	141	1	158	26	**6**	**10**	**42**
Total Volume	72	268	27	367	5	34	179	218	57	558	7	622	104	10	28	142
% App. Total	19.6	73	7.4		2.3	15.6	82.1		9.2	89.7	1.1		73.2	7	19.7	
PHF	.818	.827	.964	.908	.417	.708	.932	.865	.891	.943	.875	.937	.929	.417	.700	.845

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Marquesas Way
Weather: Clear

File Name : MDR_Via Marina_Marquesas PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

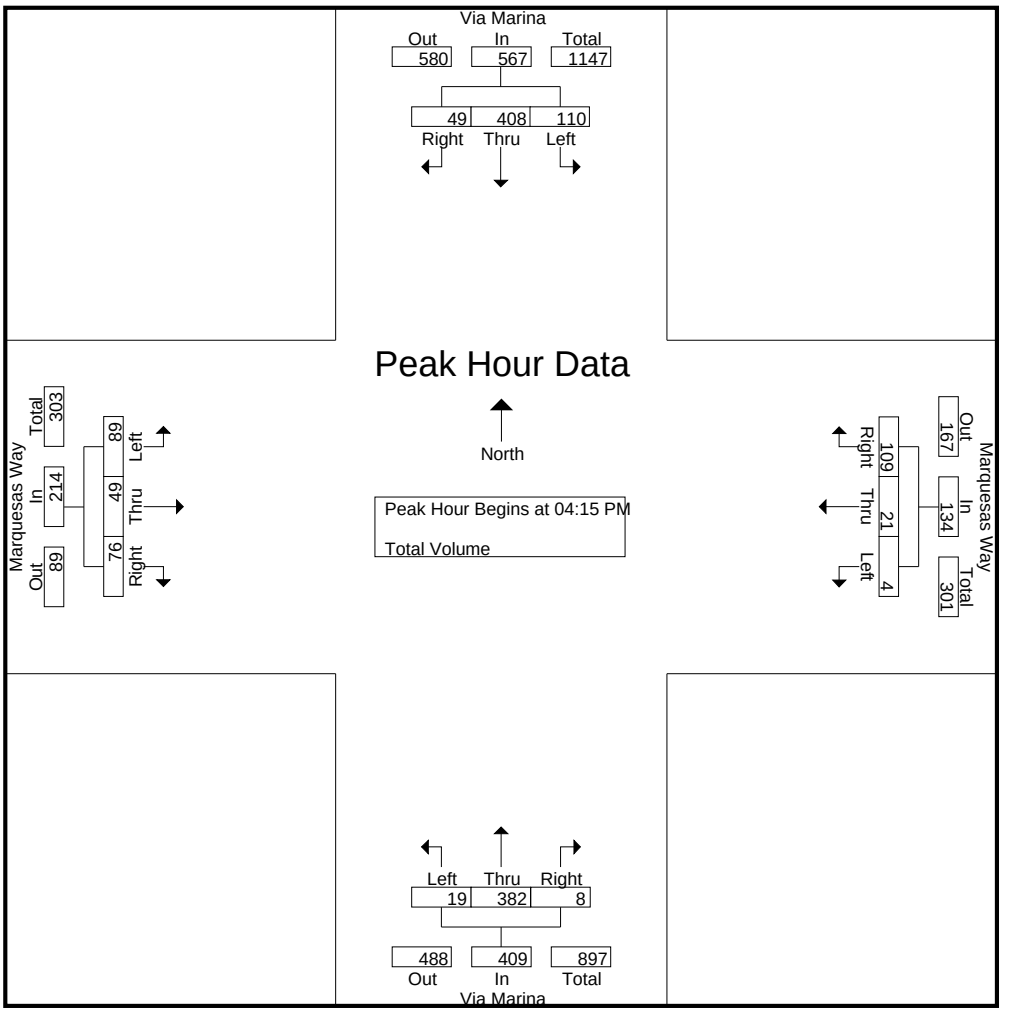
	Via Marina Southbound				Marquesas Way Westbound				Via Marina Northbound				Marquesas Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	72	14	108	4	3	20	27	4	98	2	104	17	10	19	46	285
04:15 PM	25	97	10	132	0	7	19	26	6	101	0	107	19	12	16	47	312
04:30 PM	21	101	15	137	0	3	32	35	9	113	2	124	22	13	23	58	354
04:45 PM	34	90	13	137	2	6	29	37	1	89	4	94	23	12	17	52	320
Total	102	360	52	514	6	19	100	125	20	401	8	429	81	47	75	203	1271
05:00 PM	30	120	11	161	2	5	29	36	3	79	2	84	25	12	20	57	338
05:15 PM	29	113	8	150	0	1	25	26	5	76	0	81	22	11	17	50	307
05:30 PM	33	91	13	137	2	1	13	16	5	75	3	83	28	9	15	52	288
05:45 PM	38	93	8	139	2	6	14	22	5	66	1	72	27	14	23	64	297
Total	130	417	40	587	6	13	81	100	18	296	6	320	102	46	75	223	1230
Grand Total	232	777	92	1101	12	32	181	225	38	697	14	749	183	93	150	426	2501
Apprch %	21.1	70.6	8.4		5.3	14.2	80.4		5.1	93.1	1.9		43	21.8	35.2		
Total %	9.3	31.1	3.7	44	0.5	1.3	7.2	9	1.5	27.9	0.6	29.9	7.3	3.7	6	17	

	Via Marina Southbound				Marquesas Way Westbound				Via Marina Northbound				Marquesas Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	25	97	10	132	0	**7**	19	26	6	101	0	107	19	12	16	47	312
04:30 PM	21	101	**15**	137	0	3	**32**	35	**9**	**113**	2	**124**	22	**13**	**23**	**58**	**354**
04:45 PM	**34**	90	13	137	**2**	6	29	**37**	1	89	**4**	94	23	12	17	52	320
05:00 PM	30	**120**	11	**161**	2	5	29	36	3	79	2	84	**25**	12	20	57	338
Total Volume	110	408	49	567	4	21	109	134	19	382	8	409	89	49	76	214	1324
% App. Total	19.4	72	8.6		3	15.7	81.3		4.6	93.4	2		41.6	22.9	35.5		
PHF	.809	.850	.817	.880	.500	.750	.852	.905	.528	.845	.500	.825	.890	.942	.826	.922	.935

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina
E/W: Marquesas Way
Weather: Clear

File Name : MDR_Via Marina_Marquesas PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	30	**120**	11	**161**	0	**7**	19	26	4	98	2	104	25	12	20	57
+15 mins.	29	113	8	150	0	3	**32**	35	6	101	0	107	22	11	17	50
+30 mins.	33	91	**13**	137	**2**	6	29	**37**	**9**	**113**	2	**124**	**28**	9	15	52
+45 mins.	**38**	93	8	139	2	5	29	36	1	89	**4**	94	27	**14**	**23**	**64**
Total Volume	130	417	40	587	4	21	109	134	20	401	8	429	102	46	75	223
% App. Total	22.1	71	6.8		3	15.7	81.3		4.7	93.5	1.9		45.7	20.6	33.6	
PHF	.855	.869	.769	.911	.500	.750	.852	.905	.556	.887	.500	.865	.911	.821	.815	.871

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina / Ocean Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Via Marina_Washington AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

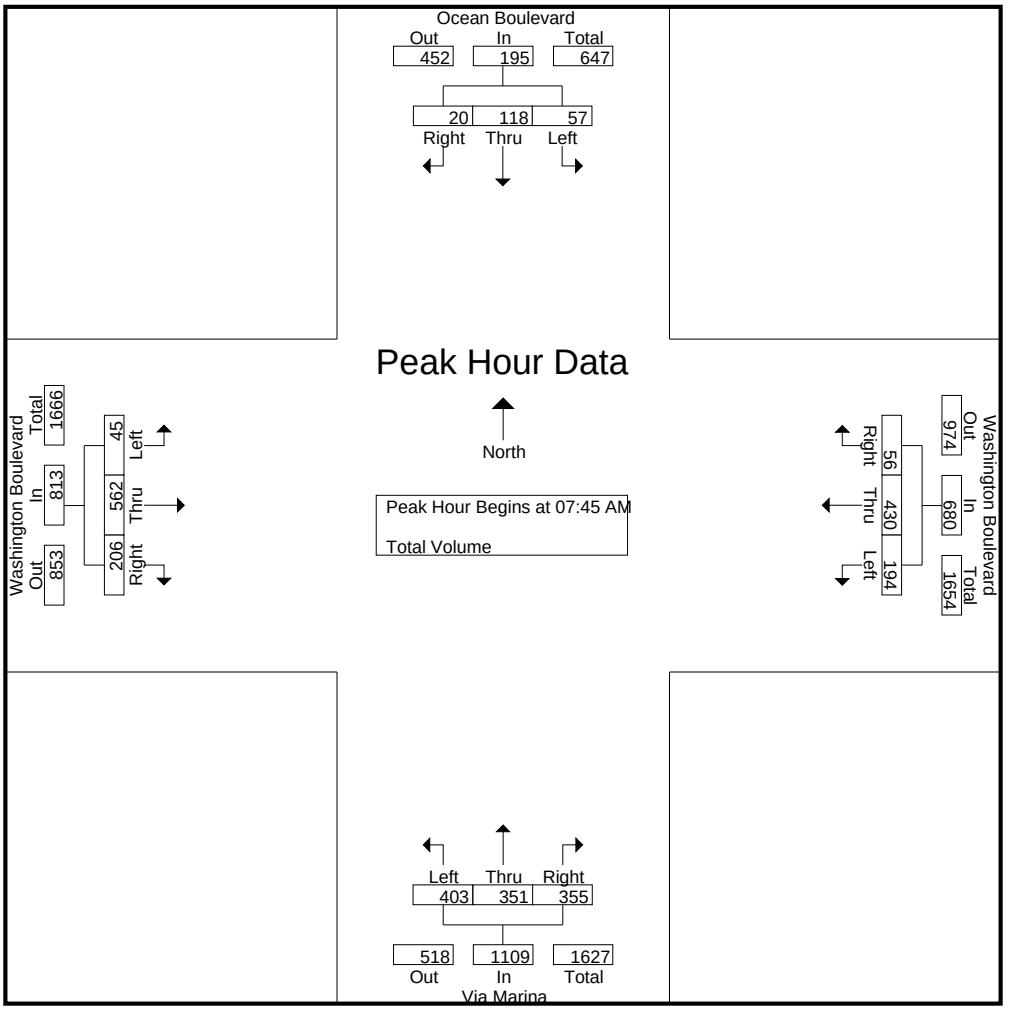
	Ocean Boulevard Southbound				Washington Boulevard Westbound				Via Marina Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	14	2	25	41	71	8	120	51	50	75	176	4	82	29	115	436
07:15 AM	8	13	1	22	31	70	7	108	81	66	67	214	4	94	28	126	470
07:30 AM	12	30	5	47	48	92	8	148	108	98	76	282	8	119	32	159	636
07:45 AM	10	26	4	40	40	113	15	168	101	89	107	297	12	166	47	225	730
Total	39	83	12	134	160	346	38	544	341	303	325	969	28	461	136	625	2272
08:00 AM	13	24	5	42	52	111	15	178	106	93	90	289	13	148	55	216	725
08:15 AM	19	28	4	51	53	103	12	168	97	90	85	272	10	120	52	182	673
08:30 AM	15	40	7	62	49	103	14	166	99	79	73	251	10	128	52	190	669
08:45 AM	23	30	4	57	50	114	15	179	81	98	74	253	15	137	51	203	692
Total	70	122	20	212	204	431	56	691	383	360	322	1065	48	533	210	791	2759
Grand Total	109	205	32	346	364	777	94	1235	724	663	647	2034	76	994	346	1416	5031
Apprch %	31.5	59.2	9.2		29.5	62.9	7.6		35.6	32.6	31.8		5.4	70.2	24.4		
Total %	2.2	4.1	0.6	6.9	7.2	15.4	1.9	24.5	14.4	13.2	12.9	40.4	1.5	19.8	6.9	28.1	

	Ocean Boulevard Southbound				Washington Boulevard Westbound				Via Marina Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	10	26	4	40	40	**113**	**15**	168	101	89	**107**	**297**	12	**166**	47	**225**	**730**
08:00 AM	13	24	5	42	52	111	15	**178**	**106**	**93**	90	289	**13**	148	**55**	216	725
08:15 AM	**19**	28	4	51	**53**	103	12	168	97	90	85	272	10	120	52	182	673
08:30 AM	15	**40**	**7**	**62**	49	103	14	166	99	79	73	251	10	128	52	190	669
Total Volume	57	118	20	195	194	430	56	680	403	351	355	1109	45	562	206	813	2797
% App. Total	29.2	60.5	10.3		28.5	63.2	8.2		36.3	31.7	32		5.5	69.1	25.3		
PHF	.750	.738	.714	.786	.915	.951	.933	.955	.950	.944	.829	.934	.865	.846	.936	.903	.958

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina / Ocean Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Via Marina_Washington AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:30 AM				07:45 AM			
+0 mins.	13	24	5	42	52	111	**15**	178	**108**	**98**	76	282	12	**166**	47	**225**
+15 mins.	19	28	4	51	**53**	103	12	168	101	89	**107**	**297**	**13**	148	**55**	216
+30 mins.	15	**40**	**7**	**62**	49	103	14	166	106	93	90	289	10	120	52	182
+45 mins.	**23**	30	4	57	50	**114**	15	**179**	97	90	85	272	10	128	52	190
Total Volume	70	122	20	212	204	431	56	691	412	370	358	1140	45	562	206	813
% App. Total	33	57.5	9.4		29.5	62.4	8.1		36.1	32.5	31.4		5.5	69.1	25.3	
PHF	.761	.763	.714	.855	.962	.945	.933	.965	.954	.944	.836	.960	.865	.846	.936	.903

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina / Ocean Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Via Marina_Washington PM
Site Code : 00000000
Start Date : 11/20/2013

Groups Printed- Total Volume

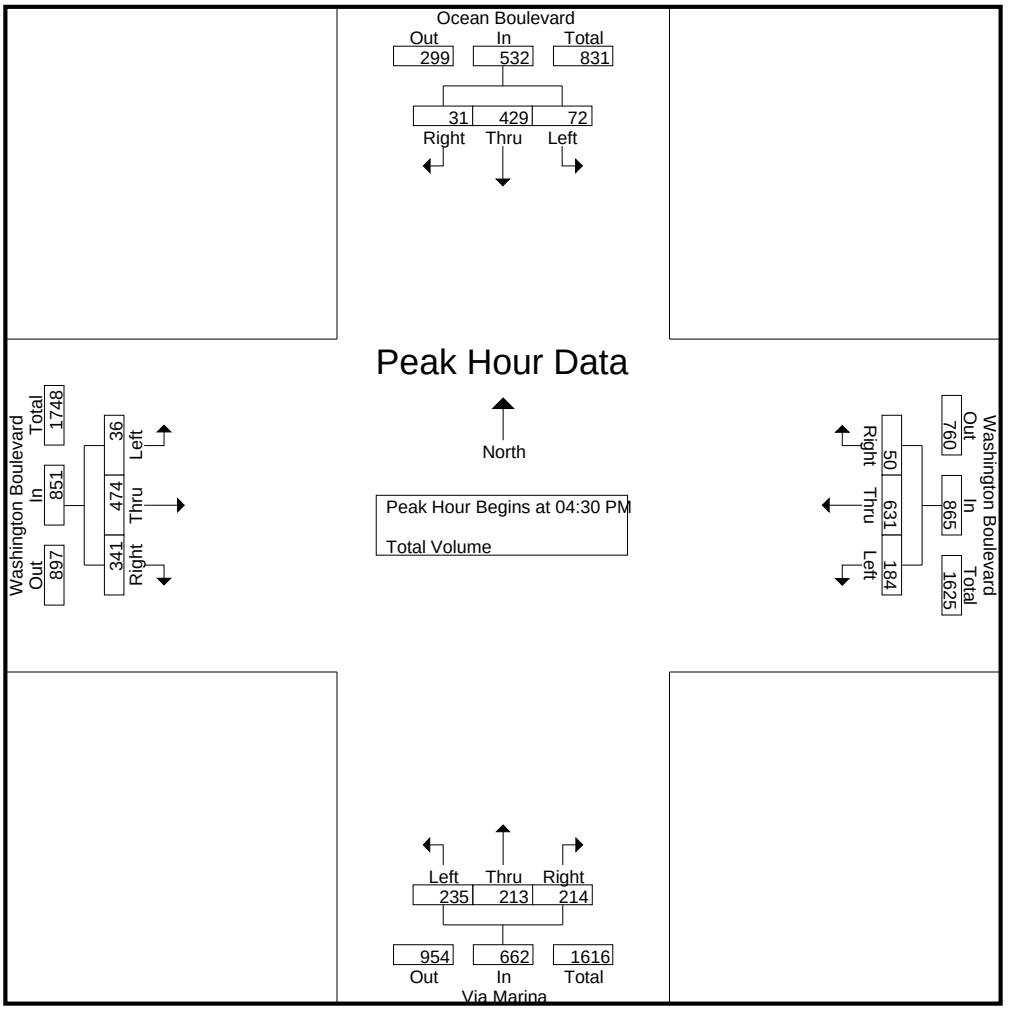
	Ocean Boulevard Southbound				Washington Boulevard Westbound				Via Marina Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	13	63	5	81	58	131	9	198	45	51	60	156	8	108	77	193	628
04:15 PM	19	89	13	121	45	153	9	207	40	41	57	138	9	120	78	207	673
04:30 PM	15	88	3	106	54	157	11	222	52	60	65	177	12	117	80	209	714
04:45 PM	24	110	11	145	39	151	14	204	63	44	45	152	9	122	91	222	723
Total	71	350	32	453	196	592	43	831	200	196	227	623	38	467	326	831	2738
05:00 PM	17	115	7	139	47	160	16	223	55	50	44	149	11	124	94	229	740
05:15 PM	16	116	10	142	44	163	9	216	65	59	60	184	4	111	76	191	733
05:30 PM	17	129	7	153	50	144	10	204	54	51	38	143	3	102	70	175	675
05:45 PM	18	109	5	132	48	183	14	245	66	51	34	151	8	97	100	205	733
Total	68	469	29	566	189	650	49	888	240	211	176	627	26	434	340	800	2881
Grand Total	139	819	61	1019	385	1242	92	1719	440	407	403	1250	64	901	666	1631	5619
Apprch %	13.6	80.4	6		22.4	72.3	5.4		35.2	32.6	32.2		3.9	55.2	40.8		
Total %	2.5	14.6	1.1	18.1	6.9	22.1	1.6	30.6	7.8	7.2	7.2	22.2	1.1	16	11.9	29	

	Ocean Boulevard Southbound				Washington Boulevard Westbound				Via Marina Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	15	88	3	106	**54**	157	11	222	52	**60**	**65**	177	**12**	117	80	209	714
04:45 PM	**24**	110	**11**	**145**	39	151	14	204	63	44	45	152	9	122	91	222	723
05:00 PM	17	115	7	139	47	160	**16**	**223**	55	50	44	149	11	**124**	**94**	**229**	**740**
05:15 PM	16	**116**	10	142	44	**163**	9	216	**65**	59	60	**184**	4	111	76	191	733
Total Volume	72	429	31	532	184	631	50	865	235	213	214	662	36	474	341	851	2910
% App. Total	13.5	80.6	5.8		21.3	72.9	5.8		35.5	32.2	32.3		4.2	55.7	40.1		
PHF	.750	.925	.705	.917	.852	.968	.781	.970	.904	.888	.823	.899	.750	.956	.907	.929	.983

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Via Marina / Ocean Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Via Marina_Washington PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:30 PM				04:15 PM			
+0 mins.	**24**	110	**11**	145	47	160	**16**	223	52	**60**	**65**	177	9	120	78	207
+15 mins.	17	115	7	139	44	163	9	216	63	44	45	152	**12**	117	80	209
+30 mins.	16	116	10	142	**50**	144	10	204	55	50	44	149	9	122	91	222
+45 mins.	17	**129**	7	**153**	48	**183**	14	**245**	**65**	59	60	**184**	11	**124**	**94**	**229**
Total Volume	74	470	35	579	189	650	49	888	235	213	214	662	41	483	343	867
% App. Total	12.8	81.2	6		21.3	73.2	5.5		35.5	32.2	32.3		4.7	55.7	39.6	
PHF	.771	.911	.795	.946	.945	.888	.766	.906	.904	.888	.823	.899	.854	.974	.912	.947

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Lincoln_Washington AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

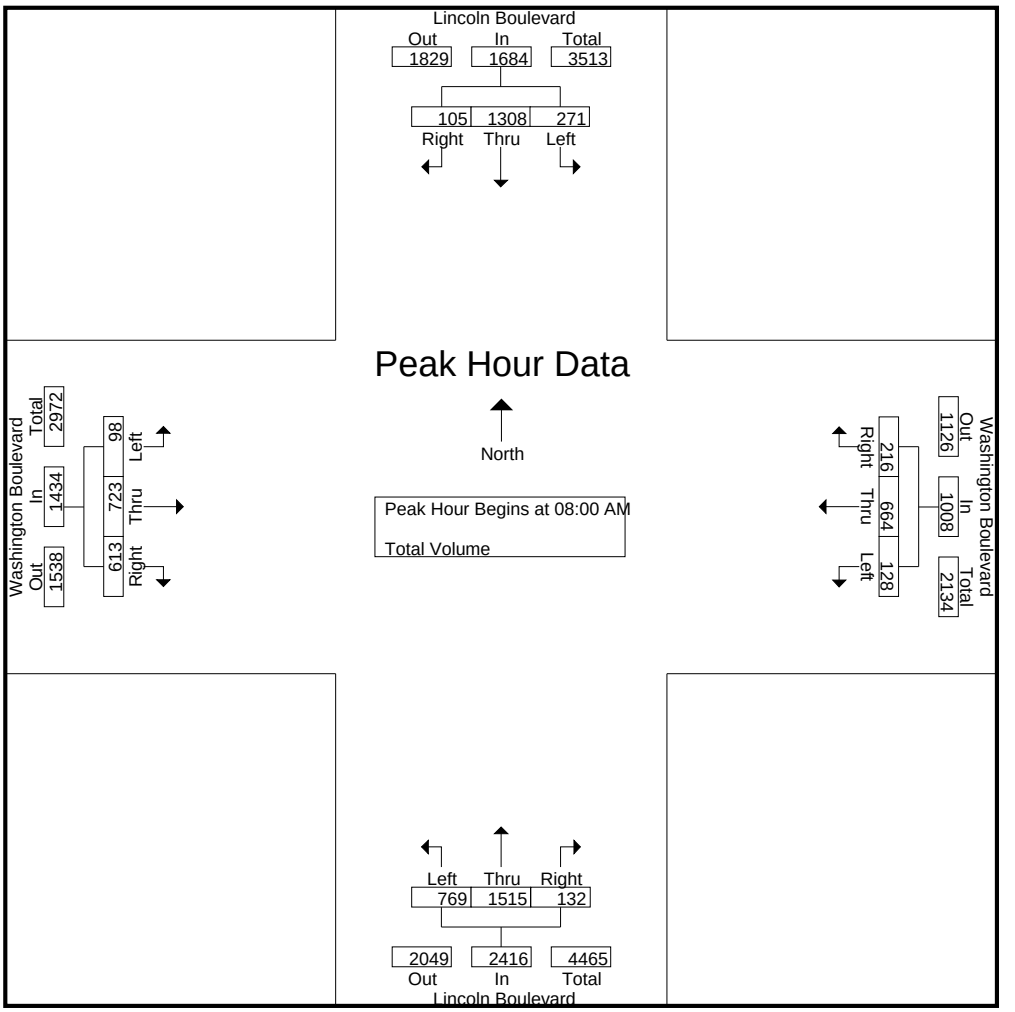
	Lincoln Boulevard Southbound				Washington Boulevard Westbound				Lincoln Boulevard Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	31	160	21	212	14	116	41	171	113	408	13	534	27	137	93	257	1174
07:15 AM	30	240	32	302	16	116	43	175	128	471	27	626	16	113	132	261	1364
07:30 AM	40	279	18	337	23	162	52	237	152	433	24	609	24	153	124	301	1484
07:45 AM	57	321	29	407	31	200	59	290	160	382	17	559	18	178	146	342	1598
Total	158	1000	100	1258	84	594	195	873	553	1694	81	2328	85	581	495	1161	5620
08:00 AM	54	318	19	391	33	159	55	247	190	394	18	602	24	204	152	380	1620
08:15 AM	79	327	22	428	36	172	50	258	183	379	30	592	21	179	157	357	1635
08:30 AM	68	327	30	425	28	181	48	257	189	379	43	611	25	182	154	361	1654
08:45 AM	70	336	34	440	31	152	63	246	207	363	41	611	28	158	150	336	1633
Total	271	1308	105	1684	128	664	216	1008	769	1515	132	2416	98	723	613	1434	6542
Grand Total	429	2308	205	2942	212	1258	411	1881	1322	3209	213	4744	183	1304	1108	2595	12162
Apprch %	14.6	78.5	7		11.3	66.9	21.9		27.9	67.6	4.5		7.1	50.3	42.7		
Total %	3.5	19	1.7	24.2	1.7	10.3	3.4	15.5	10.9	26.4	1.8	39	1.5	10.7	9.1	21.3	

	Lincoln Boulevard Southbound				Washington Boulevard Westbound				Lincoln Boulevard Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	54	318	19	391	33	159	55	247	190	**394**	18	602	24	**204**	152	**380**	1620
08:15 AM	**79**	327	22	428	**36**	172	50	**258**	183	379	30	592	21	179	**157**	357	1635
08:30 AM	68	327	30	425	28	**181**	48	257	189	379	**43**	**611**	25	182	154	361	**1654**
08:45 AM	70	**336**	**34**	**440**	31	152	**63**	246	**207**	363	41	611	**28**	158	150	336	1633
Total Volume	271	1308	105	1684	128	664	216	1008	769	1515	132	2416	98	723	613	1434	6542
% App. Total	16.1	77.7	6.2		12.7	65.9	21.4		31.8	62.7	5.5		6.8	50.4	42.7		
PHF	.858	.973	.772	.957	.889	.917	.857	.977	.929	.961	.767	.989	.875	.886	.976	.943	.989

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Lincoln_Washington AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				07:45 AM			
+0 mins.	54	318	19	391	31	**200**	**59**	**290**	190	**394**	18	602	18	178	146	342
+15 mins.	**79**	327	22	428	33	159	55	247	183	379	30	592	24	**204**	152	**380**
+30 mins.	68	327	30	425	**36**	172	50	258	189	379	**43**	**611**	21	179	**157**	357
+45 mins.	70	**336**	**34**	**440**	28	181	48	257	**207**	363	41	611	**25**	182	154	361
Total Volume	271	1308	105	1684	128	712	212	1052	769	1515	132	2416	88	743	609	1440
% App. Total	16.1	77.7	6.2		12.2	67.7	20.2		31.8	62.7	5.5		6.1	51.6	42.3	
PHF	.858	.973	.772	.957	.889	.890	.898	.907	.929	.961	.767	.989	.880	.911	.970	.947

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Lincoln_Washington PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

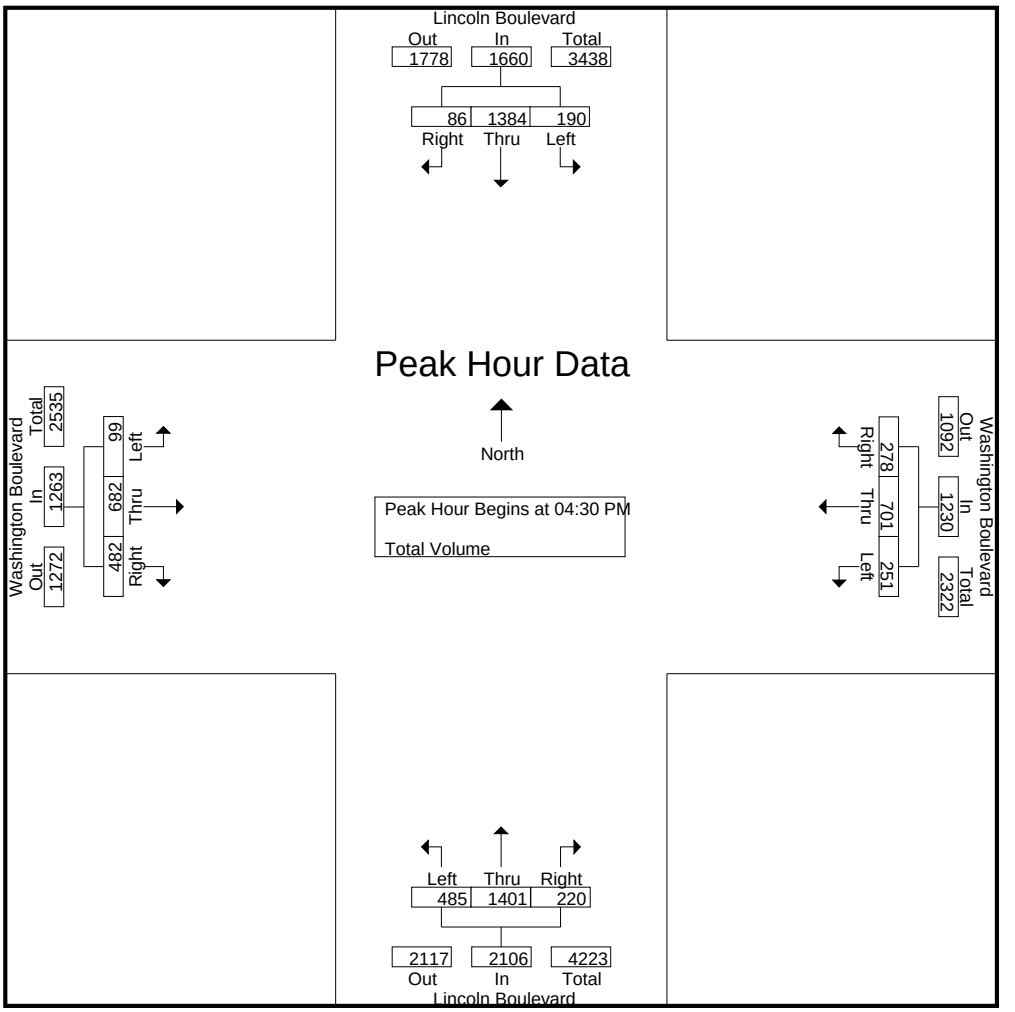
	Lincoln Boulevard Southbound				Washington Boulevard Westbound				Lincoln Boulevard Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	62	331	27	420	81	164	76	321	122	324	38	484	24	170	110	304	1529
04:15 PM	55	350	22	427	59	169	59	287	123	321	43	487	15	166	126	307	1508
04:30 PM	55	338	25	418	65	174	60	299	119	324	61	504	27	175	120	322	1543
04:45 PM	48	348	18	414	67	190	77	334	121	371	45	537	24	180	122	326	1611
Total	220	1367	92	1679	272	697	272	1241	485	1340	187	2012	90	691	478	1259	6191
05:00 PM	51	346	26	423	51	154	67	272	123	364	58	545	25	178	121	324	1564
05:15 PM	36	352	17	405	68	183	74	325	122	342	56	520	23	149	119	291	1541
05:30 PM	53	346	19	418	58	199	57	314	111	347	33	491	21	157	115	293	1516
05:45 PM	38	362	30	430	64	213	67	344	113	346	53	512	16	144	110	270	1556
Total	178	1406	92	1676	241	749	265	1255	469	1399	200	2068	85	628	465	1178	6177
Grand Total	398	2773	184	3355	513	1446	537	2496	954	2739	387	4080	175	1319	943	2437	12368
Apprch %	11.9	82.7	5.5		20.6	57.9	21.5		23.4	67.1	9.5		7.2	54.1	38.7		
Total %	3.2	22.4	1.5	27.1	4.1	11.7	4.3	20.2	7.7	22.1	3.1	33	1.4	10.7	7.6	19.7	

	Lincoln Boulevard Southbound				Washington Boulevard Westbound				Lincoln Boulevard Northbound				Washington Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**55**	338	25	418	65	174	60	299	119	324	**61**	504	**27**	175	120	322	1543
04:45 PM	48	348	18	414	67	**190**	**77**	**334**	121	**371**	45	537	24	**180**	**122**	**326**	**1611**
05:00 PM	51	346	**26**	**423**	51	154	67	272	**123**	364	58	**545**	25	178	121	324	1564
05:15 PM	36	**352**	17	405	**68**	183	74	325	122	342	56	520	23	149	119	291	1541
Total Volume	190	1384	86	1660	251	701	278	1230	485	1401	220	2106	99	682	482	1263	6259
% App. Total	11.4	83.4	5.2		20.4	57	22.6		23	66.5	10.4		7.8	54	38.2		
PHF	.864	.983	.827	.981	.923	.922	.903	.921	.986	.944	.902	.966	.917	.947	.988	.969	.971

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Washington Boulevard
Weather: Clear

File Name : MDR_Lincoln_Washington PM
Site Code : 00000000
Start Date : 11/20/2013



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:30 PM				04:15 PM			
+0 mins.	**55**	**350**	22	**427**	51	154	67	272	119	324	**61**	504	15	166	**126**	307
+15 mins.	55	338	25	418	**68**	183	**74**	325	121	**371**	45	537	**27**	175	120	322
+30 mins.	48	348	18	414	58	199	57	314	**123**	364	58	**545**	24	**180**	122	**326**
+45 mins.	51	346	**26**	423	64	**213**	67	**344**	122	342	56	520	25	178	121	324
Total Volume	209	1382	91	1682	241	749	265	1255	485	1401	220	2106	91	699	489	1279
% App. Total	12.4	82.2	5.4		19.2	59.7	21.1		23	66.5	10.4		7.1	54.7	38.2	
PHF	.950	.987	.875	.985	.886	.879	.895	.912	.986	.944	.902	.966	.843	.971	.970	.981

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Marina Expressway (SR-90)
Weather: Clear

File Name : MDR_Lincoln_Marina Expressway AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

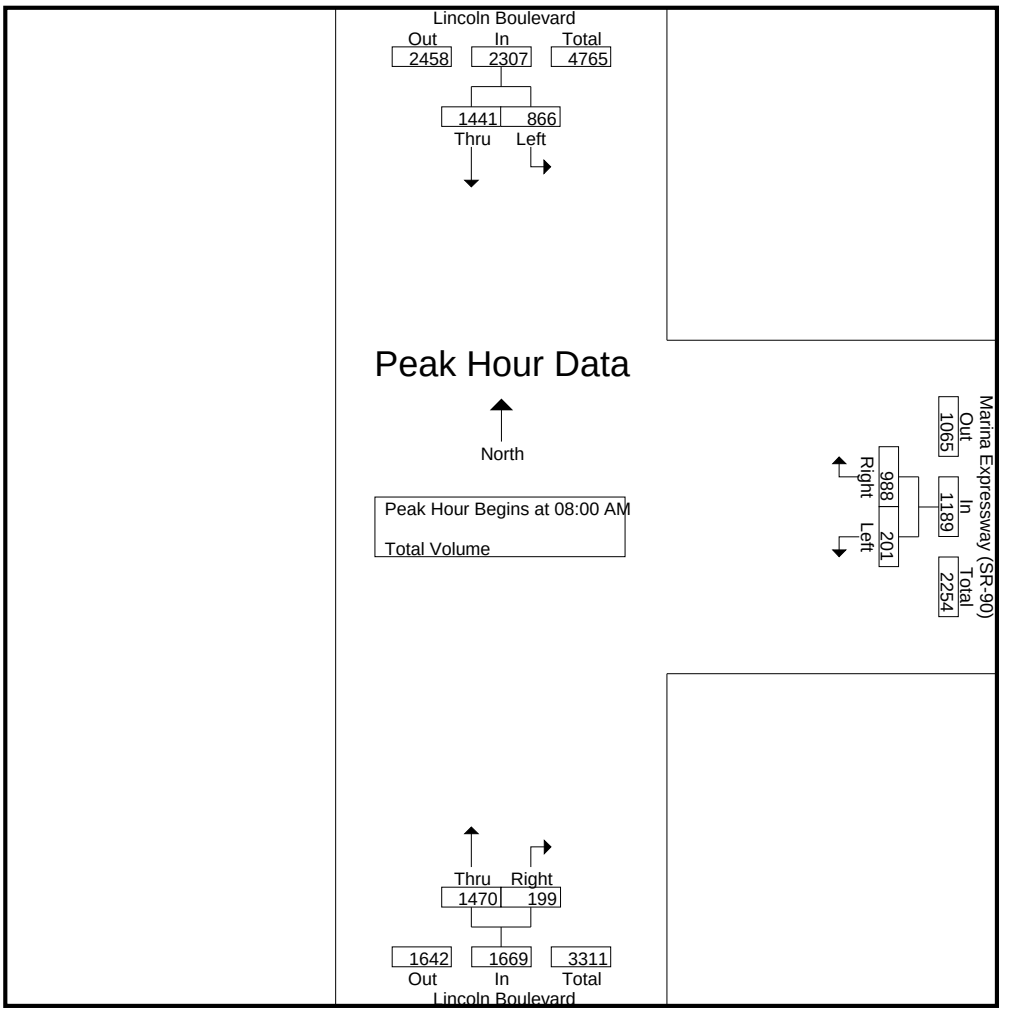
	Lincoln Boulevard Southbound			Marina Expressway (SR-90) Westbound			Lincoln Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	145	184	329	36	226	262	375	40	415	1006
07:15 AM	192	237	429	31	235	266	446	46	492	1187
07:30 AM	231	240	471	32	272	304	398	46	444	1219
07:45 AM	230	342	572	41	255	296	375	38	413	1281
Total	798	1003	1801	140	988	1128	1594	170	1764	4693
08:00 AM	198	350	548	47	236	283	371	43	414	1245
08:15 AM	244	331	575	49	257	306	338	48	386	1267
08:30 AM	230	359	589	50	227	277	432	52	484	1350
08:45 AM	194	401	595	55	268	323	329	56	385	1303
Total	866	1441	2307	201	988	1189	1470	199	1669	5165
Grand Total	1664	2444	4108	341	1976	2317	3064	369	3433	9858
Apprch %	40.5	59.5		14.7	85.3		89.3	10.7		
Total %	16.9	24.8	41.7	3.5	20	23.5	31.1	3.7	34.8	

	Lincoln Boulevard Southbound			Marina Expressway (SR-90) Westbound			Lincoln Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	198	350	548	47	236	283	371	43	414	1245
08:15 AM	**244**	331	575	49	257	306	338	48	386	1267
08:30 AM	230	359	589	50	227	277	**432**	52	**484**	**1350**
08:45 AM	194	**401**	**595**	**55**	**268**	**323**	329	**56**	385	1303
Total Volume	866	1441	2307	201	988	1189	1470	199	1669	5165
% App. Total	37.5	62.5		16.9	83.1		88.1	11.9		
PHF	.887	.898	.969	.914	.922	.920	.851	.888	.862	.956

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Marina Expressway (SR-90)
Weather: Clear

File Name : MDR_Lincoln_Marina Expressway AM
Site Code : 00000000
Start Date : 11/20/2013



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:30 AM			07:00 AM		
+0 mins.	198	350	548	32	**272**	304	375	40	415
+15 mins.	**244**	331	575	41	255	296	**446**	**46**	**492**
+30 mins.	230	359	589	47	236	283	398	46	444
+45 mins.	194	**401**	**595**	**49**	257	**306**	375	38	413
Total Volume	866	1441	2307	169	1020	1189	1594	170	1764
% App. Total	37.5	62.5		14.2	85.8		90.4	9.6	
PHF	.887	.898	.969	.862	.938	.971	.893	.924	.896

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Marina Expressway (SR-90)
Weather: Clear

File Name : MDR_Lincoln_Marina Expressway PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

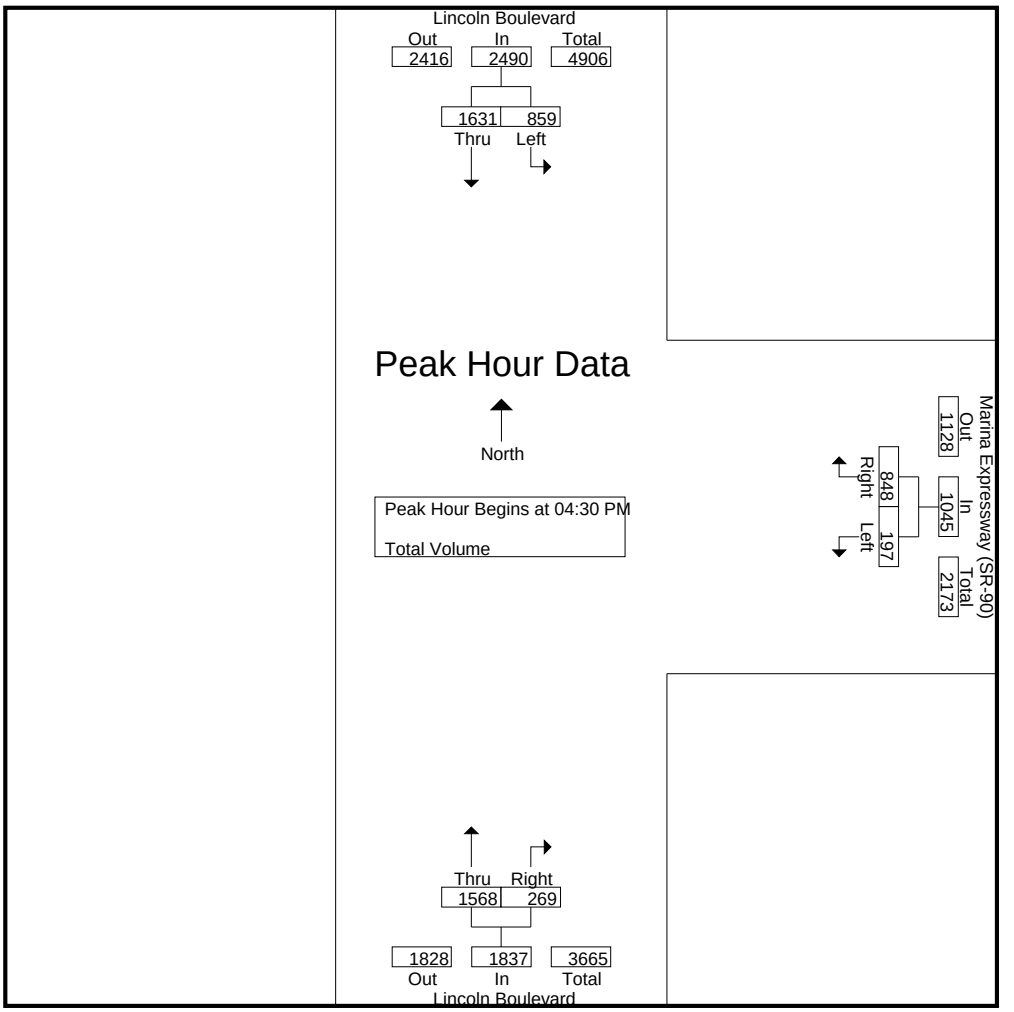
	Lincoln Boulevard Southbound			Marina Expressway (SR-90) Westbound			Lincoln Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	195	423	618	40	175	215	328	59	387	1220
04:15 PM	209	384	593	46	197	243	339	56	395	1231
04:30 PM	193	410	603	39	198	237	402	69	471	1311
04:45 PM	219	415	634	69	229	298	376	60	436	1368
Total	816	1632	2448	194	799	993	1445	244	1689	5130
05:00 PM	230	380	610	37	213	250	388	81	469	1329
05:15 PM	217	426	643	52	208	260	402	59	461	1364
05:30 PM	168	426	594	36	190	226	384	46	430	1250
05:45 PM	193	419	612	48	223	271	382	50	432	1315
Total	808	1651	2459	173	834	1007	1556	236	1792	5258
Grand Total	1624	3283	4907	367	1633	2000	3001	480	3481	10388
Apprch %	33.1	66.9		18.4	81.7		86.2	13.8		
Total %	15.6	31.6	47.2	3.5	15.7	19.3	28.9	4.6	33.5	

	Lincoln Boulevard Southbound			Marina Expressway (SR-90) Westbound			Lincoln Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	193	410	603	39	198	237	**402**	69	**471**	1311
04:45 PM	219	415	634	**69**	**229**	**298**	376	60	436	**1368**
05:00 PM	**230**	380	610	37	213	250	388	**81**	469	1329
05:15 PM	217	**426**	**643**	52	208	260	402	59	461	1364
Total Volume	859	1631	2490	197	848	1045	1568	269	1837	5372
% App. Total	34.5	65.5		18.9	81.1		85.4	14.6		
PHF	.934	.957	.968	.714	.926	.877	.975	.830	.975	.982

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Marina Expressway (SR-90)
Weather: Clear

File Name : MDR_Lincoln_Marina Expressway PM
Site Code : 00000000
Start Date : 11/20/2013



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	193	410	603	39	198	237	**402**	69	**471**
+15 mins.	219	415	634	**69**	**229**	**298**	376	60	436
+30 mins.	**230**	380	610	37	213	250	388	**81**	469
+45 mins.	217	**426**	**643**	52	208	260	402	59	461
Total Volume	859	1631	2490	197	848	1045	1568	269	1837
% App. Total	34.5	65.5		18.9	81.1		85.4	14.6	
PHF	.934	.957	.968	.714	.926	.877	.975	.830	.975

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Fiji Way
Weather: Clear

File Name : MDR_Lincoln_Fiji AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

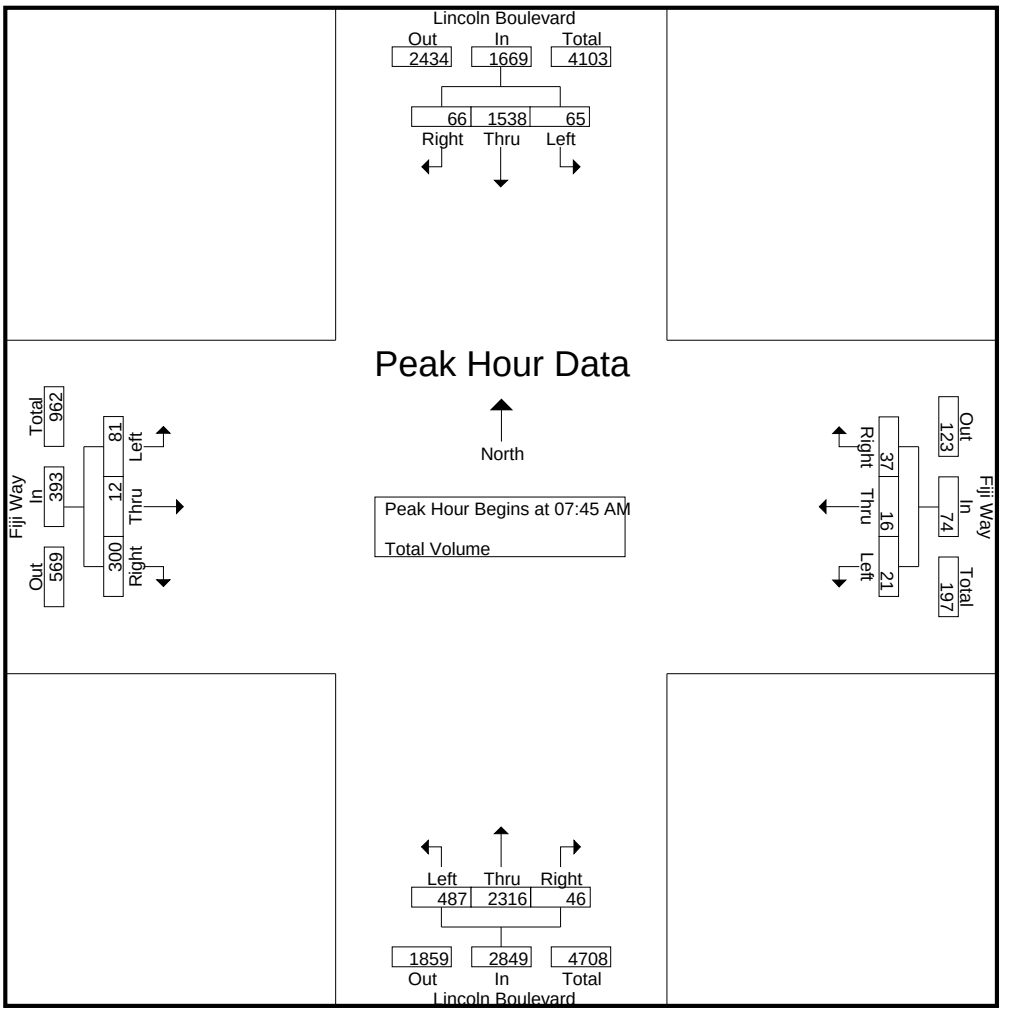
	Lincoln Boulevard Southbound				Fiji Way Westbound				Lincoln Boulevard Northbound				Fiji Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	178	16	198	2	1	7	10	114	565	8	687	22	3	59	84	979
07:15 AM	5	262	24	291	4	4	5	13	124	575	9	708	14	2	61	77	1089
07:30 AM	8	292	16	316	3	3	9	15	172	607	7	786	12	3	71	86	1203
07:45 AM	17	416	16	449	6	5	4	15	95	585	12	692	13	3	89	105	1261
Total	34	1148	72	1254	15	13	25	53	505	2332	36	2873	61	11	280	352	4532
08:00 AM	14	366	17	397	5	2	10	17	131	549	12	692	17	3	84	104	1210
08:15 AM	16	342	11	369	3	5	11	19	149	591	17	757	25	1	59	85	1230
08:30 AM	18	414	22	454	7	4	12	23	112	591	5	708	26	5	68	99	1284
08:45 AM	17	400	18	435	5	1	9	15	109	522	11	642	37	4	75	116	1208
Total	65	1522	68	1655	20	12	42	74	501	2253	45	2799	105	13	286	404	4932
Grand Total	99	2670	140	2909	35	25	67	127	1006	4585	81	5672	166	24	566	756	9464
Apprch %	3.4	91.8	4.8		27.6	19.7	52.8		17.7	80.8	1.4		22	3.2	74.9		
Total %	1	28.2	1.5	30.7	0.4	0.3	0.7	1.3	10.6	48.4	0.9	59.9	1.8	0.3	6	8	

	Lincoln Boulevard Southbound				Fiji Way Westbound				Lincoln Boulevard Northbound				Fiji Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	17	**416**	16	449	6	**5**	4	15	95	585	12	692	13	3	**89**	**105**	1261
08:00 AM	14	366	17	397	5	2	10	17	131	549	12	692	17	3	84	104	1210
08:15 AM	16	342	11	369	3	5	11	19	**149**	**591**	**17**	**757**	25	1	59	85	1230
08:30 AM	**18**	414	**22**	**454**	**7**	4	**12**	**23**	112	591	5	708	**26**	**5**	68	99	**1284**
Total Volume	65	1538	66	1669	21	16	37	74	487	2316	46	2849	81	12	300	393	4985
% App. Total	3.9	92.2	4		28.4	21.6	50		17.1	81.3	1.6		20.6	3.1	76.3		
PHF	.903	.924	.750	.919	.750	.800	.771	.804	.817	.980	.676	.941	.779	.600	.843	.936	.971

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Fiji Way
Weather: Clear

File Name : MDR_Lincoln_Fiji AM
Site Code : 00000000
Start Date : 11/20/2013



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:30 AM				08:00 AM			
+0 mins.	17	**416**	16	449	6	**5**	4	15	**172**	**607**	7	**786**	17	3	**84**	104
+15 mins.	14	366	17	397	5	2	10	17	95	585	12	692	25	1	59	85
+30 mins.	16	342	11	369	3	5	11	19	131	549	12	692	26	**5**	68	99
+45 mins.	**18**	414	**22**	**454**	**7**	4	**12**	**23**	149	591	**17**	757	**37**	4	75	**116**
Total Volume	65	1538	66	1669	21	16	37	74	547	2332	48	2927	105	13	286	404
% App. Total	3.9	92.2	4		28.4	21.6	50		18.7	79.7	1.6		26	3.2	70.8	
PHF	.903	.924	.750	.919	.750	.800	.771	.804	.795	.960	.706	.931	.709	.650	.851	.871

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Fiji Way
Weather: Clear

File Name : MDR_Lincoln_Fiji PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

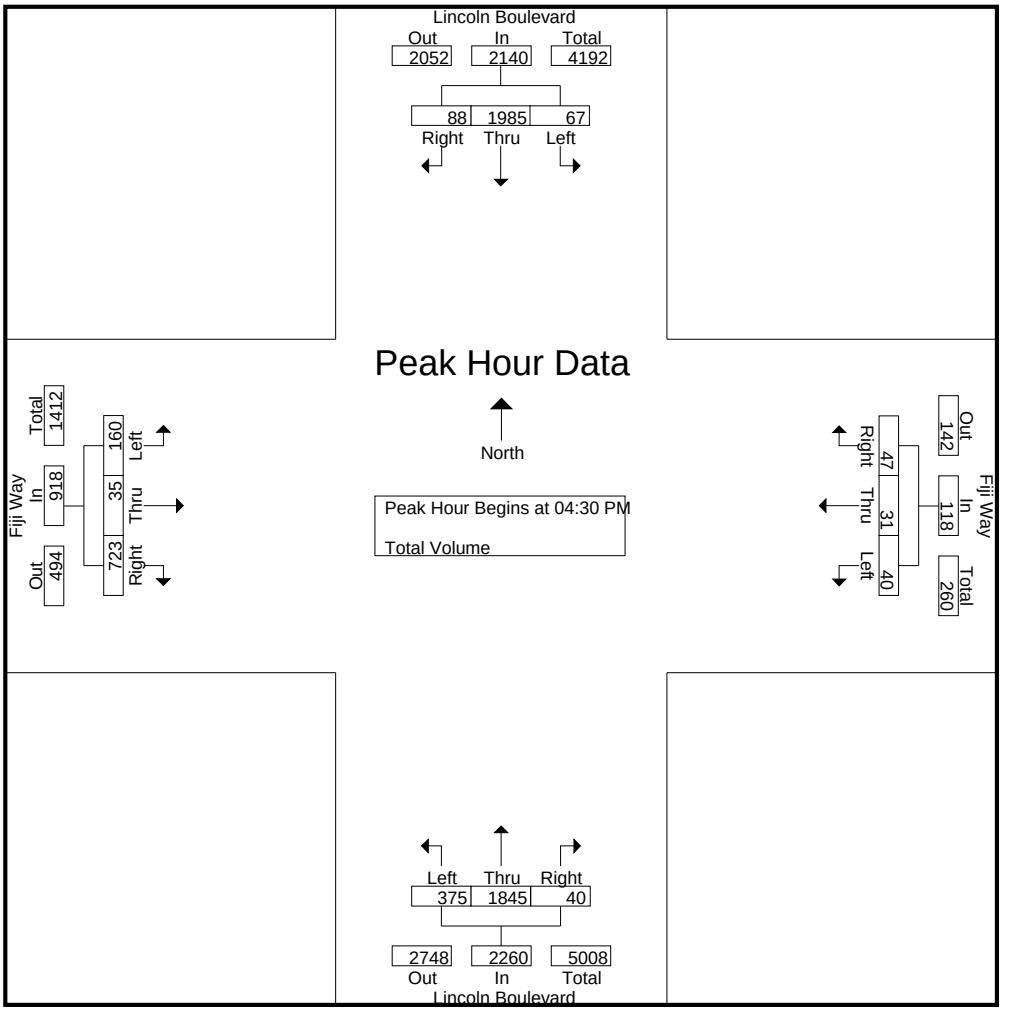
	Lincoln Boulevard Southbound				Fiji Way Westbound				Lincoln Boulevard Northbound				Fiji Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	21	437	37	495	7	8	6	21	103	373	6	482	68	20	200	288	1286
04:15 PM	12	469	39	520	5	11	5	21	91	399	6	496	60	18	192	270	1307
04:30 PM	15	468	28	511	9	5	8	22	91	472	11	574	62	12	169	243	1350
04:45 PM	18	503	20	541	9	13	16	38	114	423	7	544	55	11	198	264	1387
Total	66	1877	124	2067	30	37	35	102	399	1667	30	2096	245	61	759	1065	5330
05:00 PM	16	498	16	530	10	7	12	29	75	451	7	533	15	7	172	194	1286
05:15 PM	18	516	24	558	12	6	11	29	95	499	15	609	28	5	184	217	1413
05:30 PM	14	425	19	458	8	1	7	16	133	484	10	627	25	1	179	205	1306
05:45 PM	18	518	22	558	12	4	10	26	100	459	12	571	19	2	175	196	1351
Total	66	1957	81	2104	42	18	40	100	403	1893	44	2340	87	15	710	812	5356
Grand Total	132	3834	205	4171	72	55	75	202	802	3560	74	4436	332	76	1469	1877	10686
Apprch %	3.2	91.9	4.9		35.6	27.2	37.1		18.1	80.3	1.7		17.7	4	78.3		
Total %	1.2	35.9	1.9	39	0.7	0.5	0.7	1.9	7.5	33.3	0.7	41.5	3.1	0.7	13.7	17.6	

	Lincoln Boulevard Southbound				Fiji Way Westbound				Lincoln Boulevard Northbound				Fiji Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	15	468	**28**	511	9	5	8	22	91	472	11	574	**62**	**12**	169	243	1350
04:45 PM	**18**	503	20	541	9	**13**	**16**	**38**	**114**	423	7	544	55	11	**198**	**264**	1387
05:00 PM	16	498	16	530	10	7	12	29	75	451	7	533	15	7	172	194	1286
05:15 PM	18	**516**	24	**558**	**12**	6	11	29	95	**499**	**15**	**609**	28	5	184	217	**1413**
Total Volume	67	1985	88	2140	40	31	47	118	375	1845	40	2260	160	35	723	918	5436
% App. Total	3.1	92.8	4.1		33.9	26.3	39.8		16.6	81.6	1.8		17.4	3.8	78.8		
PHF	.931	.962	.786	.959	.833	.596	.734	.776	.822	.924	.667	.928	.645	.729	.913	.869	.962

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Lincoln Boulevard
E/W: Fiji Way
Weather: Clear

File Name : MDR_Lincoln_Fiji PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	15	468	**28**	511	9	5	8	22	75	451	7	533	**68**	**20**	**200**	**288**
+15 mins.	**18**	503	20	541	9	**13**	**16**	**38**	95	**499**	**15**	609	60	18	192	270
+30 mins.	16	498	16	530	10	7	12	29	**133**	484	10	**627**	62	12	169	243
+45 mins.	18	**516**	24	**558**	**12**	6	11	29	100	459	12	571	55	11	198	264
Total Volume	67	1985	88	2140	40	31	47	118	403	1893	44	2340	245	61	759	1065
% App. Total	3.1	92.8	4.1		33.9	26.3	39.8		17.2	80.9	1.9		23	5.7	71.3	
PHF	.931	.962	.786	.959	.833	.596	.734	.776	.758	.948	.733	.933	.901	.763	.949	.924

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway WB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway WB AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

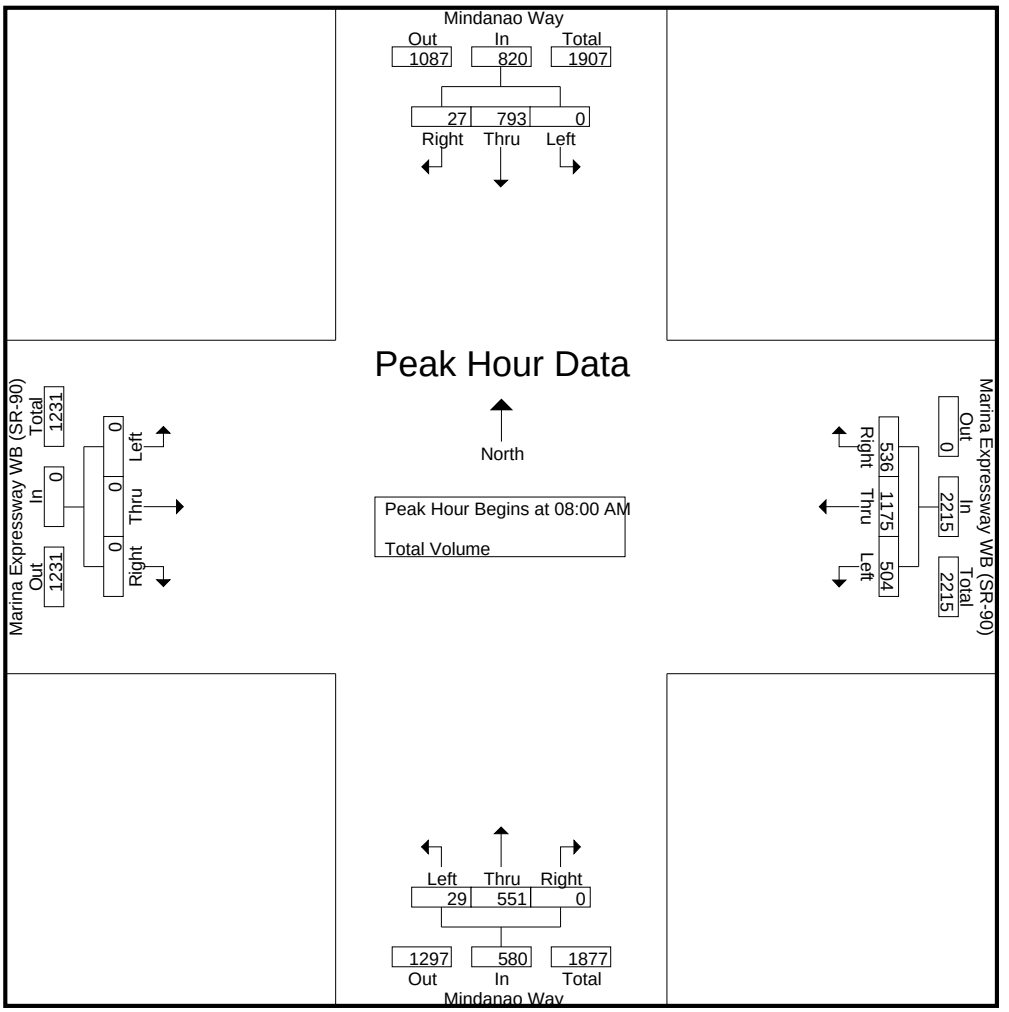
	Mindanao Way Southbound				Marina Expressway WB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway WB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	112	6	118	99	242	94	435	2	62	0	64	0	0	0	0	617
07:15 AM	0	129	3	132	108	264	129	501	4	97	0	101	0	0	0	0	734
07:30 AM	0	150	2	152	108	310	160	578	4	126	0	130	0	0	0	0	860
07:45 AM	0	192	1	193	132	313	163	608	5	151	0	156	0	0	0	0	957
Total	0	583	12	595	447	1129	546	2122	15	436	0	451	0	0	0	0	3168
08:00 AM	0	195	6	201	108	271	143	522	3	133	0	136	0	0	0	0	859
08:15 AM	0	195	5	200	111	272	126	509	4	126	0	130	0	0	0	0	839
08:30 AM	0	203	5	208	143	287	121	551	9	156	0	165	0	0	0	0	924
08:45 AM	0	200	11	211	142	345	146	633	13	136	0	149	0	0	0	0	993
Total	0	793	27	820	504	1175	536	2215	29	551	0	580	0	0	0	0	3615
Grand Total	0	1376	39	1415	951	2304	1082	4337	44	987	0	1031	0	0	0	0	6783
Apprch %	0	97.2	2.8		21.9	53.1	24.9		4.3	95.7	0		0	0	0		
Total %	0	20.3	0.6	20.9	14	34	16	63.9	0.6	14.6	0	15.2	0	0	0	0	

	Mindanao Way Southbound				Marina Expressway WB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway WB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	195	6	201	108	271	143	522	3	133	0	136	0	0	0	0	859
08:15 AM	0	195	5	200	111	272	126	509	4	126	0	130	0	0	0	0	839
08:30 AM	0	**203**	5	208	**143**	287	121	551	9	**156**	0	**165**	0	0	0	0	924
08:45 AM	0	200	**11**	**211**	142	**345**	**146**	**633**	**13**	136	0	149	0	0	0	0	**993**
Total Volume	0	793	27	820	504	1175	536	2215	29	551	0	580	0	0	0	0	3615
% App. Total	0	96.7	3.3		22.8	53	24.2		5	95	0		0	0	0		
PHF	.000	.977	.614	.972	.881	.851	.918	.875	.558	.883	.000	.879	.000	.000	.000	.000	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway WB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway WB AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:45 AM				07:00 AM			
+0 mins.	0	195	6	201	108	310	160	578	5	151	0	156	0	0	0	0
+15 mins.	0	195	5	200	**132**	**313**	**163**	**608**	3	133	0	136	0	0	0	0
+30 mins.	0	**203**	5	208	108	271	143	522	4	126	0	130	0	0	0	0
+45 mins.	0	200	**11**	**211**	111	272	126	509	**9**	**156**	0	**165**	0	0	0	0
Total Volume	0	793	27	820	459	1166	592	2217	21	566	0	587	0	0	0	0
% App. Total	0	96.7	3.3		20.7	52.6	26.7		3.6	96.4	0		0	0	0	
PHF	.000	.977	.614	.972	.869	.931	.908	.912	.583	.907	.000	.889	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway WB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway WB PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

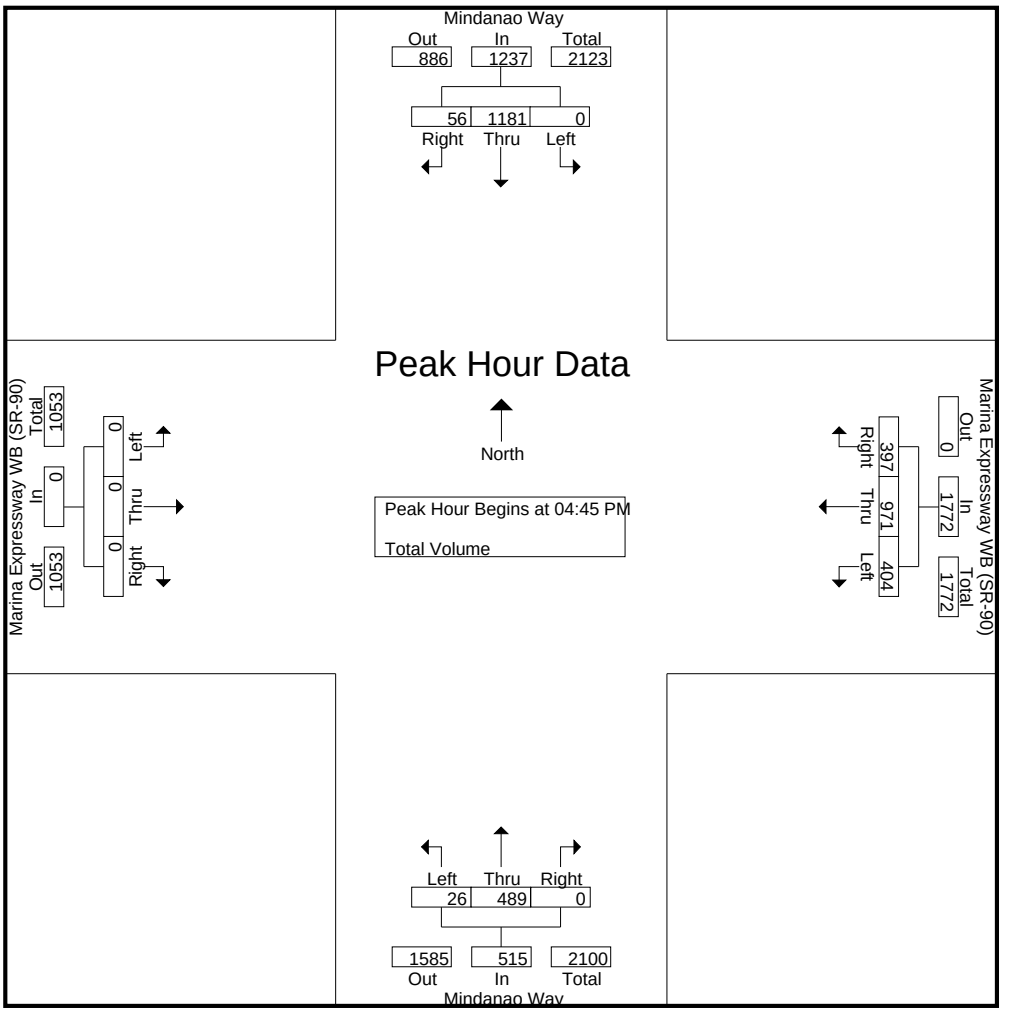
	Mindanao Way Southbound				Marina Expressway WB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway WB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	244	8	252	111	199	77	387	7	109	0	116	0	0	0	0	755
04:15 PM	0	246	13	259	113	221	98	432	5	135	0	140	0	0	0	0	831
04:30 PM	0	272	9	281	87	225	102	414	7	106	0	113	0	0	0	0	808
04:45 PM	0	278	19	297	110	262	100	472	12	130	0	142	0	0	0	0	911
Total	0	1040	49	1089	421	907	377	1705	31	480	0	511	0	0	0	0	3305
05:00 PM	0	319	17	336	108	222	94	424	6	133	0	139	0	0	0	0	899
05:15 PM	0	281	13	294	96	253	98	447	3	117	0	120	0	0	0	0	861
05:30 PM	0	303	7	310	90	234	105	429	5	109	0	114	0	0	0	0	853
05:45 PM	0	285	8	293	98	253	98	449	2	126	0	128	0	0	0	0	870
Total	0	1188	45	1233	392	962	395	1749	16	485	0	501	0	0	0	0	3483
Grand Total	0	2228	94	2322	813	1869	772	3454	47	965	0	1012	0	0	0	0	6788
Apprch %	0	96	4		23.5	54.1	22.4		4.6	95.4	0		0	0	0		
Total %	0	32.8	1.4	34.2	12	27.5	11.4	50.9	0.7	14.2	0	14.9	0	0	0	0	

	Mindanao Way Southbound				Marina Expressway WB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway WB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	278	**19**	297	**110**	**262**	100	**472**	**12**	130	0	**142**	0	0	0	0	**911**
05:00 PM	0	**319**	17	**336**	108	222	94	424	6	**133**	0	139	0	0	0	0	899
05:15 PM	0	281	13	294	96	253	98	447	3	117	0	120	0	0	0	0	861
05:30 PM	0	303	7	310	90	234	**105**	429	5	109	0	114	0	0	0	0	853
Total Volume	0	1181	56	1237	404	971	397	1772	26	489	0	515	0	0	0	0	3524
% App. Total	0	95.5	4.5		22.8	54.8	22.4		5	95	0		0	0	0		
PHF	.000	.926	.737	.920	.918	.927	.945	.939	.542	.919	.000	.907	.000	.000	.000	.000	.967

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway WB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway WB PM
Site Code : 00000000
Start Date : 11/20/2013



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:15 PM				04:00 PM			
+0 mins.	0	278	**19**	297	**110**	**262**	100	**472**	5	**135**	0	140	0	0	0	0
+15 mins.	0	**319**	17	**336**	108	222	94	424	7	106	0	113	0	0	0	0
+30 mins.	0	281	13	294	96	253	98	447	**12**	130	0	**142**	0	0	0	0
+45 mins.	0	303	7	310	90	234	**105**	429	6	133	0	139	0	0	0	0
Total Volume	0	1181	56	1237	404	971	397	1772	30	504	0	534	0	0	0	0
% App. Total	0	95.5	4.5		22.8	54.8	22.4		5.6	94.4	0		0	0	0	
PHF	.000	.926	.737	.920	.918	.927	.945	.939	.625	.933	.000	.940	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway EB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway EB AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Total Volume

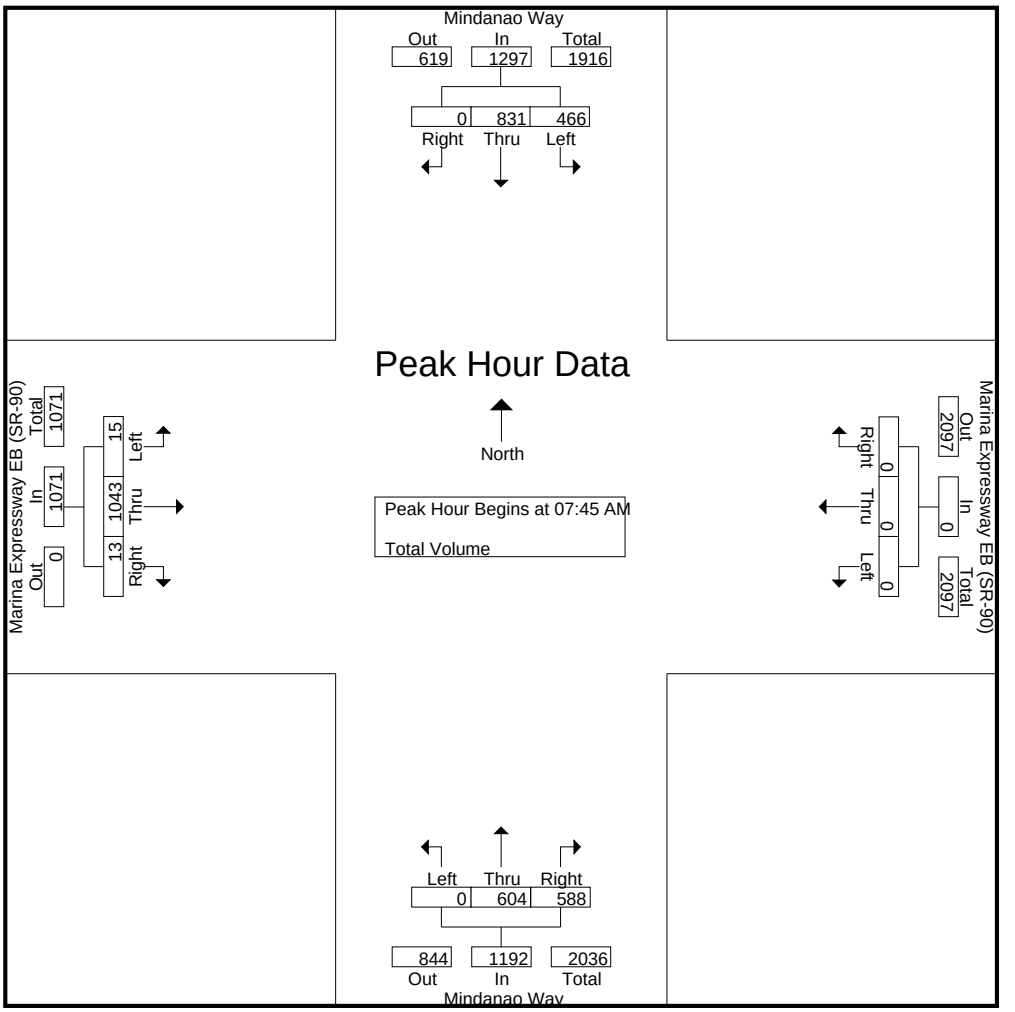
	Mindanao Way Southbound				Marina Expressway EB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway EB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	63	152	0	215	0	0	0	0	0	73	112	185	4	179	2	185	585
07:15 AM	78	158	0	236	0	0	0	0	0	93	115	208	3	227	0	230	674
07:30 AM	101	158	0	259	0	0	0	0	0	128	140	268	6	272	3	281	808
07:45 AM	110	219	0	329	0	0	0	0	0	160	147	307	6	264	4	274	910
Total	352	687	0	1039	0	0	0	0	0	454	514	968	19	942	9	970	2977
08:00 AM	130	185	0	315	0	0	0	0	0	143	157	300	2	230	3	235	850
08:15 AM	92	209	0	301	0	0	0	0	0	139	144	283	1	292	2	295	879
08:30 AM	134	218	0	352	0	0	0	0	0	162	140	302	6	257	4	267	921
08:45 AM	104	222	0	326	0	0	0	0	0	133	128	261	9	259	2	270	857
Total	460	834	0	1294	0	0	0	0	0	577	569	1146	18	1038	11	1067	3507
Grand Total	812	1521	0	2333	0	0	0	0	0	1031	1083	2114	37	1980	20	2037	6484
Apprch %	34.8	65.2	0		0	0	0		0	48.8	51.2		1.8	97.2	1		
Total %	12.5	23.5	0	36	0	0	0	0	0	15.9	16.7	32.6	0.6	30.5	0.3	31.4	

	Mindanao Way Southbound				Marina Expressway EB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway EB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	110	**219**	0	329	0	0	0	0	0	160	147	**307**	**6**	264	**4**	274	910
08:00 AM	130	185	0	315	0	0	0	0	0	143	**157**	300	2	230	3	235	850
08:15 AM	92	209	0	301	0	0	0	0	0	139	144	283	1	**292**	2	**295**	879
08:30 AM	**134**	218	0	**352**	0	0	0	0	0	**162**	140	302	6	257	4	267	**921**
Total Volume	466	831	0	1297	0	0	0	0	0	604	588	1192	15	1043	13	1071	3560
% App. Total	35.9	64.1	0		0	0	0		0	50.7	49.3		1.4	97.4	1.2		
PHF	.869	.949	.000	.921	.000	.000	.000	.000	.000	.932	.936	.971	.625	.893	.813	.908	.966

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway EB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway EB AM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:45 AM				07:30 AM			
+0 mins.	110	**219**	0	329	0	0	0	0	0	160	147	**307**	**6**	272	3	281
+15 mins.	130	185	0	315	0	0	0	0	0	143	**157**	300	6	264	**4**	274
+30 mins.	92	209	0	301	0	0	0	0	0	139	144	283	2	230	3	235
+45 mins.	**134**	218	0	**352**	0	0	0	0	0	**162**	140	302	1	**292**	2	**295**
Total Volume	466	831	0	1297	0	0	0	0	0	604	588	1192	15	1058	12	1085
% App. Total	35.9	64.1	0		0	0	0		0	50.7	49.3		1.4	97.5	1.1	
PHF	.869	.949	.000	.921	.000	.000	.000	.000	.000	.932	.936	.971	.625	.906	.750	.919

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway EB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway EB PM
Site Code : 00000000
Start Date : 11/20/2013

Groups Printed- Total Volume

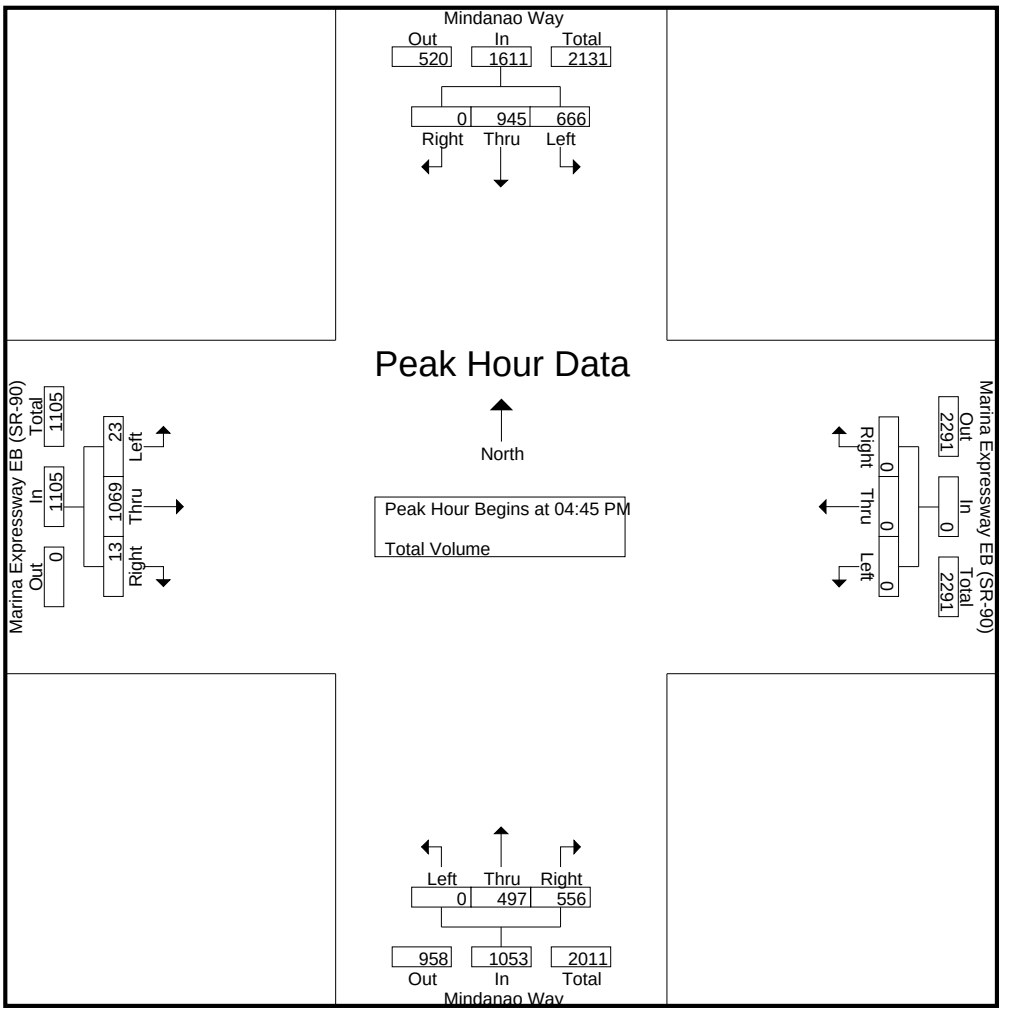
	Mindanao Way Southbound				Marina Expressway EB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway EB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	123	245	0	368	0	0	0	0	0	114	127	241	6	248	3	257	866
04:15 PM	130	229	0	359	0	0	0	0	0	135	108	243	8	254	3	265	867
04:30 PM	148	223	0	371	0	0	0	0	0	111	107	218	5	253	5	263	852
04:45 PM	138	253	0	391	0	0	0	0	0	135	133	268	6	264	3	273	932
Total	539	950	0	1489	0	0	0	0	0	495	475	970	25	1019	14	1058	3517
05:00 PM	184	248	0	432	0	0	0	0	0	131	134	265	9	286	4	299	996
05:15 PM	168	223	0	391	0	0	0	0	0	116	162	278	5	294	2	301	970
05:30 PM	176	221	0	397	0	0	0	0	0	115	127	242	3	225	4	232	871
05:45 PM	155	241	0	396	0	0	0	0	0	129	115	244	7	230	2	239	879
Total	683	933	0	1616	0	0	0	0	0	491	538	1029	24	1035	12	1071	3716
Grand Total	1222	1883	0	3105	0	0	0	0	0	986	1013	1999	49	2054	26	2129	7233
Apprch %	39.4	60.6	0		0	0	0		0	49.3	50.7		2.3	96.5	1.2		
Total %	16.9	26	0	42.9	0	0	0	0	0	13.6	14	27.6	0.7	28.4	0.4	29.4	

	Mindanao Way Southbound				Marina Expressway EB (SR-90) Westbound				Mindanao Way Northbound				Marina Expressway EB (SR-90) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	138	**253**	0	391	0	0	0	0	0	**135**	133	268	6	264	3	273	932
05:00 PM	**184**	248	0	**432**	0	0	0	0	0	131	134	265	**9**	286	**4**	299	**996**
05:15 PM	168	223	0	391	0	0	0	0	0	116	**162**	**278**	5	**294**	2	**301**	970
05:30 PM	176	221	0	397	0	0	0	0	0	115	127	242	3	225	4	232	871
Total Volume	666	945	0	1611	0	0	0	0	0	497	556	1053	23	1069	13	1105	3769
% App. Total	41.3	58.7	0		0	0	0		0	47.2	52.8		2.1	96.7	1.2		
PHF	.905	.934	.000	.932	.000	.000	.000	.000	.000	.920	.858	.947	.639	.909	.813	.918	.946

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Marina Del Rey
N/S: Mindanao Way
E/W: Marina Expressway EB (SR-90)
Weather: Clear

File Name : MDR_Mindanao_Marina Expressway EB PM
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:45 PM				04:30 PM			
+0 mins.	**184**	**248**	0	**432**	0	0	0	0	0	**135**	133	268	5	253	**5**	263
+15 mins.	168	223	0	391	0	0	0	0	0	131	134	265	6	264	3	273
+30 mins.	176	221	0	397	0	0	0	0	0	116	**162**	**278**	**9**	286	4	299
+45 mins.	155	241	0	396	0	0	0	0	0	115	127	242	5	**294**	2	**301**
Total Volume	683	933	0	1616	0	0	0	0	0	497	556	1053	25	1097	14	1136
% App. Total	42.3	57.7	0		0	0	0		0	47.2	52.8		2.2	96.6	1.2	
PHF	.928	.941	.000	.935	.000	.000	.000	.000	.000	.920	.858	.947	.694	.933	.700	.944

ATTACHMENT B

Existing (2007) AM and PM Peak-Hour Traffic Volumes

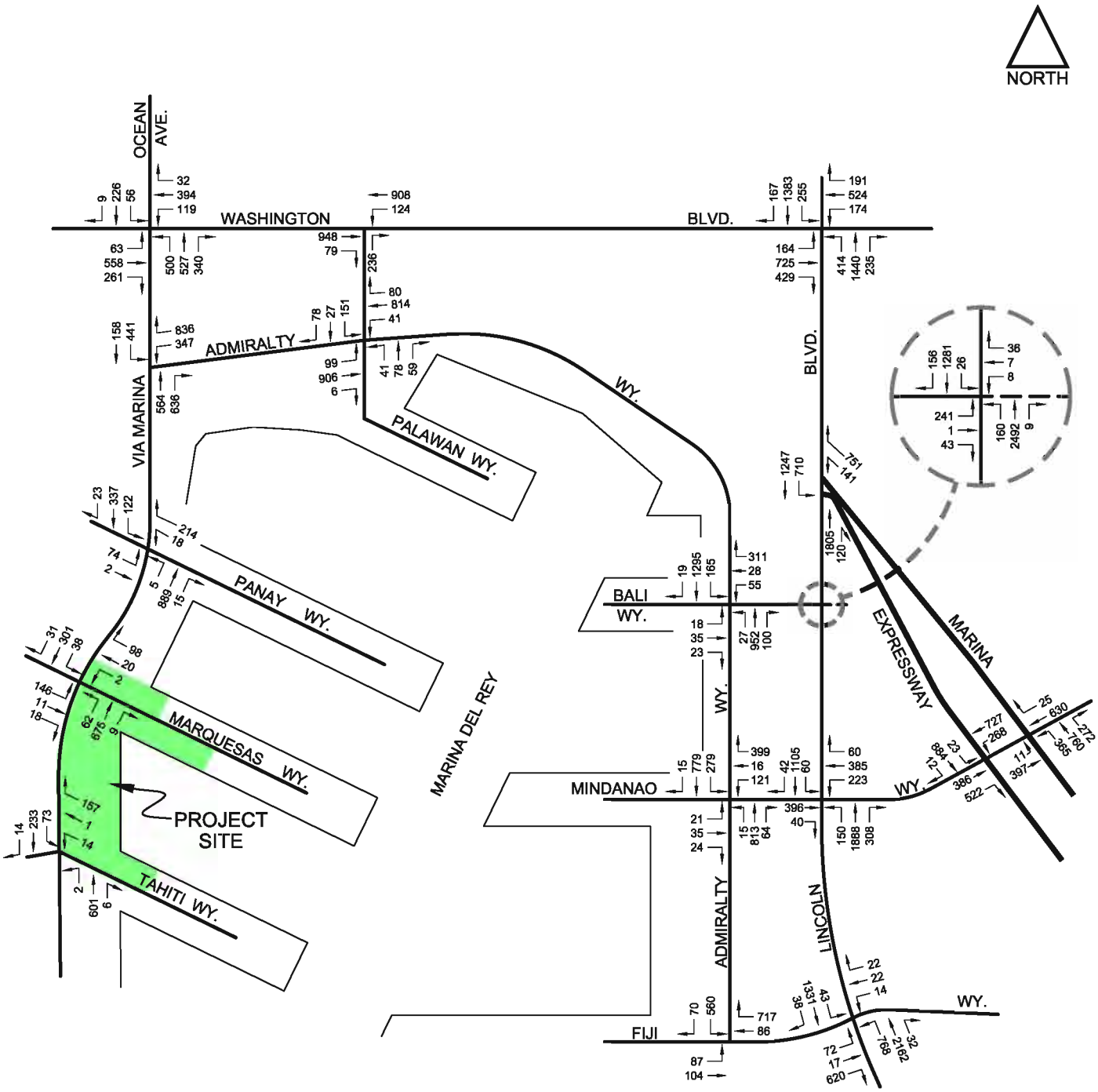


FIGURE 3(a)

5/24/2007

Marina del Rey Legacy\REPORT (2-2007)\AM2007EX

EXISTING (2007) TRAFFIC VOLUMES
AM PEAK HOUR

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

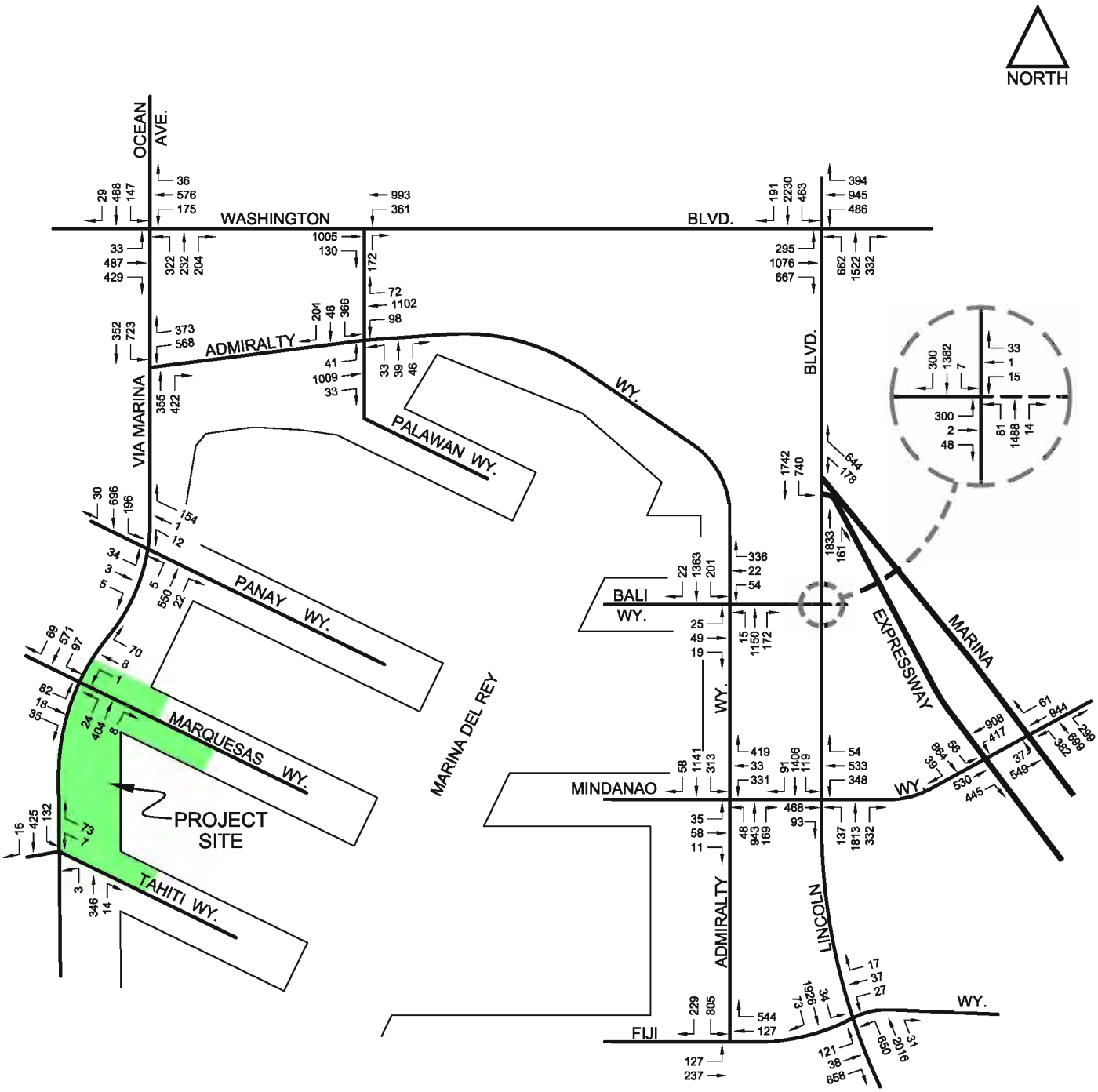


FIGURE 3(b)

5/24/2007

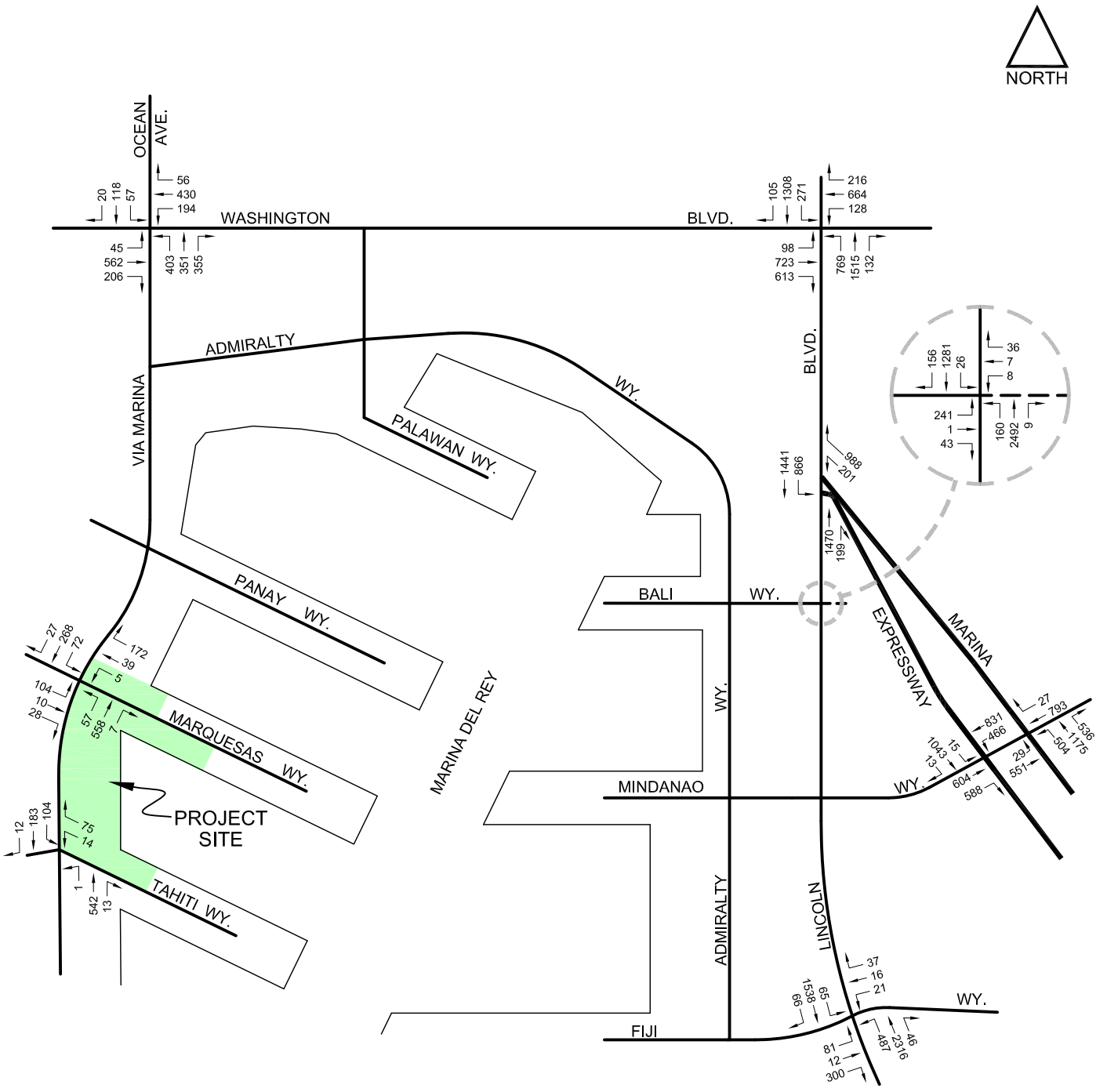
Marina del Rey Legacy\REPORT (2-2007)\PM2007EX

EXISTING (2007) TRAFFIC VOLUMES
PM PEAK HOUR

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

ATTACHMENT C

Existing (2013) AM and PM Peak-Hour Traffic Volumes



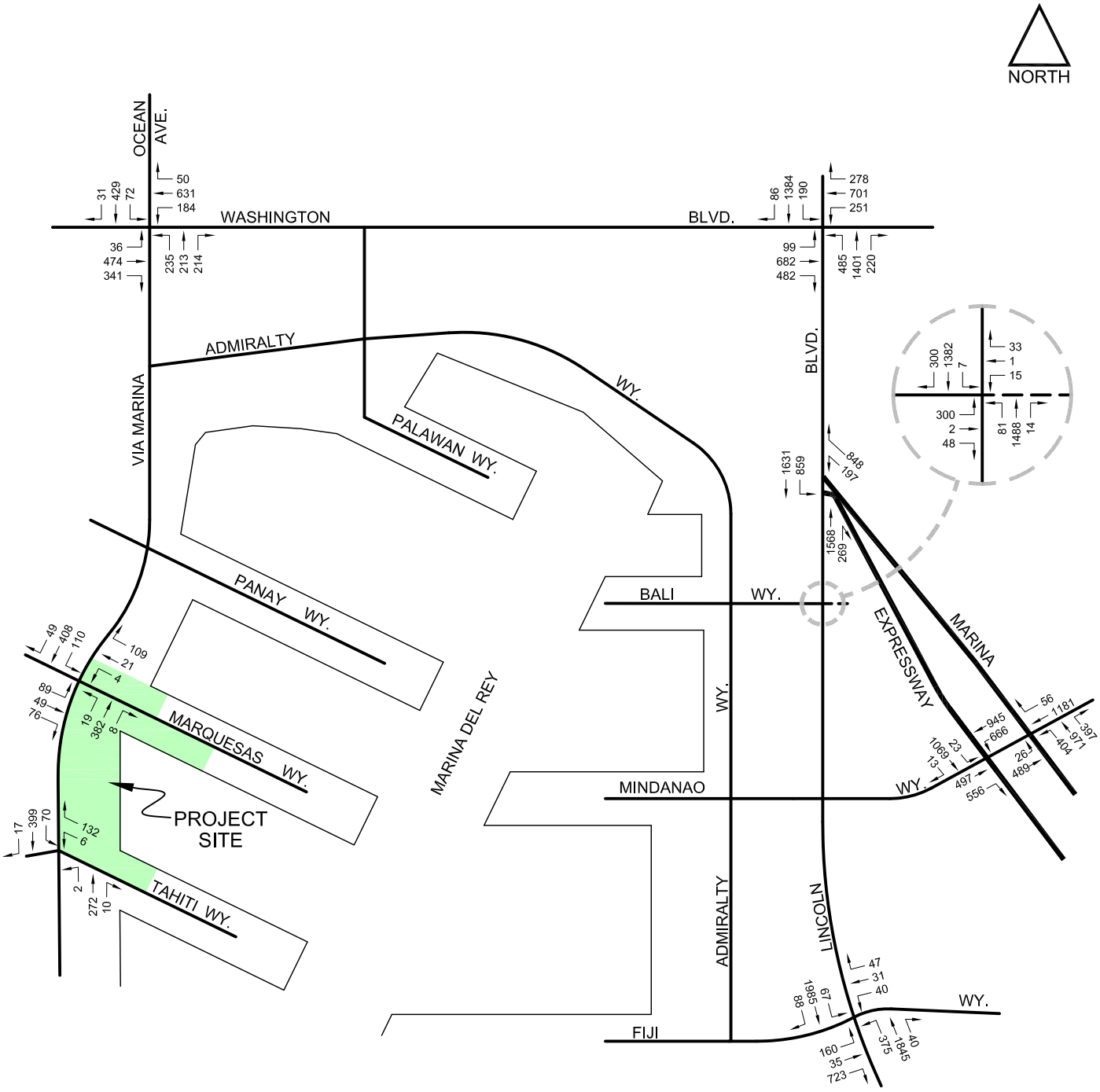
ATTACHMENT C-1

12/18/2013

MARINA DEL REY PARCEL 9U\20131218\AM2013EX

EXISTING (2013) TRAFFIC VOLUMES
AM PEAK HOUR

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com



ATTACHMENT C-2

12/18/2013

MARINA DEL REY PARCEL 9U\20131218\AM2013EX

EXISTING (2013) TRAFFIC VOLUMES
PM PEAK HOUR

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

ATTACHMENT D

December 2007 Traffic Study Project Traffic Section

PROJECT TRAFFIC

The following section describes the methodology used and results of the calculations for traffic generation, distribution and assignment for the project.

Traffic Generation

Vehicle trip generation rates for various types of developments within the Marina are specified in Appendix G (Transportation Improvement Program) of the Marina del Rey Local Implementation Program, which is currently in effect and includes the project site. This document provides the PM peak hour trip rates for the proposed project's residential (apartment) components, as well as for the hotel/timeshare use and boat slip portions of the project. No trip rates are provided for the public park use; however, it was assumed that this project component would generate only nominal amounts of peak hour traffic. It should be noted that rather than the 50 weekday trips assumed, the ITE rates[3] indicate only 3 vehicle trips will be made to and from the park on an average weekday. Therefore, it is unlikely the park will generate any peak hour trips on an average weekday. In addition, the TIP does not specify daily or AM peak hour trip generation rates for any of the proposed uses. However, the traffic study upon which the TIP PM peak hour rates were derived does identify AM peak hour rates.[2] As these rates are consistent with the trip generation methodology utilized for the PM peak hour, the AM rates from the traffic study were also used. Daily trip rates were derived from Trip Generation, published by the Institute of Transportation Engineers (ITE)[3]. This document is the current industry standard for trip generation data. Daily trip generation factors for the proposed project uses were calculated based on the ratio of peak hour-to-daily rates for the ITE data, applied to the peak hour TIP rates. The trip rates used in the traffic analysis for the proposed project are listed in Table 4.

---

[2] Table 2-11, Marina del Rey Traffic Study Final Report, DKS Associates in Association with Gruen Associates, January 17, 1991.

[3] Trip Generation, 6th Edition, Institute of Transportation Engineers, Washington, D.C., 2003.

Table 4
Project Trip Generation Rates

Apartments – per dwelling unit

Daily:	T = 3.960(U)
AM Peak Hour:	T = 0.349(U); I/B = 18%, O/B = 82%
PM Peak Hour:	T = 0.326(U); I/B = 68%, O/B = 32%

Hotel – per room

Daily:	T = 5.339(R)
AM Peak Hour:	T = 0.406(R); I/B = 54%, O/B = 46%
PM Peak Hour:	T = 0.353(R); I/B = 45%, O/B = 55%

Boat Slips – per berth

Daily:	T = 2.883(S)
AM Peak Hour:	T = 0.126(S); I/B = 34%, O/B = 66%
PM Peak Hour:	T = 0.137(S); I/B = 36%, O/B = 64%

Where:

U = Dwellling Units	T = Trip Ends
R = Hotel Rooms	I/B = Inbound Trip Percentage
S = Boat Slips	O/B = Outbound Trip Percentage

Applying the trip generation rates shown in Table 4, the traffic expected to be generated by the project was calculated, and is summarized in Table 5. As shown in this table, the total project (Parcels FF, 10R and 9U) is expected to generate approximately 3,104 net new trips per day, with about 253 trips occurring during the morning peak hour, and 228 trips occurring during the evening peak hour. This amount of new trips will be added to the project area roadway network once the existing development on the sites is demolished and the proposed project is completed and fully occupied. For Parcel 10R, the residential portion is expected to produce approximately 1,045 net new daily trips, including 93 net AM peak hour trips and 86 net PM peak hour trips. The boat slip portion is expected to result in a decrease of 28 net daily trips, including a decrease of 1 net trip during both the AM and PM peak hours. The combined residential and boat slip uses for Parcel 10R would produce approximately 1,017 net new daily trips, including 92 net AM peak hour trips and 85 net PM peak hour trips. For Parcel FF, the proposed residential development will generate 499 net new daily trips, including 44 net AM peak

Table 5
Project Trip Generation

Size/Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Parcel 10R							
Proposed Uses							
400 Apartments	1,584	25	115	140	88	42	130
174 Boat Slips	502	7	15	22	9	15	24
	2,086	32	130	162	97	57	154
Existing Uses - Removed							
136 Apartments	539	8	39	47	30	14	44
184 Boat Slips	530	8	15	23	9	16	25
	1,069	16	54	70	39	30	69
Net New Trips (Parcel 10R)	***1,017***	***16***	***76***	***92***	***58***	***27***	***85***
Parcel FF							
Proposed Uses							
126 Apartments	499	8	36	44	28	13	41
Existing Uses - Removed							
None	0	0	0	0	0	0	0
Net New Trips (Parcel FF)	***499***	***8***	***36***	***44***	***28***	***13***	***41***
Parcel 9U							
Proposed Uses							
288 -Suite Hotel	1,538	63	54	117	46	56	102
1.46 Ac Public Park	50	0	0	0	0	0	0
	1,588	63	54	117	46	56	102
Existing Uses - Removed							
None	0	0	0	0	0	0	0
Net New Trips (Parcel 9U)	***1,588***	***63***	***54***	***117***	***46***	***56***	***102***
Total Net Trips (Parcels 10R, FF and 9U)	***3,104***	***87***	***166***	***253***	***132***	***96***	***228***

hour trips and 41 net PM peak hour trips. For Parcel 9U, the hotel/timeshare resort component will generate about 1,538 net new daily trips, including 117 new trips during the AM peak hour and 102 trips during the PM peak hour. The new public park on Parcel 9U is anticipated to result in approximately 50 new daily trips, although peak hour traffic for the park is expected to be nominal.

Trip Distribution

Determination of the geographic distribution of generated trips was the next step in the process. A primary factor affecting trip distribution is the relative distribution of employment, educational, and retail centers that would be used by the residents of the project, guests of the hotel/timeshare resort and persons using the boat slips. Another key factor is the availability of roadway access to and from the site. Data from the Los Angeles Regional Transportation Study (LARTS) forecasts, as well as information presented in the current Los Angeles County Congestion Management Plan (CMP), were analyzed in order to estimate regional traffic distribution. Lastly, actual vehicle turning movements in and around the project vicinity were observed, and general geographic trip distribution characteristics were developed. The percentage split of trips, by direction, is shown in Table 6.

Table 6
Directional Trip Distribution

Direction	Percentage of Trips
North	25%
East	35%
South	35%
West	5%
Total:	100%

Traffic Assignment

The general geographic trip distribution percentages shown in Table 6 were then assigned to specific travel routes in the study area. These assignment percentages are shown in Figure 4(a) for Parcel 10R, Figure 4(b) for Parcel FF and Figure 4(c) for Parcel 9U. These distribution percentages are assumed to be the same during both the AM and PM peak hours. Based on these directional distribution percentages, the number of trips along each roadway was calculated. The results of this traffic assignment provide the necessary level of detail to conduct the traffic analysis. The traffic assignments for the AM and PM peak hour project traffic on the nearby street system are shown in Figures 5(a) and 5(b), Net Total Project Traffic Volumes.

Project Access

Vehicular access for the proposed project would be provided along Marquesas Way and Via Marina. Primary access to the residential and boat slip parking facilities on Parcel 10R is proposed via multiple driveways located along the south side of Marquesas Way, with an additional access provided for the Via Marina fronting apartments on Parcel 10R via a new driveway on Via Marina. An opening in the median island on Via Marina currently exists at the approximate location of the new residential driveway. This median “cut” will allow access from the north to the Via Marina driveway provided for this portion of the project site. For the residential parking facilities on Parcel FF, primary access is proposed to be provided by multiple driveways located along the north side of Marquesas Way. For Parcel 9U, access to the proposed hotel/timeshare resort parking facility will be accessed via one new driveway along the site frontage of Via Marina. Currently, a median island exists on Via Marina at the location of the new hotel/timeshare resort driveway. The project proposes an opening in the median island on Via Marina in order to provide full left- and right-turn access and egress at the new driveway. In addition, two driveways located further to the north along Via Marina will serve the loading dock. The two service driveways are proposed to be restricted to “right-in/right-out” operation due to the raised median island on Via Marina.

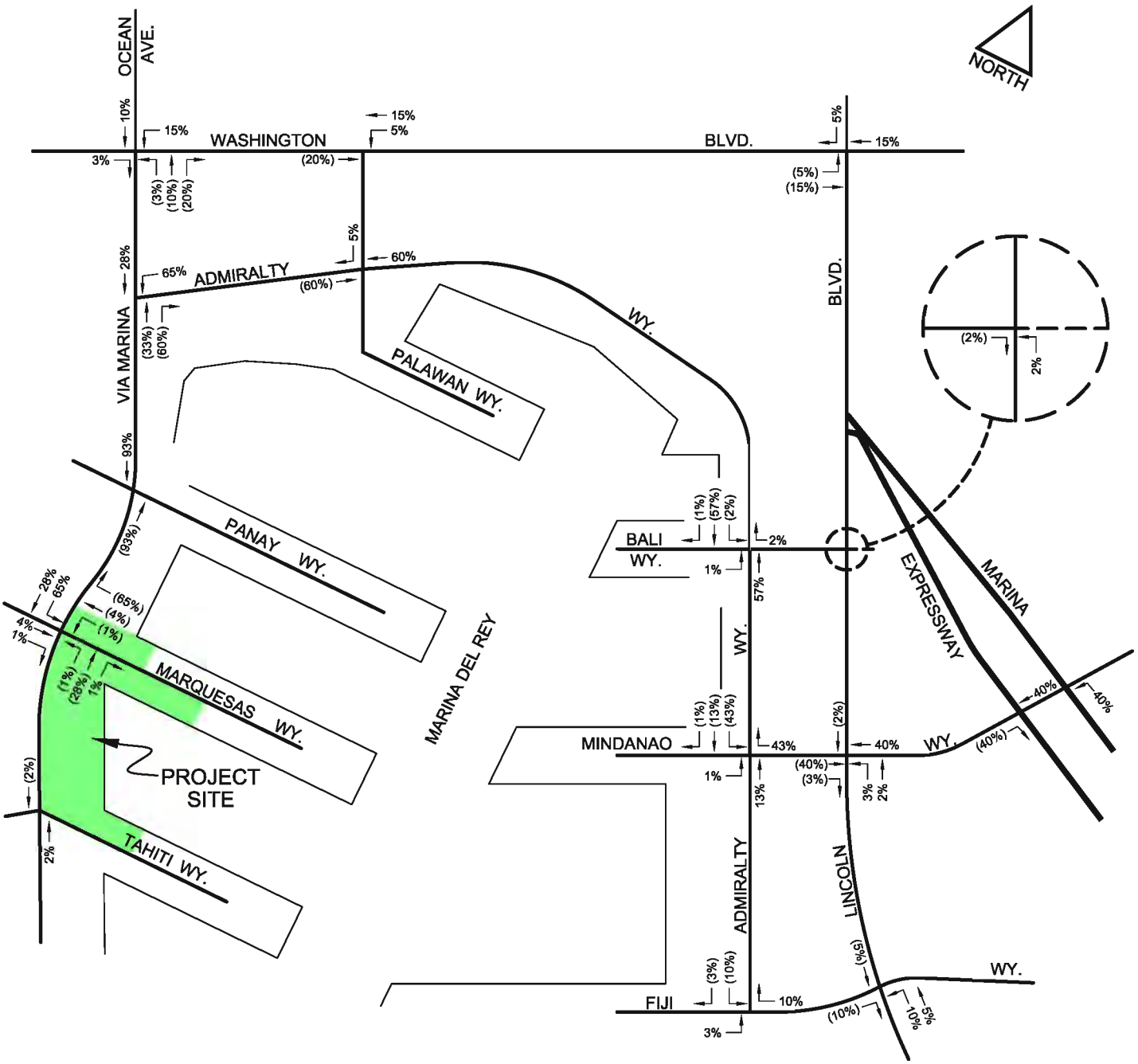


FIGURE 4(a)

2/15/2007

FN: MARINA DEL REY LEGACY\REPORT(2-2007)\PROJ-DIST(10R)

PROJECT TRIP DISTRIBUTION PERCENTAGES
(PARCEL 10R)

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

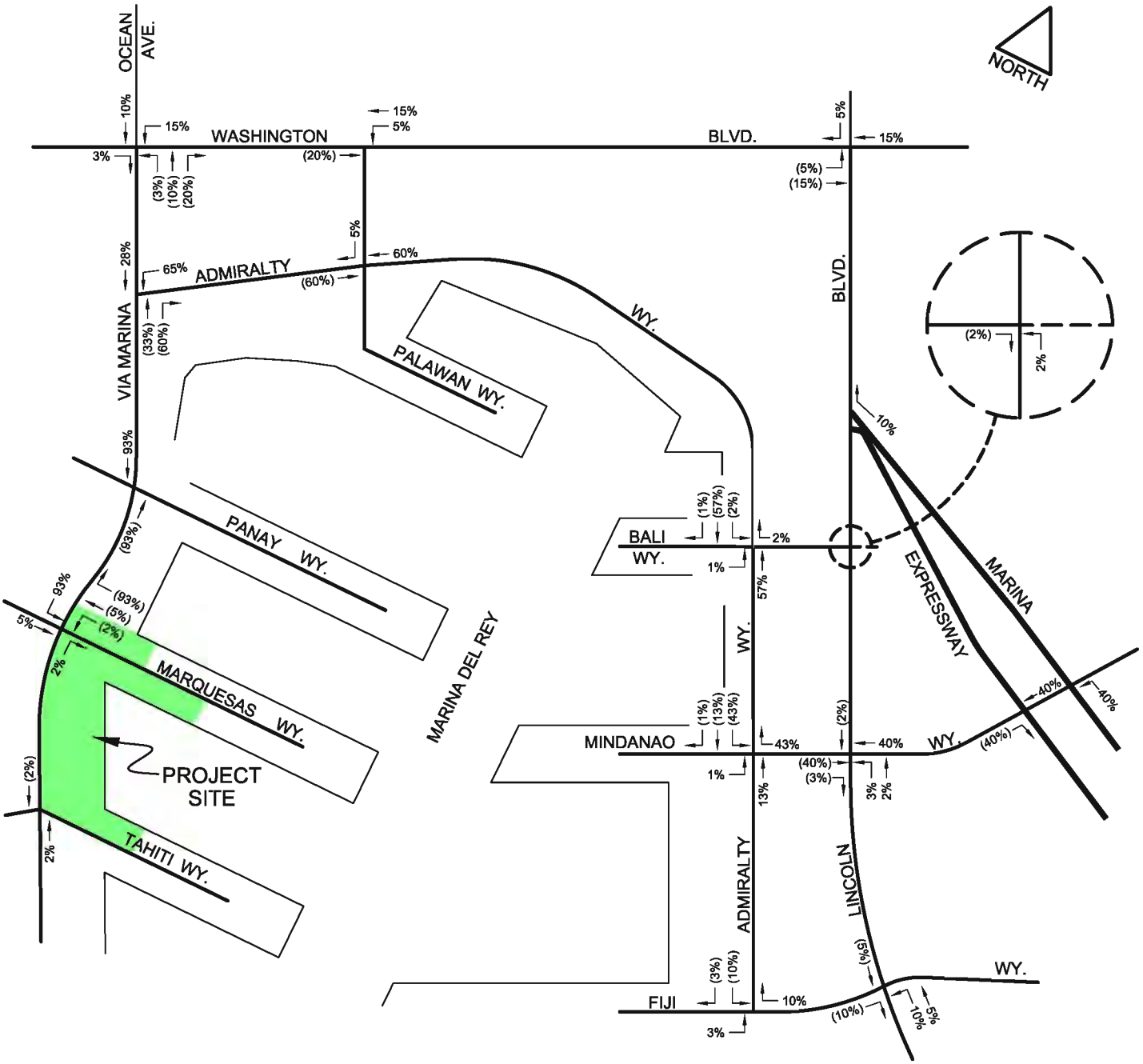


FIGURE 4(b)

2/15/2007

FN: MARINA DEL REY LEGACY\REPORT(2-2007)\PROJ-DIST(FF)

PROJECT TRIP DISTRIBUTION PERCENTAGES (PARCEL FF)

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

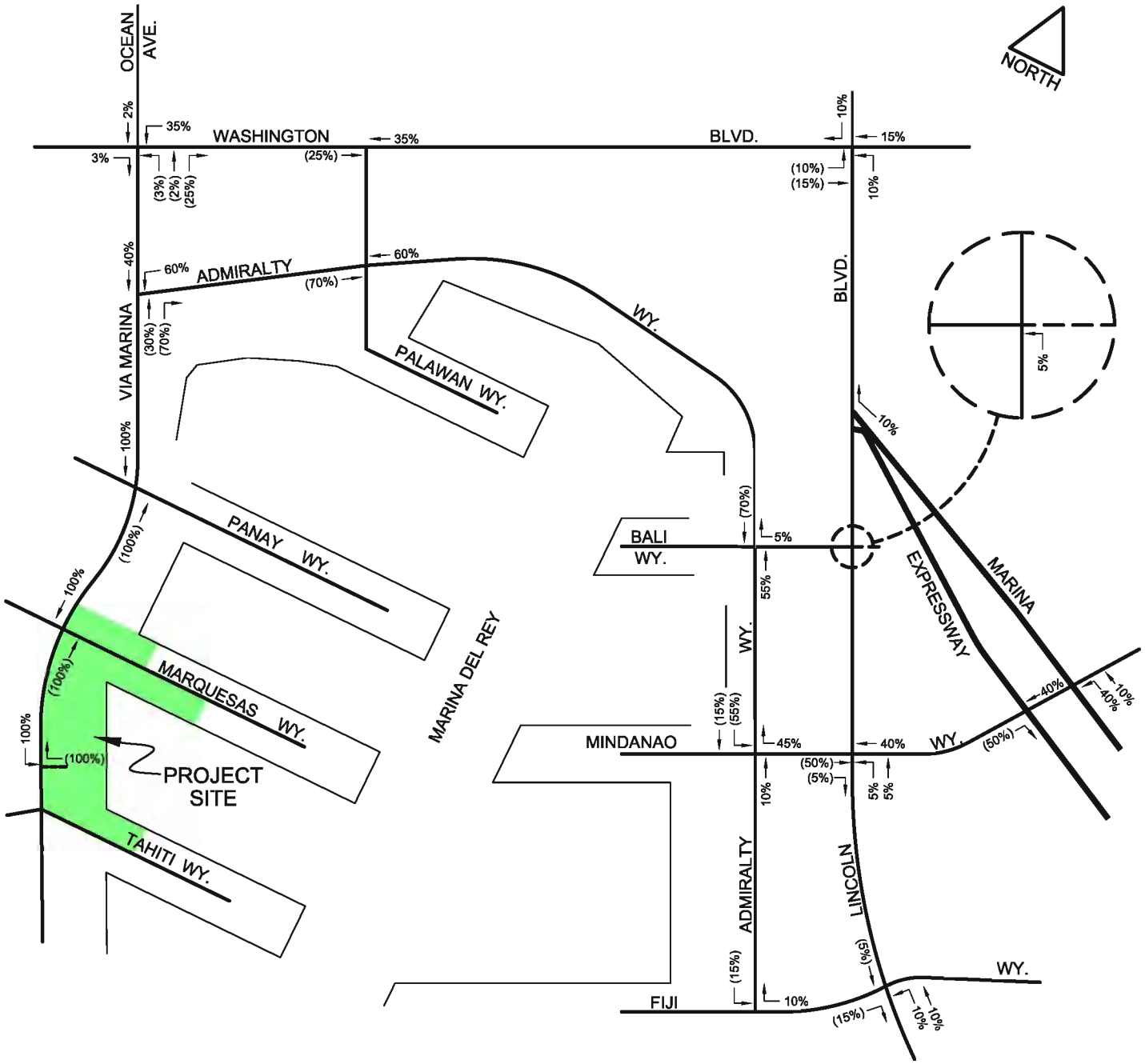


FIGURE 4(c)

2/15/2007

FN: MARINA DEL REY LEGACY\REPORT(2-2007)\PROJ-DIST-(9U)

PROJECT TRIP DISTRIBUTION PERCENTAGES
(PARCEL 9U)

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

ATTACHMENT E

December 2007 Traffic Study Related Projects Section

Related Projects

In addition to the use of the 0.6 percent annual growth rate, listings of potential related projects located in the study area were obtained from the Los Angeles County Regional Planning Department, the City of Los Angeles Department of Transportation, and from the Cities of Santa Monica and Culver City. From a review of these lists, it was determined that traffic from 41 projects near the study site could produce additional traffic at the 17 study intersections. The locations of the related projects are shown in Figure 6.

A description and an estimate of the daily and peak hour traffic volumes expected to be generated by these related projects are summarized in Table 8. The trip-making estimates for the related projects are based on Coastal Transportation Corridor Specific Plan (CTCSP) PM trip rates, supplemented by data obtained from the ITE rates and equations, or from previously prepared traffic studies or other environmental documentation. Related project traffic was assigned to the area roadway system using a procedure identical to the methodology described previously for determining the proposed project's traffic assignments. Note that project number 17, Playa Vista Phase 1, is currently approximately 30 percent completed and occupied. Thus, a trip reduction of 30 percent was assumed for this related project when the related project trips were assigned to the network.

This cumulative impact analysis is inherently conservative in that it assumes that each of the related projects will be built out at full density and without any additional mitigation requirements. In fact, it is likely that at least some of these projects will not be built, others will be built at a lesser density than proposed, and most will be required to implement mitigation measures as part of the approval process.

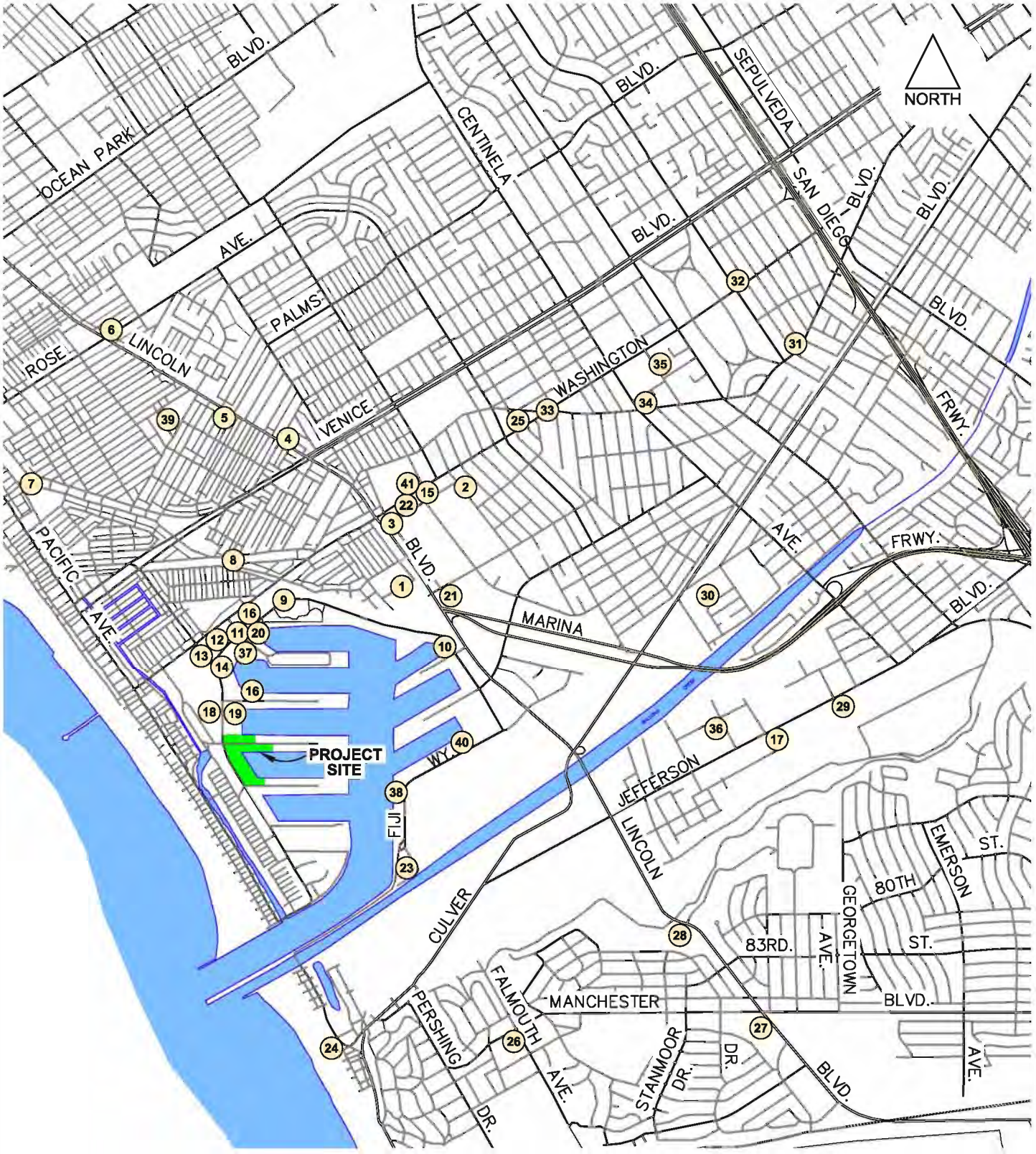


FIGURE 6

5/22/2007

FN: MARINA DEL REY LEGACY\REPORT(5-2007)\RELPROJS

RELATED PROJECTS LOCATION MAP

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

Table 8
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
1.	NWC Princeton Dr./Carter Av. [1]	298	du	Apartment	860	(70)	103	47	(79)
		(24,000)	*sf*	*Light Manufacturing (to be removed)*					
		(21,600)	*sf*	*Office (to be removed)*					
		(40,000)	*sf*	*Auto Service/Repair (to be removed)*					
2.	4055, 4063 & 4071 S. Redwood Av.	140	du	Condominium	820	11	51	66	32
3.	4004 S. Lincoln Bl.	98	du	Condominium	574	7	36	46	23
		6,020	sf	Retail	267	4	3	13	17
					841	**11**	**39**	**59**	**40**
4.	2005 Lincoln Bl.	6	vfp	Service Station w/ Convenience Store	977	30	30	11	11
5.	1430 Lincoln Bl.	188,600	sf	Retail	10,257	140	89	501	543
		280	du	Apartment	1,882	29	114	127	69
					12,139	**169**	**203**	**636**	**613**
6.	115 Lincoln Bl.	8,800	sf	Shopping Center (addition)	378	5	4	61	67
7.	901 Abbott Kinney Bl. [2]	57	rm	Hotel	757	19	11	33	24
		1,200	sf	Retail					
		4,300	sf	Restaurant					
8.	2100 Abbot Kinney Bl.	15,180	sf	Office	167	21	3	7	36
9.	4333 Admiralty Wy.	600	du	Condominium	3,516	45	219	133	63

Table 8 (continued)
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
10.	4363 Lincoln Bl. [3]	158	du	Condominium	386	0	47	53	18
		3,178	sf	Specialty Retail					
		(48,000)	*sf*	*Car Rental Facility (to be removed)*					
11.	NWC Admiralty Wy./Palawan Wy. [4]	179	du	Apartment	650	11	51	34	24
	(Parcels 140)	*(64)*	*du*	*Apartment (to be removed)*	*(233)*	*(4)*	*(18)*	*(12)*	*(9)*
					417	**7**	**33**	**22**	**15**
12.	514-586 Washington Bl. [5]	6,236	sf	Retail	18	1	0	1	1
	bet. Via Marina/Palawan Wy.	*(5,750)*	*sf*	*Retail (to be removed)*					
	(Parcel 97)								
13.	S/s Washington Bl.	72	du	Apartment	1,360	23	42	77	58
	bet. Via Marina/Via Dolce	368	st	Restaurant					
	(Parcel 95) [6]	16,352	sf	Retail					
		7,888	sf	Office					
		(9,180)	*sf*	*Office (to be removed)*					
		(165)	*st*	*Restaurant (to be removed)*					
14.	S/s Admiralty Wy., E/s Via Marina	147	rm	Hotel	1,201	50	32	23	29
	(Parcel IR)								
15.	13340 Washington Bl.	41	du	Condominium	240	3	15	14	7
16.	E/o Palawan Wy., betw. Washington Bl./	114	du	Congregate Care Retirement Facility	387	5	5	20	21
	Admiralty Wy. (Parcel OT)	5,000	sf	Retail					
	N/s Panay Wy., E/o Via Marina	6,000	sf	Marine Commercial Office	(109)	4	(2)	(10)	(1)
	(Parcel 21) [7]	*(6,000)*	*sf*	*Health Club (to be removed)*					
					278	**9**	**3**	**10**	**20**

Table 8 (continued)
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
17.	South of Jefferson Bl., E/o Lincoln Bl.	3,206,950	sf	Office	38,733	2,455	1,540	1,777	3,217
	(Playa Vista Phase I)	3,246	du	Condominium					
		35,000	sf	Retail					
		120,000	sf	Community Serving Uses					
18.	W/s Via Marina (Parcel 100 and 101) [8]	544	du	Apartment	2,154	34	156	120	57
		(202)	*du*	*Apartment (to be removed)*	*(1,354)*	*(13)*	*(57)*	*(45)*	*(21)*
					800	**21**	**99**	**75**	**36**
19.	E/s Via Marina	940	du	Apartment	1,785	31	140	106	46
	bet. Panay Wy./Marquesas Wy. [9]	82	du	Senior Apartment					
	(Parcels 12, 15)	4,000	sf	Retail					
		6,000	sf	Commercial					
		439	slip	Boat					
		(408)	*du*	*Apartment (to be removed)*					
		(10,000)	*sf*	*Retail (to be removed)*					
		(717)	*slip*	*Boat (to be removed)*					
20.	S/s Admiralty Wy., E/s Palawan Wy.	351	du	Apartment	2,359	36	143	78	36
	(Parcel 33/NR)	24,300	sf	Retail	1,077	17	12	46	62
		266	seat	Restaurant (10,000 sf)	761	4	4	45	22
		(1,067)	*seat*	*Restaurant (to be removed)*	*(3,052)*	*(17)*	*(15)*	*(179)*	*(88)*
					1,145	**40**	**144**	**(10)**	**32**
21.	E/o Lincoln Bl. Betw. SR90 & Maxella Av. [10]			Villa Marina Mixed-Use Project	903	11	84	73	10
		244	du	Condominium					
		9,000	sf	Shopping Center					
		(21,038)	*sf*	*Shopping Center (to be removed)*					

Table 8 (continued)
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
22.	13464 W. Washington Bl. [11]	81	du	Condominium	1,401	11	32	83	75
		37,041	sf	Retail					
		(22)	*rm*	*Motel (to be removed)*					
		(7,525)	*sf*	*Retail (to be removed)*					
		(8,500)	*sf*	*Industrial (to be removed)*					
23.	Southern terminus of Fiji Wy. (Parcel 64) [12]	478	du	Multi-family Residential	1,106	17	76	58	30
		500	sf	Restaurant					
		34	slip	Boat					
		(224)	*du*	*Apartment (to be removed)*					
24.	NWC Pacific Av./Culver Bl. [13]	35	du	Townhome	548	16	24	34	22
		2,000	sf	Retail					
		2,000	sf	Restaurant					
25.	12801-23 Washington Bl.	12	du	Live/Work	81	1	5	5	2
		12	du	Apartment	81	1	5	5	2
					162	**2**	**10**	**10**	**4**
26.	8030-8040 Manchester Av.	204	du	Apartment	1,371	21	83	93	50
27.	8601 Lincoln Bl. [14]	547	du	Apartment	905	(128)	136	124	(10)
		17,000	sf	Shopping Center					
		4,000	sf	Retail					
		5,000	sf	High-Turnover Restaurant					
		3,000	sf	Quality Restaurant					
		(500)	*rm*	*Hotel (to be removed)*					
		(10,420)	*sf*	*Retail (to be removed)*					
		(10,590)	*sf*	*Office (to be removed)*					
		(4,800)	*sf*	*High-Turnover Restaurant (to be removed)*					

Table 8 (continued)
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
28.	7400 80th St. [15]	120	du	Single-Family Residential	1,220	25	70	82	46
29.	South of the intersection of Jefferson Bl./ Westlawn Av. [16]	175,000	sf	Office	24,220	577	1,049	1,275	1,027
		2,600	du	Apartment					
		150,000	sf	Retail					
		40,000	sf	Community Serving Uses					
30.	12700 Braddock Dr.	134,557	sf	Warehouse	667	50	11	54	161
		1,357	sf	Office	15	2	0	1	3
		(58,323)	*sf*	*University of CA laundry building (to be removed)*	*(223)*	*(33)*	*(10)*	*(17)*	*(30)*
					459	**19**	**1**	**38**	**134**
31.	11501-11509 Washington Bl.	2	du	Apartment	13	0	1	1	0
		950	sf	Office	37	4	1	14	66
		2,359	sf	Retail	105	2	1	3	3
					155	**6**	**3**	**18**	**69**
32.	11611 Washington Pl.	20	du	Senior Day Care Facility (9,970 sf)	43	1	0	2	1
		(9,970)	*sf*	*Furniture manufacturing/warehouse (to be removed)*	*(38)*	*(5)*	*(2)*	*(3)*	*(4)*
					5	**(4)**	**(2)**	**(1)**	**(3)**
33.	4025 Wade St.	4	du	Condominium	23	0	2	2	1
34.	12337-12449 Washington Bl.			Phase A					
		12,070	sf	Commercial	535	8	6	15	18
		60	du	Condominium	352	4	22	21	10
				Phase B					
		3,890	sf	Commercial	172	3	2	5	6
		18	du	Condominium	105	1	7	6	3
					1,164	**16**	**37**	**47**	**37**

Table 8 (continued)
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
35.	4061 Grand View Bl.	70	du	Assisted Living Facility	151	2	2	7	5
36.	5401 Beethoven St.	420	st	Private School (K-8)	N/A	208	170	120	136
37.	SWC Admiralty Wy. & Palawan Wy.	111	rm	Hotel	907	38	24	18	21
	(Parcel 27)	*(42)*	*rm*	*Hotel (to be removed)*	(343)	(15)	(9)	(7)	(8)
					564	**23**	**15**	**11**	**13**
38.	West of Fiji Wy. Near Terminus -	132	rm	Hotel	2,375	41	57	114	95
	Fisherman's Village [17]	1,230	seat	Restaurant					
	(Parcels 55/56/W)	24,250	sf	Retail					
		5,200	sf	Office					
		26	slip	Boat					
		(12,984)	*sf*	*Retail/Commercial (to be removed)*					
		(16,149)	*sf*	*Restaurant (to be removed)*					
		(17)	*slip*	*Boat (to be removed)*					
39.	841 California Ave.	420	st	High School	718	119	53	28	31
40.	N/s Fiji Wy., W/o Admiralty Wy.	345	Vessel	Dry Stack Storage Facility	995	15	28	17	30
	(Parcel 52/GG)	30	Vessel	Mast Up Storage Space	86	1	3	1	3
		1,500	sf	Sheriff Boatwright Facility	-	-	-	-	-
					1,081	**16**	**31**	**18**	**33**

Table 8 (continued)
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit	Description	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
41.	13365 Washington Boulevard	5,000	sf	Retail	222	4	2	6	8
		19	du	Condominium	111	1	7	7	3
					333	**5**	**9**	**13**	**11**

Sources:

[1] Traffic Analysis for a Proposed 298-unit Residential Development on Princeton Drive in the Oxford Triangle Neighborhood of the City of Los Angeles, Crain & Associates, Revised January 2004.

[2] Los Angeles Department of Transportation Traffic Study Memorandum of Understanding (MOU), The Ambrose Hotel, Crain & Associates, April 17, 2006.

[3] Los Angeles Department of Transportation Scoping for Traffic Study for Marina del Rey Mixed-Use Platt Project, Crain & Associates, May 22, 2006.

[4] Traffic Analysis for a Proposed 179-unit Residential Development at 4160 Admiralty Way (Parcels 140) in Marina del Rey, Crain & Associates, September 2003.

[5] Traffic Analysis for 6,236 sf Retail Development at 514-586 Washington Boulevard, between Via Marina and Palawan Way, in Marina del Rey, Crain & Associates, November 2002.

[6] Preliminary Trip Generation Estimates for Parcel 95 Project, Hirsch Green Traffic Consultant, April 2007.

[7] Traffic Analysis for the Proposed 114-Unit Congregate-Care Retirement Facility and 5,000 sf Retail on Parcel OT and the Holiday Harbor Courts Project on Parcel 21 in Marina del Rey, Crain & Associates, January 2007.

[8] Traffic Analysis for a Proposed 544-unit Residential Development on Parcels 100 and 101 in Marina del Rey, Crain & Associates, August 2005.

[9] Source: County of Los Angeles, Trip Generation By Development Project Summary Table.

[10] Final EIR for The Villa Marina Mixed-Use Project, PCR Services Corporation, March 2005.

[11] Los Angeles Department of Transportation Scoping for Traffic Study for Washington & Glencoe Mixed-use Project, Crain & Associates, October 10, 2006.

[12] Traffic Analysis for a Proposed 478-unit Residential Development on Parcel 64 in Marina del Rey, Crain & Associates, January 2007.

[13] Traffic Analysis for Proposed Mixed-Use Development at Pacific Avenue and Culver Boulevard, Playa del Rey, City of Los Angeles, Crain & Associates, November 2004.

[14] Traffic Impact Study for Residential Mixed-Use Project at Lincoln Boulevard/Manchester Avenue (8601 Lincoln Boulevard), City of Los Angeles, Crain & Associates, November 2002.

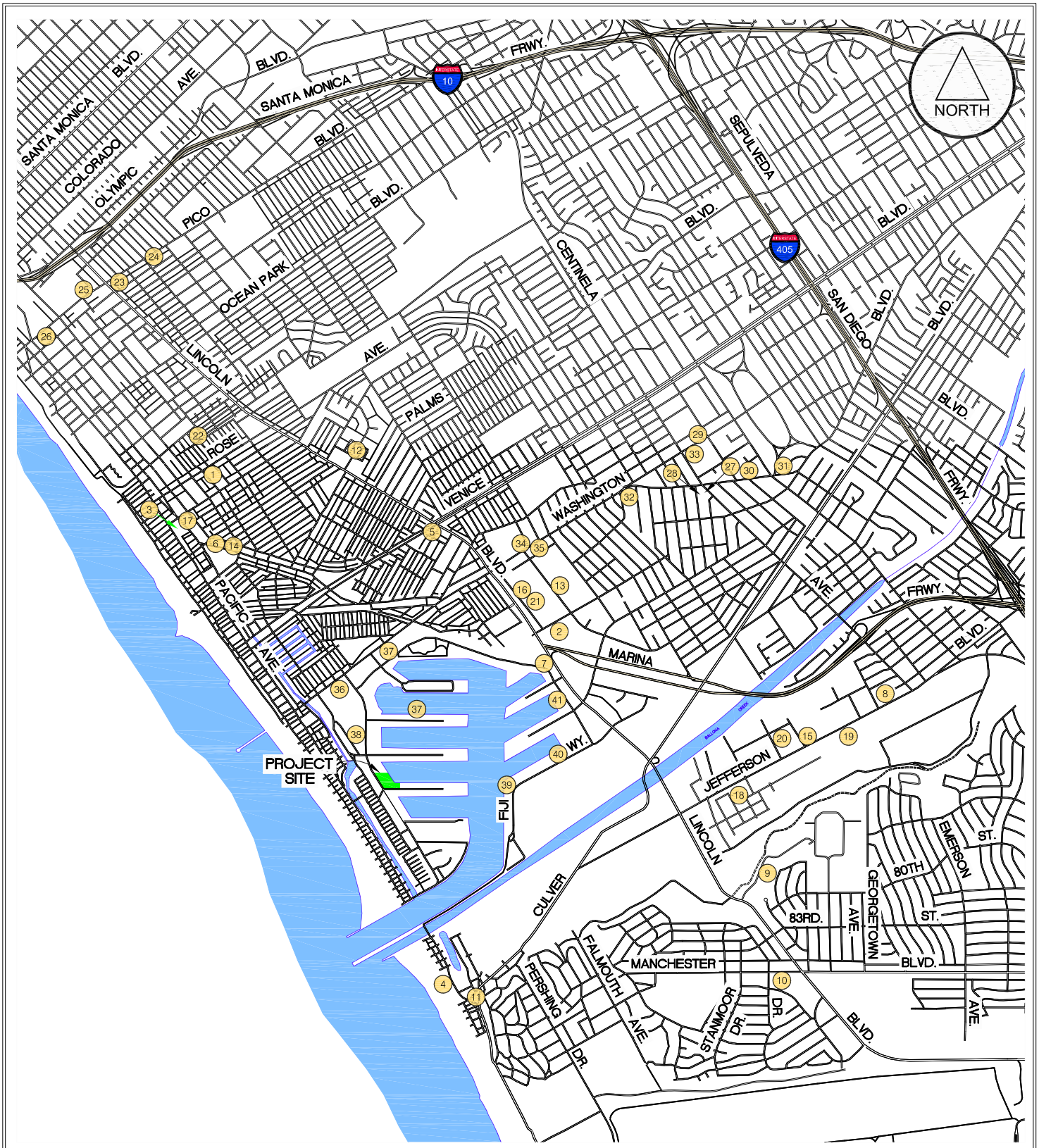
[15] Traffic Analysis for 120-unit Single-Family Residential Development Located on 80th Street in the City of Los Angeles, Crain & Associates, January 1998.

[16] Traffic Analysis for The Village at Playa Vista Project, Kaku Associates, Inc. and Raju Associates, Inc., July 2003.

[17] Traffic Study for the Fisherman's Village Retail and Commercial Development Project, Hirsch Green Traffic Consultant, March 2007.

ATTACHMENT F

Current Related Projects Location Map



ATTACHMENT F

12/18/13

FN: MARINA DEL REY PARCEL 9U\20131218\RELPROJS

CURRENT RELATED PROJECTS LOCATION MAP

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

ATTACHMENT G

Current Related Projects Trip Generation Table

Attachment G
Current Related Project Locations, Descriptions, and Trip Generations

	Address	Size		Project Description	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
	CITY OF LOS ANGELES										
1.	512 E Rose Avenue[1]			**The Pioneer Bakery Building**	**1,134**	**9**	**43**	**52**	**59**	**29**	**88**
		70	du	Condominium							
		6,290	sf	Retail							
		4,985	sf	Other							
2.	13488 W Maxella Avenue	9,000	sf	Retail[2]	*725*	*11*	*8*	*19*	*29*	*37*	*66*
		244	du	Apartment[3]	*1,623*	*25*	*99*	*124*	*111*	*60*	*171*
					2,348	**36**	**107**	**143**	**140**	**97**	**237**
3.	100 E Sunset Avenue	225	du	Condominium[1]	*1,319*	*17*	*82*	*99*	*106*	*52*	*158*
		2,000	sf	Retail[2]	*89*	*2*	*1*	*3*	*4*	*6*	*10*
		3,000	sf	Other[4]	*381*	*18*	*17*	*35*	*16*	*16*	*32*
		1,000	sf	Retail[2]	*716*	*5*	*4*	*9*	*12*	*15*	*27*
		7,500	sf	Other[4]	*247*	*0*	*0*	*0*	*14*	*13*	*27*
					2,752	**42**	**104**	**146**	**152**	**102**	**254**
4.	6719 Pacific Avenue	35	du	Condominium[1]	*205*	*3*	*12*	*15*	*17*	*8*	*25*
		2,000	sf	Retail[2]	*89*	*1*	*1*	*2*	*4*	*6*	*10*
		2,000	sf	Other[4]	*254*	*12*	*11*	*23*	*11*	*10*	*21*
					548	**16**	**24**	**40**	**32**	**24**	**56**
5.	1020 W Venice Boulevard[5]	3,895	sf	High-Turnover Restaurant	**396**	**18**	**15**	**33**	**20**	**13**	**33**
6.	901 Abbot Kinney Boulevard			**Ray Hotel[6]**	**757**	**19**	**11**	**30**	**33**	**24**	**57**
		57	rm	Hotel							
		4,300	sf	Quality Restaurant							
		1,200	sf	Specialty Retail							
7.	4363 Lincoln Boulevard	158	du	Condominium[1]	*926*	*12*	*58*	*70*	*74*	*37*	*111*
		3,178	sf	Retail[2]	*136*	*2*	*1*	*3*	*7*	*9*	*16*
					1,062	**14**	**59**	**73**	**81**	**46**	**127**
8.	5550 Grosvenor Boulevard	215	du	Condominium[1]	**1,260**	**16**	**79**	**95**	**75**	**37**	**112**
9.	1 LMU Drive[7]	932	stu	School	**2,540**	**146**	**30**	**176**	**112**	**111**	**223**
10.	7280 W Manchester Boulevard[8]	260	du	Apartments	**(156)**	**(4)**	**40**	**36**	**4**	**(36)**	**(32)**
11.	138 E Culver Boulevard[5]	72	du	Apartments	*479*	*7*	*30*	*37*	*33*	*17*	*50*
		7,000	sf	Retail	*251*	*4*	*4*	*8*	*12*	*16*	*28*
		1,500	sf	Other	*138*	*5*	*7*	*12*	*5*	*6*	*11*
		6,000	sf	Retail	*116*	*2*	*1*	*3*	*13*	*13*	*26*
					984	**18**	**42**	**60**	**63**	**52**	**115**
12.	1054 S Frederick Street[5]	99	du	Apartments	**665**	**10**	**40**	**50**	**45**	**24**	**69**
13.	4140 S Glencoe Avenue[5]	67	du	Apartments	*446*	*7*	*27*	*34*	*31*	*16*	*47*
		3,211	sf	Office	*35*	*4*	*1*	*5*	*2*	*7*	*9*
					481	**11**	**28**	**39**	**33**	**23**	**56**
14.	1027 S Abbot Kinney Boulevard[5]	92	rm	Hotel	**705**	**17**	**10**	**27**	**27**	**16**	**43**
		3,000	sf	Retail							
		2,072	sf	Restaurant							

Attachment G
Current Related Project Locations, Descriptions, and Trip Generations

	Address	Size		Project Description	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
15.	5456 W McConnell Avenue[5]	500	stu	School	**980**	**216**	**198**	**414**	**79**	**66**	**145**
16.	4090 S Del Rey Avenue[5]	51	du	Apartments	**339**	**5**	**21**	**26**	**23**	**13**	**36**
17.	222 E Sunset Avenue[5]			**Mixed-Use (Residential & Retail)**	**369**	**7**	**17**	**24**	**35**	**28**	**63**
		45	du	Apartments							
		7,500	sf	Retail							
18.	S/o Jefferson Blvd, E/o Lincoln Blvd			**Playa Vista - Phase 1**	**20,386**	**1,824**	**745**	**2,569**	**1,320**	**1,664**	**2,984**
		1,922,050	sf	Office							
		3,246	du	Condominium							
		25,000	sf	Retail							
		1,129,900	sf	Production & Stage Support							
		65,000	sf	Community Service Uses							
19.	S/o Jefferson Blvd/Westlawn Ave			**The Village at Playa Vista - Phase 2**	**24,220**	**577**	**1,049**	**1,626**	**1,275**	**1,027**	**2,302**
		175,000	sf	Office							
		2,600	du	Apartments							
		150,000	sf	Retail							
		40,000	sf	Community Serving Uses							
20.	5400 S Beethoven Street	32	stu	Private School K-8[10]	**88**	**16**	**13**	**29**	**3**	**3**	**6**
21.	4100 S Del Rey Avenue[5]	77	du	Apartments	**512**	**8**	**31**	**39**	**35**	**19**	**54**
				CITY OF SANTA MONICA[11]							
22.	3214 Highland Avenue	6	du	Condominium	**35**	**1**	**2**	**3**	**2**	**1**	**3**
23.	1907 Lincoln Boulevard	12,000	sf	Pharmacy/Drugstore	**1,081**	**23**	**12**	**35**	**49**	**52**	**101**
24.	1112-1122 Pico Boulevard	32	du	Condominium	**186**	**2**	**12**	**14**	**11**	**6**	**17**
25.	601 Pico Boulevard	84,000	sf	**Santa Monica High School - Science & Technology Bldg**[12]	**--**	**--**	**--**	**--**	**--**	**--**	**--**
26.	234 Pico Boulevard	91	du	Condominium	*529*	*7*	*33*	*40*	*31*	*16*	*47*
		20,100	sf	Specialty Retail	*891*	*14*	*10*	*24*	*24*	*30*	*54*
		(24)	*ln*	*Bowling Alley (to be removed)*	*(800)*	*(45)*	*(30)*	*(75)*	*(22)*	*(14)*	*(36)*
					620	**(24)**	**13**	**(11)**	**33**	**32**	**65**
				CITY OF CULVER CITY							
27.	12400 Washington Boulevard	1,500	sf	Quality Restaurant[13]	**135**	**1**	**0**	**1**	**7**	**4**	**11**
28.	12404 Washington Boulevard	1,500	sf	Quality Restaurant[14]	**135**	**1**	**0**	**1**	**7**	**4**	**11**
29.	12201 Washington Place	100	stu	Private School[15]	**248**	**49**	**32**	**81**	**7**	**10**	**17**
30.	12095-12101 Washington Boulevard	200	stu	Private School[15]	*496*	*99*	*63*	*162*	*15*	*19*	*34*
		(20,095)	*sf*	*General Office (to be removed)*[16]	*(222)*	*(27)*	*(4)*	*(31)*	*(5)*	*(25)*	*(30)*
					274	**72**	**59**	**131**	**10**	**(6)**	**4**
31.	11957 Washington Boulevard	30	du	Residentail[17]	*174*	*2*	*11*	*13*	*11*	*5*	*16*
		8,682	sf	Retail[18]	*385*	*6*	*4*	*10*	*11*	*13*	*24*
					559	**8**	**15**	**23**	**22**	**18**	**40**
32.	12712-12718 Washington Boulevard	5	du	Residentail[17]	*29*	*0*	*2*	*2*	*2*	*1*	*3*
		3,414	sf	Retail[18]	*151*	*2*	*2*	*4*	*4*	*5*	*9*
					180	**2**	**4**	**6**	**6**	**6**	**12**

Attachment G
Current Related Project Locations, Descriptions, and Trip Generations

	Address	Size		Project Description	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
33.	12350 Washington Place	2,000	sf	Fast-Food Restaurant with Drive-Through Window[19]	**992**	**0**	**0**	**0**	**34**	**31**	**65**
34.	13365 Washington Boulevard	19	du	Condominiums[17]	*110*	*1*	*7*	*8*	*7*	*3*	*10*
		4,183	sf	Retail[18]	*185*	*3*	*2*	*5*	*5*	*6*	*11*
					295	**4**	**9**	**13**	**12**	**9**	**21**
35.	13340 Washington Boulevard	41	du	Condominiums[17]	**238**	**3**	**15**	**18**	**14**	**7**	**21**
				COUNTY OF LOS ANGELES[20]							
36.	S/s Washington Boulevard			**Marina del Rey Parcels 95/LLS**							
	btw. Via Marina and Via Dolce	16,719	sf	Retail[21]	*741*	*12*	*8*	*20*	*33*	*41*	*74*
		(9,180)	*sf*	*Office (to be removed)*[22]	*(101)*	*(12)*	*(2)*	*(14)*	*(3)*	*(17)*	*(20)*
					640	**0**	**6**	**6**	**30**	**24**	**54**
37.	E/o Palawan Way, btw. Washington			**Marina del Rey Parcels OT/21**[23]	**278**	**9**	**3**	**12**	**10**	**20**	**30**
	Boulevard and Admiralty Way (OT);	114	du	Congregate Care Retirement Facility							
	N/s Panay Way, E/o Via Marina (21)	3,500	sf	Retail							
		6,000	sf	Marine Commercial Office							
		(6,000)	*sf*	*Health Club (to be removed)*							
38.	W/s Via Marina, btw. Panay Way			**Marina del Rey Parcels 100/101**[24]	**800**	**21**	**99**	**120**	**75**	**36**	**111**
	and Marquesas Way	544	du	Apartment							
		(202)	*du*	*Apartment (to be removed)*							
39.	W/o Fiji Way, near Terminus -			**Marina del Rey Parcels 55/56/W**[25]	**2,375**	**41**	**57**	**98**	**114**	**95**	**209**
	Fisherman's Village	132	rm	Hotel							
		1,230	se	Restaurant							
		24,250	sf	Retail							
		5,200	sf	Office							
		26	sl	Boat							
		(12,984)	*sf*	*Retail/Commercial (to be removed)*							
		(16,149)	*sf*	*Restaurant (to be removed)*							
		(17)	*slip*	*Boat (to be removed)*							
40.	N/s Fiji Way, W/o Admiralty Way			**Marina del Rey Parcel 52**							
		345	ves	Dry Stack Storage Facility[26]	*995*	*15*	*28*	*43*	*17*	*30*	*47*
		30	ves	Mast Up Storage Facility[26]	*86*	*1*	*3*	*4*	*1*	*3*	*4*
		5,300	sf	Sheriff Boatwright Facility	*0*	*0*	*0*	*0*	*0*	*0*	*0*
					1,081	**16**	**31**	**47**	**18**	**33**	**51**
41.	W/s Admiralty Way, btw. Bali Way			**Marina del Rey Parcel 44**							
	and Mindanao Way	13,625	sf	Specialty Market[27]	*1,393*	*29*	*17*	*46*	*66*	*63*	*129*
		3,521	sf	Offices[22]	*39*	*4*	*1*	*5*	*1*	*7*	*8*
		41,680	sf	Retail[21]	*1,847*	*30*	*20*	*50*	*81*	*104*	*185*
		9,978	sf	Restaurant[28]	*898*	*7*	*1*	*8*	*50*	*25*	*75*
		573	sf	Boat Repair[29]	*0*	*0*	*0*	*0*	*0*	*0*	*0*
					4,177	**70**	**39**	**109**	**198**	**199**	**397**

Notes:

du = Dwelling Units; sf = Square Feet; rm = Rooms; stu = Students; ln = Bowling Lanes; se = Seats; sl = Slips; ves = Vessels.

Attachment G
Current Related Project Locations, Descriptions, and Trip Generations

Address	Size	Project Description	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total

Sources:

[1] Trip generation from LADOT database, December 2013. Directional splits not provided; assumed ITE Trip Generation Manual (9th Edition, 2012) Residential Condominium/Townhouse [Land Use Code 230] directional splits.

[2] Trip generation from LADOT database, December 2013. Directional splits not provided; assumed AM directional splits from the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates (April 2002) and PM directional splits from the ITE Trip Generation Manual (9th Edition, 2012) for the Specialty Retail land use [Land Use Code 826].

[3] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for Apartment [Land Use Code 220] land use. PM peak-hour rate assumed from the Coastal Transportation Corridor Specific Plan.

[4] Trip generation from LADOT database, December 2013. Exact land use and directional splits not provided; assumed 50%/50% directional splits.

[5] Trip generation from LADOT database, December 2013.

[6] Traffic Impact Study for the Proposed Mixed-Use Project at 901 Abbot Kinney Boulevard (Crain & Associates, September 2006).

[7] Transportation Impact Analysis for the Loyola Marymount University Master Plan Project (Fehr & Peers, December 2009).

[8] Traffic Impact Study for the Project at Lincoln Boulevard/Manchester Avenue (Crain & Associates, January 2009).

[9] Trip generation from LADOT database, December 2013. Assumed 50% complete and occupied, based on the current construction and occupation of 3,157 residential units, approximately 20,000 sf of retail, 763,080 sf of office and production/stage uses, and 36,000 square feet of community serving uses (fire station, library, etc.).

[10] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for Private School K-8 [Land Use Code 534] land use. Daily and PM peak-hour trip rates and directional split determined by applying daily-to-AM peak hour and PM peak hour-to-AM peak hour trip rate factors for Private School K-12 [Land Use Code 536] to the Private School K-8 AM peak-hour trip rate.

[11] No trip generation data provided. Trip rates/equations and directional splits assumed from the ITE Trip Generation Manual (9th Edition, 2012) using appropriate land uses.

[12] Although Santa Monica High School is replacing its Science and Technology Building, student enrollment will not increase and there will be no increase in the volume of traffic accessing the site.

[13] Project size from City of Culver City Official Notification, February 28, 2013. Trip rates and directional splits assumed from the ITE Trip Generation Manual (9th Edition, 2012) for Quality Restaurant [Land Use Code 931] land use.

[14] Project size from City of Culver City Official Notification, October 23, 2012. Trip rates and directional splits assumed from the ITE Trip Generation Manual (9th Edition, 2012) for Quality Restaurant [Land Use Code 931] land use.

[15] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for Private School K-12 [Land Use Code 536] land use.

[16] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for General Office Building [Land Use Code 710] land use.

[17] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for Residential Condominium/Townhouse [Land Use Code 230] land use.

[18] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for Specialty Retail [Land Use Code 826] land use. AM peak-hour trip rate and directional splits assumed from the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates (April 2002).

[19] Generation based on ITE Trip Generation Manual (9th Edition, 2012) for Fast-Food Restaurant with Drive-Through Window [Land Use Code 934] land use. AM peak-hour trips assumed to be insignificant given that the yogurt shop will open daily at lunch.

[20] For County of Los Angeles projects located within Marina del Rey, PM peak-hour trip generation rates from the Marina del Rey Land Use Plan (February 8, 2012) were assumed. PM directional splits assumed from the ITE Trip Generation Manual (9th Edition, 2012).

[21] Daily generation based on ITE Trip Generation Manual (9th Edition, 2012) for Specialty Retail [Land Use Code 826] land use. AM peak-hour trip rate and directional splits assumed from the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates (April 2002).

[22] Daily and AM peak-hour generation based on ITE Trip Generation Manual (9th Edition, 2012) for General Office Building [Land Use Code 710] land use.

[23] Traffic Analysis for the Proposed 114-Unit Congregate-Care Retirement Facility and 3,500 sf Retail on Parcel OT and the Holiday Harbor Courts Project on Parcel 21 in Marina del Rey (Crain & Associates, March 5, 2010).

[24] Traffic Analysis for a Proposed 544-unit Residential Development on Parcels 100 and 101 in Marina del Rey (Crain & Associates, August 2005).

[25] Traffic Study for the Fisherman's Village Retail and Commercial Development Project (Hirsch Green Traffic Consultants, March 2007).

[26] AM and PM peak-hour trip generations based on the traffic study used to generate trip rates for the Marina del Rey Land Use Plan: Marina del Rey Traffic Study Final Report (DKS Associates in association with Gruen Associates, January 17, 1991).

[27] Daily and AM peak-hour generation based on ITE Trip Generation Manual (9th Edition, 2012) for Supermarket [Land Use Code 850] land use.

[28] Daily and AM peak-hour generation based on ITE Trip Generation Manual (9th Edition, 2012) for Quality Restaurant [Land Use Code 931] land use.

[29] Trip generation for the 573 square-foot net increase in boat repair space assumed to be negligible.

ATTACHMENT H

December 2007 Traffic Study Project-Specific Mitigation Measures

MITIGATION MEASURES

As described in the preceding section, the development of the proposed project will result in four significant project impacts, prior to mitigation. However, these project-specific impacts can be mitigated to a less than significant level through the implementation of area traffic improvement measures recommended in the adopted Marina del Rey Specific Plan Transportation Improvement Program (TIP). The TIP includes specific detailed transportation and circulation improvements designed to fully mitigate the traffic generation of the Phase II development in Marina del Rey.

In order to fund the recommended TIP roadway improvements, all projects developed within the Marina, including the proposed project, are required to pay a traffic mitigation fee imposed by the County of Los Angeles pursuant to the Marina del Rey Specific Plan Transportation Improvement Program. This fee is intended to fund the Category 1 (local Marina) and Category 3 (regional) roadway improvements described in the TIP, by providing "fair share" contributions toward the improvements, based on the amount of project PM peak hour trips. (Category 2 roadway improvements are reserved for Area A, which is DZ 15 and is part of the Playa Vista Development on the Marina.) These improvements address local traffic generated in and confined to the Marina, as well as trips which leave or pass through the Marina (regional trips). The County's traffic mitigation fee structure is currently $5,690 per PM peak hour trip. Based on the expected net project trip generation of 228 PM peak hour trips, the project would be required to pay a $1,297,320 in trip mitigation fees ($716,940 attributable to Legacy Partners and $580,380 attributable to Woodfin). A portion of these fees is designated toward the Category 3 (regional) transportation improvements.

The County Department of Public Works has expressed that it prefers to implement the Marina del Rey TIP-recommended roadway improvements as a single major project in

order to minimize traffic disruptions and construction time. Therefore, payment of the traffic impact mitigation fee is the recommended mitigation over the partial construction by this project of portions of the relevant TIP roadway improvements. However, should the County decide that roadway improvement measures must be implemented earlier to assure that the project's direct significant impacts are reduced to less than significant levels on or before project occupancy, the following measures are recommended:

- Admiralty Way and Via Marina – Widen the south side of Admiralty Way to accommodate a triple westbound left turn movement, and two lanes eastbound on Admiralty Way with a right-turn merge lane from northbound Via Marina. This improvement is identified in the Marina del Rey TIP as a Category 1 improvement, and will enhance traffic flow within the Marina.

- Washington Boulevard and Via Marina/Ocean Avenue – No feasible physical improvements are identified in the TIP that remain available to mitigate this potential project traffic impact. However, the County of Los Angeles Department of Public Works has identified an improvement at the nearby intersection of Washington Boulevard and Palawan Way that would provide additional egress from the Marina, reducing traffic volumes on the northbound approach of Via Marina at this intersection, and providing mitigation for the cumulative impacts. The proposed improvement would reconstruct the intersection of Washington Boulevard and Palawan Way to allow for dual northbound left-turns onto westbound Washington Boulevard, and install a new traffic signal at that intersection. The improvement will provide an additional means of accessing westbound Washington Boulevard from westbound Admiralty Way, reducing the existing high northbound volumes at Washington Boulevard and Via Marina/Ocean Avenue. (See "Washington Boulevard and Palawan Way" below for additional details.)

- Lincoln Boulevard and Mindanao Way – Widen the west side of Lincoln Boulevard both north and south of Mindanao Way, and relocate and narrow the median island on Lincoln Boulevard to provide a right-turn lane in the northbound direction. This improvement is identified in the Marina del Rey TIP as a Category 1 improvement, and will enhance the traffic flow within the Marina.

- Admiralty Way and Mindanao Way – Install dual left-turn lanes on Admiralty Way for southbound travel at the approach to Mindanao Way and modify the traffic signal to provide a westbound right-turn phase concurrent with the southbound left-turn movement. The dual left-turn lanes on Admiralty Way will enhance egress from the Marina at Mindanao Way, has already been approved as part of a previous project (Marina Two), and would mitigate to less than significance the combined traffic impacts of both projects. It should be noted that this improvement is not included in the TIP. As such, the proposed project would be conditioned to contribute "fair share" funding to this improvement above and beyond the previously identified traffic mitigation fees. The project's "fair share" proportion would be negotiated between the proposed project and the County.

To determine the quantitative effect of these mitigation measures on the project-specific significant impact, a supplemental analysis was performed. This analysis utilized the same analysis procedures and techniques as were used in the preceding analysis of intersection conditions, with the exception that the proposed mitigation measures were assumed to be "in place" for the "With Mitigation" scenario. The results of the supplemental "With Mitigation" analysis are presented in Table 13 and show that, once

Table 13
Critical Movement Analysis (CMA) Summary
Future (2013) With Project Plus Mitigation Conditions

No.	Intersection	Peak Hour	With Ambient Growth		With Ambient Growth Plus Project			With Project Plus Mitigation		
			CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
4.	Admiralty Way and	AM	0.730	C	0.749	C	0.019	0.637	B	-0.093
	Via Marina	PM	0.783	C	0.826	D	0.043 *	0.739	C	-0.044
5.	Washington Boulevard and	AM	0.744	C	0.774	C	0.030	0.689	B	-0.055
	Via Marina/Ocean Avenue	PM	0.799	C	0.831	D	0.032 *	0.791	C	-0.008
11.	Lincoln Boulevard and	AM	0.754	C	0.782	C	0.028	0.704	C	-0.050
	Mindanao Way	PM	0.884	D	0.901	E	0.017 *	0.819	D	-0.065
14.	Lincoln Blvd. and	AM	0.654	B	0.712	C	0.058 *	0.608	B	-0.046
	Mindanao Wy.	PM	0.772	C	0.835	D	0.063 *	0.734	C	-0.038

* indicates significant project traffic impact, prior to mitigation, per Los Angeles County Department of Public Works "Traffic Impact Analysis Report Guidelines ", January 1, 1997.

installed, these mitigation measures will reduce the traffic impacts of the proposed project to a less than significant level, and no additional project-specific traffic improvements are necessary.

Although the project itself would potentially significantly impact only four of the area intersections, an analysis of cumulative traffic impacts at the study intersections indicates that traffic resulting from total development throughout the project vicinity, including the proposed project, could produce significant impacts at 12 of the 17 locations analyzed. The TIP improvements are designed to address traffic growth due to cumulative development within and surrounding the Marina, and therefore, payment of the traffic impact mitigation fee described earlier is intended to mitigate the proposed project's incremental contributions toward cumulative traffic growth and the resulting impacts in the study area. However, the County acknowledges that traffic growth within the project vicinity has outpaced the projections upon which the TIP trip fees were

ATTACHMENT I

Revised Future Conditions CMA/LOS Worksheets

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, LINCOLN BOULEVARD AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: AM PEAK HOUR
CASE: FUTURE (2013) WITHOUT PROJECT (AMBIENT GROWTH ONLY)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	231	399	62	0
EASTBOUND	0	410	41	0
NORTHBOUND	155	1957	255	64
SOUTHBOUND	62	1145	44	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	1	1	0	0	4
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	1	0	3	0	1	0	5
SOUTHBOUND	1	0	2	1	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	127	N/A	230	230	N/A	N/A
EASTBOUND	N/A	N/A	226	226	N/A	N/A
NORTHBOUND	155	N/A	652	N/A	255	N/A
SOUTHBOUND	62	N/A	396	396	N/A	N/A

EAST-WEST CRITICAL VOLUMES 353
NORTH-SOUTH CRITICAL VOLUMES 714

THE SUM OF CRITICAL VOLUMES 1067

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.676

LEVEL OF SERVICE ..... B

---

* Includes CMA value decreased due to ATCS Implementation.

File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int11Test, Row: 12
12/19/2013 1:51:36 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, LINCOLN BOULEVARD AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: PM PEAK HOUR
CASE: FUTURE (2013) WITHOUT PROJECT (AMBIENT GROWTH ONLY)

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS **	
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	361	552	56	0
EASTBOUND	0	485	96	0
NORTHBOUND	142	1879	244	100
SOUTHBOUND	123	1457	94	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	1	1	0	0	4
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	1	0	3	0	1	0	5
SOUTHBOUND	1	0	2	1	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	199	N/A	304	304	N/A	N/A
EASTBOUND	N/A	N/A	290	290	N/A	N/A
NORTHBOUND	142	N/A	626	N/A	244	N/A
SOUTHBOUND	123	N/A	517	517	N/A	N/A

EAST-WEST CRITICAL VOLUMES 489
NORTH-SOUTH CRITICAL VOLUMES 749

THE SUM OF CRITICAL VOLUMES 1238

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.800

LEVEL OF SERVICE C

---

* Includes CMA value decreased due to ATCS Implementation.

File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int11Test, Row: 29
12/19/2013 1:51:37 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, LINCOLN BOULEVARD AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: AM PEAK HOUR
CASE: FUTURE (2013) W/ AMBIENT GROWTH + PROJECT (PARCELS 10R,FF,9U)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	231	434	62	0
EASTBOUND	0	481	47	0
NORTHBOUND	159	1960	255	64
SOUTHBOUND	62	1148	44	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	1	1	0	0	4
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	1	0	3	0	1	0	5
SOUTHBOUND	1	0	2	1	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	127	N/A	248	248	N/A	N/A
EASTBOUND	N/A	N/A	264	264	N/A	N/A
NORTHBOUND	159	N/A	653	N/A	255	N/A
SOUTHBOUND	62	N/A	397	397	N/A	N/A

EAST-WEST CRITICAL VOLUMES 391
NORTH-SOUTH CRITICAL VOLUMES 715

THE SUM OF CRITICAL VOLUMES 1106

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.704

LEVEL OF SERVICE C

---

* Includes CMA value decreased due to ATCS Implementation.

File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int11Test, Row: 46
12/19/2013 1:51:37 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, LINCOLN BOULEVARD AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: PM PEAK HOUR
CASE: FUTURE (2013) W/ AMBIENT GROWTH + PROJECT (PARCELS 10R,FF,9U)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	361	604	56	0
EASTBOUND	0	528	101	0
NORTHBOUND	148	1883	245	99
SOUTHBOUND	123	1458	94	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	1	1	0	0	4
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	1	0	3	0	1	0	5
SOUTHBOUND	1	0	2	1	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	198	N/A	330	330	N/A	N/A
EASTBOUND	N/A	N/A	314	314	N/A	N/A
NORTHBOUND	148	N/A	628	N/A	245	N/A
SOUTHBOUND	123	N/A	517	517	N/A	N/A

EAST-WEST CRITICAL VOLUMES 512
NORTH-SOUTH CRITICAL VOLUMES 751

THE SUM OF CRITICAL VOLUMES 1263

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.819

LEVEL OF SERVICE ..... D

---

* Includes CMA value decreased due to ATCS Implementation.

File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int11Test, Row: 63
12/19/2013 1:51:38 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, ADMIRALTY WAY AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: AM PEAK HOUR
CASE: FUTURE (2013) WITHOUT PROJECT (AMBIENT GROWTH ONLY)

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS **	
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	125	17	125	289
EASTBOUND	22	36	25	0
NORTHBOUND	16	843	66	0
SOUTHBOUND	289	807	16	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	1	0	0	1	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	71	71	N/A	N/A	125	N/A
EASTBOUND	22	N/A	N/A	61	N/A	N/A
NORTHBOUND	16	N/A	454	454	N/A	N/A
SOUTHBOUND	289	N/A	412	412	N/A	N/A

EAST-WEST CRITICAL VOLUMES 186
NORTH-SOUTH CRITICAL VOLUMES 743

THE SUM OF CRITICAL VOLUMES 929

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.576

LEVEL OF SERVICE ..... A

---

* Includes CMA value decreased due to ATCS Implementation.

Eastbound and Westbound approaches have opposed signal phases.
File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int14Test, Row: 15
12/19/2013 3:44:03 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, ADMIRALTY WAY AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: PM PEAK HOUR
CASE: FUTURE (2013) WITHOUT PROJECT (AMBIENT GROWTH ONLY)

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS **	
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	343	34	110	324
EASTBOUND	36	60	11	0
NORTHBOUND	50	977	175	0
SOUTHBOUND	324	1183	60	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	1	0	0	1	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	188	188	N/A	N/A	110	N/A
EASTBOUND	36	N/A	N/A	71	N/A	N/A
NORTHBOUND	50	N/A	576	576	N/A	N/A
SOUTHBOUND	324	N/A	622	622	N/A	N/A

EAST-WEST CRITICAL VOLUMES 259
NORTH-SOUTH CRITICAL VOLUMES 900

THE SUM OF CRITICAL VOLUMES 1159

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.743

LEVEL OF SERVICE C

---

* Includes CMA value decreased due to ATCS Implementation.

Eastbound and Westbound approaches have opposed signal phases.
File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int14Test, Row: 32
12/19/2013 3:44:04 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, ADMIRALTY WAY AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: AM PEAK HOUR
CASE: FUTURE (2013) W/ AMBIENT GROWTH + PROJECT (PARCELS 10R,FF,9U)

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS	**
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	125	17	87	366
EASTBOUND	22	36	25	0
NORTHBOUND	16	853	66	0
SOUTHBOUND	366	830	17	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	1	0	0	1	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	71	71	N/A	N/A	87	N/A
EASTBOUND	22	N/A	N/A	61	N/A	N/A
NORTHBOUND	16	N/A	460	460	N/A	N/A
SOUTHBOUND	366	N/A	424	424	N/A	N/A

EAST-WEST CRITICAL VOLUMES 148
NORTH-SOUTH CRITICAL VOLUMES 826

THE SUM OF CRITICAL VOLUMES 974

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.608

LEVEL OF SERVICE ..... B

---

* Includes CMA value decreased due to ATCS Implementation.

Eastbound and Westbound approaches have opposed signal phases.
File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int14Test, Row: 49
12/19/2013 3:44:04 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, ADMIRALTY WAY AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: PM PEAK HOUR
CASE: FUTURE (2013) W/ AMBIENT GROWTH + PROJECT (PARCELS 10R,FF,9U)

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS	**
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	343	34	120	372
EASTBOUND	37	60	11	0
NORTHBOUND	50	993	175	0
SOUTHBOUND	372	1197	60	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	1	0	0	1	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	188	188	N/A	N/A	120	N/A
EASTBOUND	37	N/A	N/A	71	N/A	N/A
NORTHBOUND	50	N/A	584	584	N/A	N/A
SOUTHBOUND	372	N/A	628	628	N/A	N/A

EAST-WEST CRITICAL VOLUMES 259
NORTH-SOUTH CRITICAL VOLUMES 956

THE SUM OF CRITICAL VOLUMES 1215

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.784

LEVEL OF SERVICE C

---

* Includes CMA value decreased due to ATCS Implementation.

Eastbound and Westbound approaches have opposed signal phases.
File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int14Test, Row: 66
12/19/2013 3:44:05 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, ADMIRALTY WAY AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: AM PEAK HOUR
CASE: FUTURE (2013) W/ AMB. GROWTH+PROJ(PARCELS 10R,FF,9U)+MIT

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS **	
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	125	17	252	201
EASTBOUND	22	36	25	0
NORTHBOUND	16	853	66	0
SOUTHBOUND	366	830	17	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	1	0	0	1	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	2	0	1	1	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	71	71	N/A	N/A	252	N/A
EASTBOUND	22	N/A	N/A	61	N/A	N/A
NORTHBOUND	16	N/A	460	460	N/A	N/A
SOUTHBOUND	201	N/A	424	424	N/A	N/A

EAST-WEST CRITICAL VOLUMES 313
NORTH-SOUTH CRITICAL VOLUMES 661

THE SUM OF CRITICAL VOLUMES 974

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.608

LEVEL OF SERVICE ..... B

---

* Includes CMA value decreased due to ATCS Implementation.

Eastbound and Westbound approaches have opposed signal phases.
File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int14Test, Row: 73
12/19/2013 3:44:05 PM

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, ADMIRALTY WAY AND MINDANAO WAY
DATE: 12/19/2013 INITIALS: JL PERIOD: PM PEAK HOUR
CASE: FUTURE (2013) W/ AMB. GROWTH+PROJ(PARCELS 10R,FF,9U)+MIT

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS **	
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	343	34	287	205
EASTBOUND	37	60	11	0
NORTHBOUND	50	993	175	0
SOUTHBOUND	372	1197	60	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	1	0	0	1	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	2	0	1	1	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	188	188	N/A	N/A	287	N/A
EASTBOUND	37	N/A	N/A	71	N/A	N/A
NORTHBOUND	50	N/A	584	584	N/A	N/A
SOUTHBOUND	205	N/A	628	628	N/A	N/A

EAST-WEST CRITICAL VOLUMES 358
NORTH-SOUTH CRITICAL VOLUMES 789

THE SUM OF CRITICAL VOLUMES 1147

NUMBER OF CRITICAL CLEARANCE INTERVALS 4*

CMA VALUE 0.734

LEVEL OF SERVICE C

---

* Includes CMA value decreased due to ATCS Implementation.

Eastbound and Westbound approaches have opposed signal phases.
File: I:\Crain Projects\Active Projects\Marina del Rey Parcel 9U (Woodfin)\Data\ICAP7\Total MDR Parcels FF,10R,9U(12-07).xls, Worksheet: 2013Int14Test, Row: 77
12/19/2013 3:44:07 PM

ATTACHMENT J

December 2007 Traffic Study Cumulative Mitigation Measures

based, and therefore, an analysis of cumulative impacts with respect to the effectiveness of the proposed TIP improvements was requested.

The intersection improvement measures recommended to address cumulative traffic impacts in the project vicinity are shown in Appendix G (Transportation Improvement Program – TIP) of the Marina del Rey Local Implementation Program and described below.

- Admiralty Way and Via Marina – Reconstruct the intersection to provide for a realignment of Admiralty Way as a "through roadway" with the southern leg of Via Marina. As described above, the northern leg of Via Marina, south of Washington Boulevard, will intersect into Admiralty Way in a "T" configuration. The striping for turning movements at the reconfigured intersection will be constructed as dual left-turn and dual/triple right-turn movements. This improvement is identified in the Marina del Rey TIP, and will enhance traffic flow within the Marina.

- Washington Boulevard and Via Marina/Ocean Avenue – No feasible physical improvements are identified in the TIP that remain available to mitigate this potential cumulative impact. However, the County of Los Angeles Department of Public Works has identified an improvement at the nearby intersection of Washington Boulevard and Palawan Way that would provide additional egress from the Marina, reducing traffic volumes on the northbound approach of Via Marina at this intersection, and providing mitigation for the cumulative impacts. The proposed improvement would reconstruct the intersection of Washington Boulevard and Palawan Way to allow for dual northbound left-turns onto westbound Washington Boulevard, and install a new traffic signal at that intersection. The improvement will provide an additional means of accessing

westbound Washington Boulevard from westbound Admiralty Way, reducing the existing high northbound volumes at Washington Boulevard and Via Marina/Ocean Avenue. (See "Washington Boulevard and Palawan Way" below for additional details.)

In addition, the Marina del Rey TIP also identified an improvement at the intersection of Via Marina and Admiralty Way that will enhance traffic flow between Admiralty Way and Via Marina south of Admiralty Way within the Marina, reducing the northbound right-turn traffic volumes on Via Marina at Washington Boulevard. This improvement would reconstruct the Admiralty Way/Via Marina intersection to realign Admiralty Way as a "through roadway" with the southern leg of Via Marina. The northern leg of Via Marina, south of Washington Boulevard, will intersect into Admiralty Way in a "T" configuration. The striping for turning movements at the reconfigured intersection will be constructed as dual left and dual/triple right-turning movements. As a result, northbound traffic volumes on Via Marina would need to turn left (instead of making a through movement) at Admiralty Way to access eastbound Washington Boulevard. Due to the high left-turn volume on northbound Via Marina at Admiralty Way, some of these traffic volumes would reroute along eastbound Admiralty Way and turn left at Palawan Way.

- Admiralty Way and Palawan Way – Restripe the southbound approach to convert the through lane into a left/through shared lane. Restripe the northbound approach to provide an exclusive right-turn only lane, in addition to a shared left-turn/through lane. In addition, add a third westbound through lane to Admiralty Way within the existing right-of-way by moving the median and restriping Admiralty Way. These measures are identical to or consistent with the improvements in the Marina del Rey TIP.

- Washington Boulevard and Palawan Way – Install a new traffic signal at this intersection (as described above as "in lieu" mitigation for the cumulative impact at Washington Boulevard and Via Marina/Ocean Avenue). The south leg of the intersection should be realigned to reduce the angle of the northbound right-turn only lane, and provide a more perpendicular approach, plus provide northbound dual left-turn lanes.

  While this improvement is currently being investigated by the County for implementation as a new TIP- type measure, funded by fair share contributions by projects within Marina del Rey, it is not currently included in the TIP improvement program. As such, the proposed project would be conditioned to contribute "fair share" funding to this improvement above and beyond the previously identified traffic mitigation fees. As indicated in Table 10, the project will contribute 8 percent of the impact at this location. Cost estimates for this improvement are currently being finalized, but are expected to be between approximately $150,000 and $180,000, with a project responsibility of $12,000 to $14,400.

- Lincoln Boulevard and Washington Boulevard – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR 90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the key intersection of Lincoln Boulevard and Washington Boulevard. However, it should be noted that a short-term cumulative traffic impact could remain at this location should the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic

growth occurs. This measure is identified in Appendix G of the Marina del Rey Local Implementation Program and must receive approval from the Board of Supervisors, the City of Los Angeles and Caltrans.

Furthermore, if the extension of the SR-90 is not constructed at all (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a contingent significant cumulative traffic impact would remain at this location.

- Lincoln Boulevard and Marina Expressway (SR 90) – Extend Route 90 to connect to Admiralty Way across Lincoln Boulevard. The extension would reconstruct and expand the at-grade intersection, providing additional capacity for all approaches. This improvement is currently included in the TIP roadway improvements funded by the trip fee.

  However, it should be noted that a short-term cumulative traffic impact could remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. Furthermore, if the extension of the SR-90 is not constructed at all (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a significant cumulative traffic impact could remain at this location.

- Lincoln Boulevard and Bali Way – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR 90) westward to connect with Admiralty

Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the intersection of Lincoln Boulevard and Bali Way. However, it should be noted that a short-term cumulative traffic impact could remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. The SR-90 extension is identified in Appendix G of the Marina del Rey Local Implementation Program and must receive approval from the Board of Supervisors, the City of Los Angeles and Caltrans.

Furthermore, if the extension of the SR-90 is not constructed at all (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a significant cumulative traffic impact could remain at this location.

- Lincoln Boulevard and Mindanao Way – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR 90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the intersection of Lincoln Boulevard and Mindanao Way, which currently provides direct access from the SR-90 to Admiralty Way in the Marina, by providing a direct access alternative route. However, it should be noted that a short-term cumulative traffic impact could remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. The SR-90 extension is identified in Appendix G of the

Marina del Rey Local Implementation Program and must receive approval from the Board of Supervisors, the City of Los Angeles and Caltrans.

Furthermore, if the extension of the SR-90 is not constructed at all (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a significant cumulative traffic impact could remain at this location.

- Lincoln Boulevard and Fiji Way – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR 90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the intersection of Lincoln Boulevard and Fiji Way. However, it should be noted that a short-term cumulative traffic impact could remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. The SR-90 extension is identified in Appendix G of the Marina del Rey Local Implementation Program and must receive approval from the Board of Supervisors, the City of Los Angeles and Caltrans.

  Furthermore, if the extension of the SR-90 is not constructed at all (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a contingent significant cumulative traffic impact could remain at this location.

- Admiralty Way and Bali Way – Add a third westbound through lane to Admiralty Way within the existing right-of-way by moving the median and restriping Admiralty Way, as identified in the TIP.

- Admiralty Way and Mindanao Way – Widen northbound Admiralty Way to provide a right-turn lane at Mindanao Way, as identified in the TIP. Also, install dual left-turn lanes on Admiralty Way for southbound travel at the approach to Mindanao Way and modify the traffic signal to provide a westbound right-turn phase concurrent with the southbound left-turn movement. The dual left-turn lanes on Admiralty Way will enhance egress from the Marina at Mindanao Way, and has already been approved as part of a previous project (Marina Two). In addition, restripe the left-turn lane in the eastbound direction to a left-through shared lane. A second receiving lane is already present on the east leg departure from this intersection. It should be noted that the installation of dual left-turn lanes on Admiralty Way, the traffic signal modification and the restripe of the left-turn lane in the eastbound direction to a left-through shared lane are not identified in the TIP. As such, the proposed project would be conditioned to contribute "fair share" funding to this non-TIP improvement above and beyond the previously identified traffic mitigation fees. The project's "fair share" proportion would be negotiated between the proposed project and the County.

- Marina Expressway (SR 90) Eastbound and Mindanao Way – Restripe Mindanao Way to provide two through lanes and one free right-turn lane in the eastbound approach. Also provide an appropriate receiving and merge area on the eastbound Marina Expressway for the free right-turn movement from eastbound Mindanao Way. No additional right-of-way is required for this measure. This improvement is not identified in the TIP. As such, the

proposed project would be conditioned to contribute “fair share” funding to this non-TIP improvement above and beyond the previously identified traffic mitigation fees. The project’s “fair share” proportion would be negotiated between the proposed project and Caltrans.

The effectiveness of the recommended cumulative mitigation measures was evaluated in a supplemental analysis. This “With Cumulative Development Plus Mitigation” analysis in Table 14 utilized the same methodologies and assumptions as described previously, again with the exception that the recommended cumulative improvement measures described above were assumed to be “in place” for the “With Cumulative Development Plus Mitigation” scenario. This assumption also included the redistribution of traffic at several intersections (Via Marina at Washington Boulevard, and Admiralty Way, and Palawan Way at Washington Boulevard and Admiralty Way) as a result of anticipated travel pattern changes resulting from the mitigation measures at Washington Boulevard and Palawan Way, and at Via Marina and Admiralty Way. As discussed above, mitigation of cumulative traffic impacts to less than a level of significance may not occur if one or more mitigation measures is not implemented.

As shown in Table 14, the implementation of the cumulative mitigation measures cited above would result in a reduction of all cumulative traffic impacts at all study intersections. At intersections where the “With Cumulative Development Plus Mitigation” traffic conditions can be evaluated, cumulative impacts would be reduced to a less than significant level. Table 14 also indicates that, since the design of the proposed SR-90 extension has not been determined, calculation of the exact benefits to specific intersections for which the extension is identified in the Marina del Rey LUP as mitigation cannot be made at this time. The County is currently preparing an

Table 14
Critical Movement Analysis (CMA) Summary
Future (2013) Traffic Conditions With Cumulative Development Plus Mitigation

No.	Intersection	Peak Hour	Existing Plus Ambient CMA	Existing Plus Ambient LOS	With Cumulative Development CMA	With Cumulative Development LOS	With Cumulative Development Impact	With Cumulative Dev. Plus Mitigation CMA	With Cumulative Dev. Plus Mitigation LOS	With Cumulative Dev. Plus Mitigation Impact
4.	Admiralty Way and	AM	0.730	C	0.821	D	0.091 **	0.508	A	-0.222
	Via Marina	PM	0.783	C	0.915	E	0.132 **	0.546	A	-0.237
5.	Washington Boulevard and	AM	0.744	C	0.858	D	0.114 **	0.774	C	0.030
	Via Marina/Ocean Avenue	PM	0.799	C	0.918	E	0.119 **	0.807	D	0.008
6.	Admiralty Way and	AM	0.444	A	0.620	B	0.176	0.607	B	0.163
	Palawan Way	PM	0.629	B	0.809	D	0.180 **	0.658	B	0.029
7.	Washington Boulevard and	AM	0.668	B	0.935	E	0.267 **	0.671	B	0.003
	Palawan Way	PM	0.747	C	0.910	E	0.163 **	0.719	C	-0.028
8.	Washington Boulevard and	AM	0.807	D	0.947	E	0.140 **	n/a	--	--
	Lincoln Boulevard	PM	1.390	F	1.552	F	0.162 **			
9.	Lincoln Boulevard and	AM	0.707	C	0.810	D	0.103 **	n/a	--	--
	Marina Expressway (SR-90)	PM	0.751	C	0.892	D	0.141 **			
10.	Lincoln Boulevard and	AM	0.677	B	0.741	C	0.064 **	n/a	--	--
	Bali Way	PM	0.534	A	0.640	B	0.106			
11.	Lincoln Boulevard and	AM	0.754	C	0.959	E	0.205 **	n/a	--	--
	Mindanao Way	PM	0.884	D	1.049	F	0.165 **			
12.	Lincoln Boulevard and	AM	0.613	B	0.735	C	0.122 **	n/a	--	--
	Fiji Way	PM	0.762	C	0.901	E	0.139 **			
13.	Admiralty Way and	AM	0.480	A	0.605	B	0.125	0.605	B	0.125
	Bali Way	PM	0.602	B	0.740	C	0.138 **	0.579	A	-0.023
14.	Admiralty Way and	AM	0.654	B	0.889	D	0.235 **	0.655	B	0.001
	Mindanao Way	PM	0.772	C	1.013	F	0.241 **	0.787	C	0.015
17.	Marina Expressway (SR-90)	AM	0.641	B	0.783	C	0.142 **	0.624	B	-0.017
	Eastbound and Mindanao Way	PM	0.769	C	0.868	D	0.099 **	0.788	C	0.019

** Indicates significant cumulative traffic impact, prior to mitigation, per Los Angeles County Department of Public Works "Traffic Impact Analysis Report Guidelines", January 1, 1997.

"n/a" Indicates final design of proposed SR-90 extension project not available. No specific analysis of effectiveness of this measure possible at this time. However, Los Angeles County is currently preparing environmental analyses to evaluate the impacts of the proposed SR-90 extension project.

Environmental Impact Report for this roadway improvement that will identify the anticipated benefits to the Lincoln Boulevard corridor as a result of the SR-90 extension to Admiralty Way.

Condition of approval for developments within the Marina is described in the Marina del Rey LUP and summarized below:

> "Development shall not be approved that will significantly exceed the capacity of the sub-regional street system. Traffic impacts, generated by development in the LCP study area, upon the circulation system outside the unincorporated area of Marina del Rey, shall be mitigated by the developer prior to receiving final discretionary permits." [*]

In summary, the cumulative mitigation measures include measures specifically identified in the TIP, including funding for larger long-term improvements such as the planned Marina Expressway (SR-90) extension to Admiralty Way that will increase area-wide traffic capacity and help alleviate existing and future congestion in the study area. If these measures are not installed, significant cumulative traffic impacts may remain.

The improvements described above -- with the exceptions of the new traffic signal at Washington Boulevard and Palawan Way, the installation of the dual left-turn lanes, the traffic signal modification and the restripe of the left-turn lane to a left-through shared lane in the eastbound direction at Admiralty Way and Mindanao Way, and the installation of a free right-turn lane on Mindanao Way in the eastbound direction at the SR-90 eastbound approach -- are identical to or consistent with the area-wide roadway improvements identified in Appendix G (Transportation Improvement Program) of the Marina del Rey Local Implementation Program, and funded through payment of the

[*] Marina del Rey Land Use Plan, County of Los Angeles Department of Regional Planning, C.11 Circulation, Page 11-18.

traffic impact fees. The project is responsible for its “fair share” portion of implementation of the cumulative mitigation (or other County approved) improvements through payment of the $1,297,320 trip fee, plus the pro-rata share for the added measures.

APPENDIX C: Supplemental Air Quality Data

Marina del Rey Marriott Courtyard and Residence Inn (Parcel 9U)

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	288.00	Room	2.20	196,867.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use: Hotel, 288 rooms, 2.2 lot acreage.

Construction Phase - Site Prep: Apr-Jun 2015; Grading: Apr-Jun 2015; Building Construction: Jul 2015-Apr 2017; Paving: Jul 2015; Coating: Jul 2016-Apr 2017.

Off-road Equipment - Architectural Coating: 1 air compressor.

Off-road Equipment - Building Construction: 1 bore/drill rig, 1 crane, 2 crawler tractors, 1 off-highway tractor, 2 rough terrain forklifts, 2 rubber tired dozers, 2 tractors/loaders/backhoes.

Off-road Equipment - No demolition.

Off-road Equipment - Mass Grading: 1 rubber tired dozer, 1 tractor/loader/backhoe.

Off-road Equipment - Paving: 4 cement/mortar mixers, 1 paver, 1 paving equipment, 1 roller, 1 tractor/loader/backhoe

Off-road Equipment - Site Prep/Fine Grading: 1 excavator, 3 tractors/loaders/backhoes.

Grading - Acres Disturbed: 2.2 acres. Material Exported: 28,000 cy.

Architectural Coating -

Vehicle Trips - Trip Rate: 5.34 trips/room. Trip Distances: C-C 6.5 miles, C-W 12.8 miles, C-NW 5.3 miles (land use transportation reduction).

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - Construction fugitive dust control measures: water exposed area three times daily and apply soil stabilizers/water to unpaved roads (61% PM10 and PM2.5 control).
Energy Mitigation - Energy Efficiency: Title 24 improvement of 15%, efficient appliances.

Water Mitigation - WAter: Low flow toilets.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	196.00
tblConstructionPhase	NumDays	220.00	458.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	65.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	65.00
tblConstructionPhase	PhaseEndDate	5/2/2016	4/1/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	4/1/2017
tblConstructionPhase	PhaseEndDate	9/29/2015	6/30/2015
tblConstructionPhase	PhaseEndDate	5/3/2017	7/31/2015
tblConstructionPhase	PhaseEndDate	4/1/2015	6/30/2015
tblConstructionPhase	PhaseStartDate	8/1/2015	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	4/1/2015
tblConstructionPhase	PhaseStartDate	4/2/2017	7/1/2015
tblConstructionPhase	PhaseStartDate	1/1/2015	4/1/2015
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	MaterialExported	0.00	28,000.00
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	418,176.00	196,867.00

tblLandUse	LotAcreage	9.60	2.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	32.00	69.00
tblTripsAndVMT	WorkerTripNumber	83.00	176.00
tblTripsAndVMT	WorkerTripNumber	17.00	35.00

tblVehicleTrips	CC_TL	8.40	6.50
tblVehicleTrips	CNW_TL	6.90	5.30
tblVehicleTrips	CW_TL	16.60	12.80
tblVehicleTrips	ST_TR	8.19	5.34
tblVehicleTrips	SU_TR	5.95	5.34
tblVehicleTrips	WD_TR	8.17	5.34

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					
2015	9.2432	96.9541	75.1708	0.1196	5.3255	4.5560	7.7023	2.4901	4.1963	4.9001	0.0000	11,901.0595	11,901.0595	2.4801	0.0000	11,953.1415
2016	30.8180	77.7291	63.8025	0.1075	2.7897	3.5128	6.3025	0.7483	3.2475	3.9958	0.0000	10,495.6986	10,495.6986	2.0424	0.0000	10,538.5888
2017	30.3301	72.4697	60.6504	0.1075	2.7898	3.2376	6.0274	0.7483	2.9925	3.7408	0.0000	10,280.3468	10,280.3468	2.0291	0.0000	10,322.9576
Total	**70.3913**	**247.1528**	**199.6236**	**0.3346**	**10.9051**	**11.3064**	**20.0323**	**3.9867**	**10.4362**	**12.6366**	**0.0000**	**32,677.1049**	**32,677.1049**	**6.5516**	**0.0000**	**32,814.6880**

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					
2015	9.2432	96.9541	75.1708	0.1196	2.7718	4.5560	7.1779	1.1603	4.1963	4.9001	0.0000	11,901.0595	11,901.0595	2.4801	0.0000	11,953.1415
2016	30.8180	77.7291	63.8025	0.1075	2.7897	3.5128	6.3025	0.7483	3.2475	3.9958	0.0000	10,495.6986	10,495.6986	2.0424	0.0000	10,538.5888
2017	30.3301	72.4697	60.6504	0.1075	2.7898	3.2376	6.0274	0.7483	2.9925	3.7408	0.0000	10,280.3468	10,280.3468	2.0291	0.0000	10,322.9576
Total	**70.3913**	**247.1528**	**199.6236**	**0.3346**	**8.3513**	**11.3064**	**19.5079**	**2.6570**	**10.4362**	**12.6366**	**0.0000**	**32,677.1049**	**32,677.1049**	**6.5516**	**0.0000**	**32,814.6880**

	ROG	NOx	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**	**23.42**	**0.00**	**2.62**	**33.35**	**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	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Energy	0.1455	1.3230	1.1113	7.9400e-003		0.1006	0.1006		0.1006	0.1006		1,587.6269	1,587.6269	0.0304	0.0291	1,597.2889
Mobile	4.5523	9.5378	40.8845	0.0916	6.0098	0.1303	6.1402	1.6058	0.1200	1.7257		7,793.1071	7,793.1071	0.3076		7,799.5667
Total	**9.8486**	**10.8611**	**42.0258**	**0.0996**	**6.0098**	**0.2310**	**6.2408**	**1.6058**	**0.2206**	**1.8264**		**9,380.7969**	**9,380.7969**	**0.3382**	**0.0291**	**9,396.9223**

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	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Energy	0.1272	1.1568	0.9717	6.9400e-003		0.0879	0.0879		0.0879	0.0879		1,388.1265	1,388.1265	0.0266	0.0255	1,396.5744
Mobile	4.5523	9.5378	40.8845	0.0916	6.0098	0.1303	6.1402	1.6058	0.1200	1.7257		7,793.1071	7,793.1071	0.3076		7,799.5667
Total	**9.8303**	**10.6949**	**41.8861**	**0.0986**	**6.0098**	**0.2184**	**6.2282**	**1.6058**	**0.2080**	**1.8137**		**9,181.2966**	**9,181.2966**	**0.3344**	**0.0255**	**9,196.2078**

	ROG	NOx	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	**0.19**	**1.53**	**0.33**	**1.00**	**0.00**	**5.47**	**0.20**	**0.00**	**5.73**	**0.69**	**0.00**	**2.13**	**2.13**	**1.13**	**12.57**	**2.14**

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	1/1/2015	12/31/2014	5	0	
2	Site Preparation	Site Preparation	4/1/2015	6/30/2015	5	65	
3	Grading	Grading	4/1/2015	6/30/2015	5	65	
4	Building Construction	Building Construction	7/1/2015	4/1/2017	5	458	
5	Paving	Paving	7/1/2015	7/31/2015	5	23	
6	Architectural Coating	Architectural Coating	7/1/2016	4/1/2017	5	196	

Acres of Grading (Site Preparation Phase): 2.2

Acres of Grading (Grading Phase): 2.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 295,301; Non-Residential Outdoor: 98,434 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Excavators	1	8.00	162	0.38
Site Preparation	Graders	0	0.00	174	0.41
Site Preparation	Scrapers	0	0.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	0	0.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	205	0.50
Building Construction	Cranes	0	0.00	226	0.29

Building Construction	Crawler Tractors	2	8.00	208	0.43
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Off-Highway Tractors	1	8.00	122	0.44
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Dozers	2	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	3,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	176.00	69.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

3.3 Site Preparation - 2015

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					0.0359	0.0000	0.0359	3.8800e-003	0.0000	3.8800e-003			0.0000			0.0000
Off-Road	1.3626	13.8742	9.8064	0.0135		0.9453	0.9453		0.8697	0.8697		1,415.2102	1,415.2102	0.4225		1,424.0826
Total	**1.3626**	**13.8742**	**9.8064**	**0.0135**	**0.0359**	**0.9453**	**0.9812**	**3.8800e-003**	**0.8697**	**0.8736**		**1,415.2102**	**1,415.2102**	**0.4225**		**1,424.0826**

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	0.0461	0.0577	0.7163	1.4200e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		123.2032	123.2032	6.6300e-003		123.3424
Total	**0.0461**	**0.0577**	**0.7163**	**1.4200e-003**	**0.1118**	**9.8000e-004**	**0.1128**	**0.0296**	**9.0000e-004**	**0.0306**		**123.2032**	**123.2032**	**6.6300e-003**		**123.3424**

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					0.0140	0.0000	0.0140	1.5100e-003	0.0000	1.5100e-003			0.0000			0.0000
Off-Road	1.3626	13.8742	9.8064	0.0135		0.9453	0.9453		0.8697	0.8697	0.0000	1,415.2102	1,415.2102	0.4225		1,424.0826
Total	**1.3626**	**13.8742**	**9.8064**	**0.0135**	**0.0140**	**0.9453**	**0.9593**	**1.5100e-003**	**0.8697**	**0.8712**	**0.0000**	**1,415.2102**	**1,415.2102**	**0.4225**		**1,424.0826**

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	0.0461	0.0577	0.7163	1.4200e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		123.2032	123.2032	6.6300e-003		123.3424
Total	**0.0461**	**0.0577**	**0.7163**	**1.4200e-003**	**0.1118**	**9.8000e-004**	**0.1128**	**0.0296**	**9.0000e-004**	**0.0306**		**123.2032**	**123.2032**	**6.6300e-003**		**123.3424**

3.4 Grading - 2015

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					4.1506	0.0000	4.1506	2.1761	0.0000	2.1761			0.0000			0.0000
Off-Road	1.9038	20.3933	15.2213	0.0143		1.1414	1.1414		1.0501	1.0501		1,507.0346	1,507.0346	0.4499		1,516.4828
Total	**1.9038**	**20.3933**	**15.2213**	**0.0143**	**4.1506**	**1.1414**	**5.2920**	**2.1761**	**1.0501**	**3.2261**		**1,507.0346**	**1,507.0346**	**0.4499**		**1,516.4828**

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	1.0512	16.8880	11.3290	0.0398	0.9379	0.2884	1.2262	0.2568	0.2653	0.5220		4,051.5692	4,051.5692	0.0320		4,052.2413
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	0.0369	0.0462	0.5731	1.1300e-003	0.0894	7.9000e-004	0.0902	0.0237	7.2000e-004	0.0244		98.5625	98.5625	5.3000e-003		98.6739
Total	**1.0881**	**16.9341**	**11.9021**	**0.0409**	**1.0273**	**0.2892**	**1.3164**	**0.2805**	**0.2660**	**0.5465**		**4,150.1317**	**4,150.1317**	**0.0373**		**4,150.9151**

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					1.6187	0.0000	1.6187	0.8487	0.0000	0.8487			0.0000			0.0000
Off-Road	1.9038	20.3933	15.2213	0.0143		1.1414	1.1414		1.0501	1.0501	0.0000	1,507.0346	1,507.0346	0.4499		1,516.4828
Total	**1.9038**	**20.3933**	**15.2213**	**0.0143**	**1.6187**	**1.1414**	**2.7601**	**0.8487**	**1.0501**	**1.8987**	**0.0000**	**1,507.0346**	**1,507.0346**	**0.4499**		**1,516.4828**

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	1.0512	16.8880	11.3290	0.0398	0.9379	0.2884	1.2262	0.2568	0.2653	0.5220		4,051.5692	4,051.5692	0.0320		4,052.2413
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	0.0369	0.0462	0.5731	1.1300e-003	0.0894	7.9000e-004	0.0902	0.0237	7.2000e-004	0.0244		98.5625	98.5625	5.3000e-003		98.6739
Total	**1.0881**	**16.9341**	**11.9021**	**0.0409**	**1.0273**	**0.2892**	**1.3164**	**0.2805**	**0.2660**	**0.5465**		**4,150.1317**	**4,150.1317**	**0.0373**		**4,150.9151**

3.5 Building Construction - 2015

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	5.9324	71.5404	42.5031	0.0597		3.3827	3.3827		3.1120	3.1120		6,264.4787	6,264.4787	1.8702		6,303.7531
Total	**5.9324**	**71.5404**	**42.5031**	**0.0597**		**3.3827**	**3.3827**		**3.1120**	**3.1120**		**6,264.4787**	**6,264.4787**	**1.8702**		**6,303.7531**

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	0.6521	6.7804	7.4798	0.0150	0.4311	0.1172	0.5483	0.1228	0.1078	0.2306		1,522.2962	1,522.2962	0.0120		1,522.5474
Worker	0.8117	1.0158	12.6072	0.0249	1.9673	0.0173	1.9846	0.5217	0.0159	0.5376		2,168.3758	2,168.3758	0.1166		2,170.8253
Total	**1.4638**	**7.7962**	**20.0870**	**0.0400**	**2.3984**	**0.1346**	**2.5329**	**0.6445**	**0.1237**	**0.7682**		**3,690.6720**	**3,690.6720**	**0.1286**		**3,693.3727**

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	5.9324	71.5404	42.5031	0.0597		3.3827	3.3827		3.1120	3.1120	0.0000	6,264.4787	6,264.4787	1.8702		6,303.7531
Total	**5.9324**	**71.5404**	**42.5031**	**0.0597**		**3.3827**	**3.3827**		**3.1120**	**3.1120**	**0.0000**	**6,264.4787**	**6,264.4787**	**1.8702**		**6,303.7531**

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	0.6521	6.7804	7.4798	0.0150	0.4311	0.1172	0.5483	0.1228	0.1078	0.2306		1,522.2962	1,522.2962	0.0120		1,522.5474
Worker	0.8117	1.0158	12.6072	0.0249	1.9673	0.0173	1.9846	0.5217	0.0159	0.5376		2,168.3758	2,168.3758	0.1166		2,170.8253
Total	**1.4638**	**7.7962**	**20.0870**	**0.0400**	**2.3984**	**0.1346**	**2.5329**	**0.6445**	**0.1237**	**0.7682**		**3,690.6720**	**3,690.6720**	**0.1286**		**3,693.3727**

3.5 Building Construction - 2016

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	5.7172	68.2659	41.3499	0.0596		3.1992	3.1992		2.9433	2.9433		6,198.6655	6,198.6655	1.8697		6,237.9300
Total	**5.7172**	**68.2659**	**41.3499**	**0.0596**		**3.1992**	**3.1992**		**2.9433**	**2.9433**		**6,198.6655**	**6,198.6655**	**1.8697**		**6,237.9300**

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	0.5764	5.9924	6.8825	0.0150	0.4312	0.0973	0.5285	0.1228	0.0895	0.2123		1,505.5659	1,505.5659	0.0108		1,505.7927
Worker	0.7327	0.9163	11.4159	0.0249	1.9673	0.0164	1.9837	0.5217	0.0151	0.5369		2,093.6653	2,093.6653	0.1073		2,095.9192
Total	**1.3091**	**6.9087**	**18.2984**	**0.0400**	**2.3985**	**0.1137**	**2.5122**	**0.6445**	**0.1046**	**0.7491**		**3,599.2312**	**3,599.2312**	**0.1181**		**3,601.7119**

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	5.7172	68.2659	41.3499	0.0596		3.1992	3.1992		2.9433	2.9433	0.0000	6,198.6655	6,198.6655	1.8697		6,237.9299
Total	**5.7172**	**68.2659**	**41.3499**	**0.0596**		**3.1992**	**3.1992**		**2.9433**	**2.9433**	**0.0000**	**6,198.6655**	**6,198.6655**	**1.8697**		**6,237.9299**

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	0.5764	5.9924	6.8825	0.0150	0.4312	0.0973	0.5285	0.1228	0.0895	0.2123		1,505.5659	1,505.5659	0.0108		1,505.7927
Worker	0.7327	0.9163	11.4159	0.0249	1.9673	0.0164	1.9837	0.5217	0.0151	0.5369		2,093.6653	2,093.6653	0.1073		2,095.9192
Total	**1.3091**	**6.9087**	**18.2984**	**0.0400**	**2.3985**	**0.1137**	**2.5122**	**0.6445**	**0.1046**	**0.7491**		**3,599.2312**	**3,599.2312**	**0.1181**		**3,601.7119**

3.5 Building Construction - 2017

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	5.4022	63.8363	39.9230	0.0597		2.9585	2.9585		2.7218	2.7218		6,103.7340	6,103.7340	1.8702		6,143.0076
Total	**5.4022**	**63.8363**	**39.9230**	**0.0597**		**2.9585**	**2.9585**		**2.7218**	**2.7218**		**6,103.7340**	**6,103.7340**	**1.8702**		**6,143.0076**

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	0.5283	5.4563	6.4729	0.0150	0.4314	0.0868	0.5182	0.1229	0.0799	0.2027		1,481.2034	1,481.2034	0.0105		1,481.4228
Worker	0.6587	0.8275	10.3318	0.0249	1.9673	0.0158	1.9831	0.5217	0.0146	0.5363		2,013.5413	2,013.5413	0.0991		2,015.6214
Total	**1.1870**	**6.2838**	**16.8047**	**0.0399**	**2.3986**	**0.1027**	**2.5013**	**0.6446**	**0.0945**	**0.7390**		**3,494.7447**	**3,494.7447**	**0.1095**		**3,497.0442**

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	5.4022	63.8363	39.9230	0.0597		2.9585	2.9585		2.7218	2.7218	0.0000	6,103.7340	6,103.7340	1.8702		6,143.0076
Total	**5.4022**	**63.8363**	**39.9230**	**0.0597**		**2.9585**	**2.9585**		**2.7218**	**2.7218**	**0.0000**	**6,103.7340**	**6,103.7340**	**1.8702**		**6,143.0076**

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	0.5283	5.4563	6.4729	0.0150	0.4314	0.0868	0.5182	0.1229	0.0799	0.2027		1,481.2034	1,481.2034	0.0105		1,481.4228
Worker	0.6587	0.8275	10.3318	0.0249	1.9673	0.0158	1.9831	0.5217	0.0146	0.5363		2,013.5413	2,013.5413	0.0991		2,015.6214
Total	**1.1870**	**6.2838**	**16.8047**	**0.0399**	**2.3986**	**0.1027**	**2.5013**	**0.6446**	**0.0945**	**0.7390**		**3,494.7447**	**3,494.7447**	**0.1095**		**3,497.0442**

3.6 Paving - 2015

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	1.7547	17.5020	11.1481	0.0171		1.0369	1.0369		0.9588	0.9588		1,699.5025	1,699.5025	0.4680		1,709.3310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7547**	**17.5020**	**11.1481**	**0.0171**		**1.0369**	**1.0369**		**0.9588**	**0.9588**		**1,699.5025**	**1,699.5025**	**0.4680**		**1,709.3310**

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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	**0.0922**	**0.1154**	**1.4326**	**2.8300e-003**	**0.2236**	**1.9700e-003**	**0.2255**	**0.0593**	**1.8000e-003**	**0.0611**		**246.4063**	**246.4063**	**0.0133**		**246.6847**

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	1.7547	17.5020	11.1481	0.0171		1.0369	1.0369		0.9588	0.9588	0.0000	1,699.5024	1,699.5024	0.4680		1,709.3310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7547**	**17.5020**	**11.1481**	**0.0171**		**1.0369**	**1.0369**		**0.9588**	**0.9588**	**0.0000**	**1,699.5024**	**1,699.5024**	**0.4680**		**1,709.3310**

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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	**0.0922**	**0.1154**	**1.4326**	**2.8300e-003**	**0.2236**	**1.9700e-003**	**0.2255**	**0.0593**	**1.8000e-003**	**0.0611**		**246.4063**	**246.4063**	**0.0133**		**246.6847**

3.7 Architectural Coating - 2016

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**23.6460**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.1457	0.1822	2.2702	4.9600e-003	0.3912	3.2700e-003	0.3945	0.1038	3.0100e-003	0.1068		416.3539	416.3539	0.0213		416.8021
Total	**0.1457**	**0.1822**	**2.2702**	**4.9600e-003**	**0.3912**	**3.2700e-003**	**0.3945**	**0.1038**	**3.0100e-003**	**0.1068**		**416.3539**	**416.3539**	**0.0213**		**416.8021**

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**23.6460**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.1457	0.1822	2.2702	4.9600e-003	0.3912	3.2700e-003	0.3945	0.1038	3.0100e-003	0.1068		416.3539	416.3539	0.0213		416.8021
Total	**0.1457**	**0.1822**	**2.2702**	**4.9600e-003**	**0.3912**	**3.2700e-003**	**0.3945**	**0.1038**	**3.0100e-003**	**0.1068**		**416.3539**	**416.3539**	**0.0213**		**416.8021**

3.7 Architectural Coating - 2017

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**23.6099**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1310	0.1646	2.0546	4.9600e-003	0.3912	3.1500e-003	0.3944	0.1038	2.9000e-003	0.1067		400.4201	400.4201	0.0197		400.8338
Total	**0.1310**	**0.1646**	**2.0546**	**4.9600e-003**	**0.3912**	**3.1500e-003**	**0.3944**	**0.1038**	**2.9000e-003**	**0.1067**		**400.4201**	**400.4201**	**0.0197**		**400.8338**

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**23.6099**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1310	0.1646	2.0546	4.9600e-003	0.3912	3.1500e-003	0.3944	0.1038	2.9000e-003	0.1067		400.4201	400.4201	0.0197		400.8338
Total	**0.1310**	**0.1646**	**2.0546**	**4.9600e-003**	**0.3912**	**3.1500e-003**	**0.3944**	**0.1038**	**2.9000e-003**	**0.1067**		**400.4201**	**400.4201**	**0.0197**		**400.8338**

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	4.5523	9.5378	40.8845	0.0916	6.0098	0.1303	6.1402	1.6058	0.1200	1.7257		7,793.1071	7,793.1071	0.3076		7,799.5667
Unmitigated	4.5523	9.5378	40.8845	0.0916	6.0098	0.1303	6.1402	1.6058	0.1200	1.7257		7,793.1071	7,793.1071	0.3076		7,799.5667

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,537.92	1,537.92	1537.92	2,834,050	2,834,050
Total	1,537.92	1,537.92	1,537.92	2,834,050	2,834,050

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
Hotel	12.80	6.50	5.30	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	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	0.1272	1.1568	0.9717	6.9400e-003		0.0879	0.0879		0.0879	0.0879		1,388.1265	1,388.1265	0.0266	0.0255	1,396.5744
NaturalGas Unmitigated	0.1455	1.3230	1.1113	7.9400e-003		0.1006	0.1006		0.1006	0.1006		1,587.6269	1,587.6269	0.0304	0.0291	1,597.2889

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					
Hotel	13494.8	0.1455	1.3230	1.1113	7.9400e-003		0.1006	0.1006		0.1006	0.1006		1,587.6269	1,587.6269	0.0304	0.0291	1,597.2889
Total		**0.1455**	**1.3230**	**1.1113**	**7.9400e-003**		**0.1006**	**0.1006**		**0.1006**	**0.1006**		**1,587.6269**	**1,587.6269**	**0.0304**	**0.0291**	**1,597.2889**

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					
Hotel	11.7991	0.1272	1.1568	0.9717	6.9400e-003		0.0879	0.0879		0.0879	0.0879		1,388.1265	1,388.1265	0.0266	0.0255	1,396.5744
Total		**0.1272**	**1.1568**	**0.9717**	**6.9400e-003**		**0.0879**	**0.0879**		**0.0879**	**0.0879**		**1,388.1265**	**1,388.1265**	**0.0266**	**0.0255**	**1,396.5744**

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	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Unmitigated	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667

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	1.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8900e-003	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Total	**5.1508**	**2.8000e-004**	**0.0300**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0630**	**0.0630**	**1.8000e-004**		**0.0667**

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	1.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8900e-003	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Total	**5.1508**	**2.8000e-004**	**0.0300**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0630**	**0.0630**	**1.8000e-004**		**0.0667**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

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 Vegetation

Marina del Rey Marriott Courtyard and Residence Inn (Parcel 9U)

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	288.00	Room	2.20	196,867.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use: Hotel, 288 rooms, 2.2 lot acreage.

Construction Phase - Site Prep: Apr-Jun 2015; Grading: Apr-Jun 2015; Building Construction: Jul 2015-Apr 2017; Paving: Jul 2015; Coating: Jul 2016-Apr 2017.

Off-road Equipment - Architectural Coating: 1 air compressor.

Off-road Equipment - Building Construction: 1 bore/drill rig, 1 crane, 2 crawler tractors, 1 off-highway tractor, 2 rough terrain forklifts, 2 rubber tired dozers, 2 tractors/loaders/backhoes.

Off-road Equipment - No demolition.

Off-road Equipment - Mass Grading: 1 rubber tired dozer, 1 tractor/loader/backhoe.

Off-road Equipment - Paving: 4 cement/mortar mixers, 1 paver, 1 paving equipment, 1 roller, 1 tractor/loader/backhoe

Off-road Equipment - Site Prep/Fine Grading: 1 excavator, 3 tractors/loaders/backhoes.

Grading - Acres Disturbed: 2.2 acres. Material Exported: 28,000 cy.

Architectural Coating -

Vehicle Trips - Trip Rate: 5.34 trips/room. Trip Distances: C-C 6.5 miles, C-W 12.8 miles, C-NW 5.3 miles (land use transportation reduction).

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - Construction fugitive dust control measures: water exposed area three times daily and apply soil stabilizers/water to unpaved roads (61% PM10 and PM2.5 control).
Energy Mitigation - Energy Efficiency: Title 24 improvement of 15%, efficient appliances.

Water Mitigation - WAter: Low flow toilets.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	196.00
tblConstructionPhase	NumDays	220.00	458.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	65.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	65.00
tblConstructionPhase	PhaseEndDate	5/2/2016	4/1/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	4/1/2017
tblConstructionPhase	PhaseEndDate	9/29/2015	6/30/2015
tblConstructionPhase	PhaseEndDate	5/3/2017	7/31/2015
tblConstructionPhase	PhaseEndDate	4/1/2015	6/30/2015
tblConstructionPhase	PhaseStartDate	8/1/2015	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	4/1/2015
tblConstructionPhase	PhaseStartDate	4/2/2017	7/1/2015
tblConstructionPhase	PhaseStartDate	1/1/2015	4/1/2015
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	MaterialExported	0.00	28,000.00
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	418,176.00	196,867.00

tblLandUse	LotAcreage	9.60	2.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	32.00	69.00
tblTripsAndVMT	WorkerTripNumber	83.00	176.00
tblTripsAndVMT	WorkerTripNumber	17.00	35.00

tblVehicleTrips	CC_TL	8.40	6.50
tblVehicleTrips	CNW_TL	6.90	5.30
tblVehicleTrips	CW_TL	16.60	12.80
tblVehicleTrips	ST_TR	8.19	5.34
tblVehicleTrips	SU_TR	5.95	5.34
tblVehicleTrips	WD_TR	8.17	5.34

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					
2015	9.3293	97.2420	75.5085	0.1177	5.3255	4.5575	7.7033	2.4901	4.1976	4.9014	0.0000	11,738.6407	11,738.6407	2.4804	0.0000	11,790.7297
2016	30.8930	77.9885	64.1126	0.1055	2.7897	3.5138	6.3035	0.7483	3.2484	3.9967	0.0000	10,327.1795	10,327.1795	2.0427	0.0000	10,370.0765
2017	30.3947	72.7017	61.0110	0.1055	2.7898	3.2385	6.0283	0.7483	2.9933	3.7416	0.0000	10,117.6475	10,117.6475	2.0294	0.0000	10,160.2652
Total	**70.6170**	**247.9322**	**200.6321**	**0.3288**	**10.9051**	**11.3097**	**20.0352**	**3.9867**	**10.4393**	**12.6397**	**0.0000**	**32,183.4676**	**32,183.4676**	**6.5526**	**0.0000**	**32,321.0713**

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					
2015	9.3293	97.2420	75.5085	0.1177	2.7718	4.5575	7.1794	1.1603	4.1976	4.9014	0.0000	11,738.6406	11,738.6406	2.4804	0.0000	11,790.7297
2016	30.8930	77.9885	64.1126	0.1055	2.7897	3.5138	6.3035	0.7483	3.2484	3.9967	0.0000	10,327.1795	10,327.1795	2.0427	0.0000	10,370.0765
2017	30.3947	72.7017	61.0110	0.1055	2.7898	3.2385	6.0283	0.7483	2.9933	3.7416	0.0000	10,117.6475	10,117.6475	2.0294	0.0000	10,160.2652
Total	**70.6170**	**247.9322**	**200.6321**	**0.3288**	**8.3513**	**11.3097**	**19.5112**	**2.6570**	**10.4393**	**12.6397**	**0.0000**	**32,183.4676**	**32,183.4676**	**6.5526**	**0.0000**	**32,321.0713**

	ROG	NOx	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**	**23.42**	**0.00**	**2.62**	**33.35**	**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	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Energy	0.1455	1.3230	1.1113	7.9400e-003		0.1006	0.1006		0.1006	0.1006		1,587.6269	1,587.6269	0.0304	0.0291	1,597.2889
Mobile	4.7506	9.9889	41.9697	0.0871	6.0098	0.1312	6.1410	1.6058	0.1207	1.7265		7,418.2277	7,418.2277	0.3080		7,424.6960
Total	**10.0470**	**11.3122**	**43.1110**	**0.0950**	**6.0098**	**0.2318**	**6.2417**	**1.6058**	**0.2214**	**1.8272**		**9,005.9176**	**9,005.9176**	**0.3386**	**0.0291**	**9,022.0516**

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	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Energy	0.1272	1.1568	0.9717	6.9400e-003		0.0879	0.0879		0.0879	0.0879		1,388.1265	1,388.1265	0.0266	0.0255	1,396.5744
Mobile	4.7506	9.9889	41.9697	0.0871	6.0098	0.1312	6.1410	1.6058	0.1207	1.7265		7,418.2277	7,418.2277	0.3080		7,424.6960
Total	**10.0287**	**11.1459**	**42.9714**	**0.0940**	**6.0098**	**0.2192**	**6.2290**	**1.6058**	**0.2088**	**1.8145**		**8,806.4172**	**8,806.4172**	**0.3348**	**0.0255**	**8,821.3372**

	ROG	NOx	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	**0.18**	**1.47**	**0.32**	**1.05**	**0.00**	**5.45**	**0.20**	**0.00**	**5.71**	**0.69**	**0.00**	**2.22**	**2.22**	**1.13**	**12.57**	**2.22**

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	1/1/2015	12/31/2014	5	0	
2	Site Preparation	Site Preparation	4/1/2015	6/30/2015	5	65	
3	Grading	Grading	4/1/2015	6/30/2015	5	65	
4	Building Construction	Building Construction	7/1/2015	4/1/2017	5	458	
5	Paving	Paving	7/1/2015	7/31/2015	5	23	
6	Architectural Coating	Architectural Coating	7/1/2016	4/1/2017	5	196	

Acres of Grading (Site Preparation Phase): 2.2

Acres of Grading (Grading Phase): 2.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 295,301; Non-Residential Outdoor: 98,434 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Excavators	1	8.00	162	0.38
Site Preparation	Graders	0	0.00	174	0.41
Site Preparation	Scrapers	0	0.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	0	0.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	205	0.50
Building Construction	Cranes	0	0.00	226	0.29

Building Construction	Crawler Tractors	2	8.00	208	0.43
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Off-Highway Tractors	1	8.00	122	0.44
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Dozers	2	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	3,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	176.00	69.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

3.3 Site Preparation - 2015

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					0.0359	0.0000	0.0359	3.8800e-003	0.0000	3.8800e-003			0.0000			0.0000
Off-Road	1.3626	13.8742	9.8064	0.0135		0.9453	0.9453		0.8697	0.8697		1,415.2102	1,415.2102	0.4225		1,424.0826
Total	**1.3626**	**13.8742**	**9.8064**	**0.0135**	**0.0359**	**0.9453**	**0.9812**	**3.8800e-003**	**0.8697**	**0.8736**		**1,415.2102**	**1,415.2102**	**0.4225**		**1,424.0826**

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	0.0472	0.0634	0.6625	1.3300e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		115.5644	115.5644	6.6300e-003		115.7036
Total	**0.0472**	**0.0634**	**0.6625**	**1.3300e-003**	**0.1118**	**9.8000e-004**	**0.1128**	**0.0296**	**9.0000e-004**	**0.0306**		**115.5644**	**115.5644**	**6.6300e-003**		**115.7036**

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					0.0140	0.0000	0.0140	1.5100e-003	0.0000	1.5100e-003			0.0000			0.0000
Off-Road	1.3626	13.8742	9.8064	0.0135		0.9453	0.9453		0.8697	0.8697	0.0000	1,415.2102	1,415.2102	0.4225		1,424.0826
Total	**1.3626**	**13.8742**	**9.8064**	**0.0135**	**0.0140**	**0.9453**	**0.9593**	**1.5100e-003**	**0.8697**	**0.8712**	**0.0000**	**1,415.2102**	**1,415.2102**	**0.4225**		**1,424.0826**

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	0.0472	0.0634	0.6625	1.3300e-003	0.1118	9.8000e-004	0.1128	0.0296	9.0000e-004	0.0306		115.5644	115.5644	6.6300e-003		115.7036
Total	**0.0472**	**0.0634**	**0.6625**	**1.3300e-003**	**0.1118**	**9.8000e-004**	**0.1128**	**0.0296**	**9.0000e-004**	**0.0306**		**115.5644**	**115.5644**	**6.6300e-003**		**115.7036**

3.4 Grading - 2015

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					4.1506	0.0000	4.1506	2.1761	0.0000	2.1761			0.0000			0.0000
Off-Road	1.9038	20.3933	15.2213	0.0143		1.1414	1.1414		1.0501	1.0501		1,507.0346	1,507.0346	0.4499		1,516.4828
Total	**1.9038**	**20.3933**	**15.2213**	**0.0143**	**4.1506**	**1.1414**	**5.2920**	**2.1761**	**1.0501**	**3.2261**		**1,507.0346**	**1,507.0346**	**0.4499**		**1,516.4828**

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	1.1128	17.5010	12.8494	0.0397	0.9379	0.2894	1.2272	0.2568	0.2662	0.5230		4,041.9753	4,041.9753	0.0324		4,042.6558
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	0.0378	0.0507	0.5300	1.0600e-003	0.0894	7.9000e-004	0.0902	0.0237	7.2000e-004	0.0244		92.4515	92.4515	5.3000e-003		92.5628
Total	**1.1506**	**17.5517**	**13.3794**	**0.0408**	**1.0273**	**0.2902**	**1.3174**	**0.2805**	**0.2669**	**0.5474**		**4,134.4268**	**4,134.4268**	**0.0377**		**4,135.2186**

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					1.6187	0.0000	1.6187	0.8487	0.0000	0.8487			0.0000			0.0000
Off-Road	1.9038	20.3933	15.2213	0.0143		1.1414	1.1414		1.0501	1.0501	0.0000	1,507.0346	1,507.0346	0.4499		1,516.4828
Total	**1.9038**	**20.3933**	**15.2213**	**0.0143**	**1.6187**	**1.1414**	**2.7601**	**0.8487**	**1.0501**	**1.8987**	**0.0000**	**1,507.0346**	**1,507.0346**	**0.4499**		**1,516.4828**

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	1.1128	17.5010	12.8494	0.0397	0.9379	0.2894	1.2272	0.2568	0.2662	0.5230		4,041.9753	4,041.9753	0.0324		4,042.6558
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	0.0378	0.0507	0.5300	1.0600e-003	0.0894	7.9000e-004	0.0902	0.0237	7.2000e-004	0.0244		92.4515	92.4515	5.3000e-003		92.5628
Total	**1.1506**	**17.5517**	**13.3794**	**0.0408**	**1.0273**	**0.2902**	**1.3174**	**0.2805**	**0.2669**	**0.5474**		**4,134.4268**	**4,134.4268**	**0.0377**		**4,135.2186**

3.5 Building Construction - 2015

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	5.9324	71.5404	42.5031	0.0597		3.3827	3.3827		3.1120	3.1120		6,264.4787	6,264.4787	1.8702		6,303.7531
Total	**5.9324**	**71.5404**	**42.5031**	**0.0597**		**3.3827**	**3.3827**		**3.1120**	**3.1120**		**6,264.4787**	**6,264.4787**	**1.8702**		**6,303.7531**

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	0.7163	6.9567	8.8715	0.0149	0.4311	0.1187	0.5498	0.1228	0.1091	0.2319		1,509.5978	1,509.5978	0.0123		1,509.8561
Worker	0.8315	1.1161	11.6608	0.0234	1.9673	0.0173	1.9846	0.5217	0.0159	0.5376		2,033.9329	2,033.9329	0.1166		2,036.3824
Total	**1.5477**	**8.0727**	**20.5322**	**0.0383**	**2.3984**	**0.1360**	**2.5343**	**0.6445**	**0.1250**	**0.7695**		**3,543.5307**	**3,543.5307**	**0.1289**		**3,546.2385**

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	5.9324	71.5404	42.5031	0.0597		3.3827	3.3827		3.1120	3.1120	0.0000	6,264.4787	6,264.4787	1.8702		6,303.7531
Total	**5.9324**	**71.5404**	**42.5031**	**0.0597**		**3.3827**	**3.3827**		**3.1120**	**3.1120**	**0.0000**	**6,264.4787**	**6,264.4787**	**1.8702**		**6,303.7531**

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	0.7163	6.9567	8.8715	0.0149	0.4311	0.1187	0.5498	0.1228	0.1091	0.2319		1,509.5978	1,509.5978	0.0123		1,509.8561
Worker	0.8315	1.1161	11.6608	0.0234	1.9673	0.0173	1.9846	0.5217	0.0159	0.5376		2,033.9329	2,033.9329	0.1166		2,036.3824
Total	**1.5477**	**8.0727**	**20.5322**	**0.0383**	**2.3984**	**0.1360**	**2.5343**	**0.6445**	**0.1250**	**0.7695**		**3,543.5307**	**3,543.5307**	**0.1289**		**3,546.2385**

3.5 Building Construction - 2016

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	5.7172	68.2659	41.3499	0.0596		3.1992	3.1992		2.9433	2.9433		6,198.6655	6,198.6655	1.8697		6,237.9300
Total	**5.7172**	**68.2659**	**41.3499**	**0.0596**		**3.1992**	**3.1992**		**2.9433**	**2.9433**		**6,198.6655**	**6,198.6655**	**1.8697**		**6,237.9300**

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	0.6318	6.1437	8.2609	0.0149	0.4312	0.0983	0.5295	0.1228	0.0904	0.2132		1,492.9492	1,492.9492	0.0111		1,493.1827
Worker	0.7490	1.0065	10.5248	0.0234	1.9673	0.0164	1.9837	0.5217	0.0151	0.5369		1,963.6235	1,963.6235	0.1073		1,965.8774
Total	**1.3808**	**7.1503**	**18.7857**	**0.0383**	**2.3985**	**0.1148**	**2.5132**	**0.6445**	**0.1055**	**0.7501**		**3,456.5726**	**3,456.5726**	**0.1185**		**3,459.0601**

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	5.7172	68.2659	41.3499	0.0596		3.1992	3.1992		2.9433	2.9433	0.0000	6,198.6655	6,198.6655	1.8697		6,237.9299
Total	**5.7172**	**68.2659**	**41.3499**	**0.0596**		**3.1992**	**3.1992**		**2.9433**	**2.9433**	**0.0000**	**6,198.6655**	**6,198.6655**	**1.8697**		**6,237.9299**

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	0.6318	6.1437	8.2609	0.0149	0.4312	0.0983	0.5295	0.1228	0.0904	0.2132		1,492.9492	1,492.9492	0.0111		1,493.1827
Worker	0.7490	1.0065	10.5248	0.0234	1.9673	0.0164	1.9837	0.5217	0.0151	0.5369		1,963.6235	1,963.6235	0.1073		1,965.8774
Total	**1.3808**	**7.1503**	**18.7857**	**0.0383**	**2.3985**	**0.1148**	**2.5132**	**0.6445**	**0.1055**	**0.7501**		**3,456.5726**	**3,456.5726**	**0.1185**		**3,459.0601**

3.5 Building Construction - 2017

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	5.4022	63.8363	39.9230	0.0597		2.9585	2.9585		2.7218	2.7218		6,103.7340	6,103.7340	1.8702		6,143.0076
Total	**5.4022**	**63.8363**	**39.9230**	**0.0597**		**2.9585**	**2.9585**		**2.7218**	**2.7218**		**6,103.7340**	**6,103.7340**	**1.8702**		**6,143.0076**

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	0.5771	5.5909	7.8424	0.0149	0.4314	0.0877	0.5190	0.1229	0.0806	0.2035		1,468.7607	1,468.7607	0.0108		1,468.9869
Worker	0.6719	0.9088	9.4903	0.0234	1.9673	0.0158	1.9831	0.5217	0.0146	0.5363		1,888.2087	1,888.2087	0.0991		1,890.2889
Total	**1.2489**	**6.4996**	**17.3326**	**0.0382**	**2.3986**	**0.1035**	**2.5021**	**0.6446**	**0.0952**	**0.7398**		**3,356.9694**	**3,356.9694**	**0.1098**		**3,359.2758**

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	5.4022	63.8363	39.9230	0.0597		2.9585	2.9585		2.7218	2.7218	0.0000	6,103.7340	6,103.7340	1.8702		6,143.0076
Total	**5.4022**	**63.8363**	**39.9230**	**0.0597**		**2.9585**	**2.9585**		**2.7218**	**2.7218**	**0.0000**	**6,103.7340**	**6,103.7340**	**1.8702**		**6,143.0076**

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	0.5771	5.5909	7.8424	0.0149	0.4314	0.0877	0.5190	0.1229	0.0806	0.2035		1,468.7607	1,468.7607	0.0108		1,468.9869
Worker	0.6719	0.9088	9.4903	0.0234	1.9673	0.0158	1.9831	0.5217	0.0146	0.5363		1,888.2087	1,888.2087	0.0991		1,890.2889
Total	**1.2489**	**6.4996**	**17.3326**	**0.0382**	**2.3986**	**0.1035**	**2.5021**	**0.6446**	**0.0952**	**0.7398**		**3,356.9694**	**3,356.9694**	**0.1098**		**3,359.2758**

3.6 Paving - 2015

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	1.7547	17.5020	11.1481	0.0171		1.0369	1.0369		0.9588	0.9588		1,699.5025	1,699.5025	0.4680		1,709.3310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7547**	**17.5020**	**11.1481**	**0.0171**		**1.0369**	**1.0369**		**0.9588**	**0.9588**		**1,699.5025**	**1,699.5025**	**0.4680**		**1,709.3310**

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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	**0.0945**	**0.1268**	**1.3251**	**2.6600e-003**	**0.2236**	**1.9700e-003**	**0.2255**	**0.0593**	**1.8000e-003**	**0.0611**		**231.1287**	**231.1287**	**0.0133**		**231.4071**

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	1.7547	17.5020	11.1481	0.0171		1.0369	1.0369		0.9588	0.9588	0.0000	1,699.5024	1,699.5024	0.4680		1,709.3310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7547**	**17.5020**	**11.1481**	**0.0171**		**1.0369**	**1.0369**		**0.9588**	**0.9588**	**0.0000**	**1,699.5024**	**1,699.5024**	**0.4680**		**1,709.3310**

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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	**0.0945**	**0.1268**	**1.3251**	**2.6600e-003**	**0.2236**	**1.9700e-003**	**0.2255**	**0.0593**	**1.8000e-003**	**0.0611**		**231.1287**	**231.1287**	**0.0133**		**231.4071**

3.7 Architectural Coating - 2016

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**23.6460**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.1490	0.2002	2.0930	4.6500e-003	0.3912	3.2700e-003	0.3945	0.1038	3.0100e-003	0.1068		390.4933	390.4933	0.0213		390.9415
Total	**0.1490**	**0.2002**	**2.0930**	**4.6500e-003**	**0.3912**	**3.2700e-003**	**0.3945**	**0.1038**	**3.0100e-003**	**0.1068**		**390.4933**	**390.4933**	**0.0213**		**390.9415**

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**23.6460**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.1490	0.2002	2.0930	4.6500e-003	0.3912	3.2700e-003	0.3945	0.1038	3.0100e-003	0.1068		390.4933	390.4933	0.0213		390.9415
Total	**0.1490**	**0.2002**	**2.0930**	**4.6500e-003**	**0.3912**	**3.2700e-003**	**0.3945**	**0.1038**	**3.0100e-003**	**0.1068**		**390.4933**	**390.4933**	**0.0213**		**390.9415**

3.7 Architectural Coating - 2017

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**23.6099**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1336	0.1807	1.8873	4.6400e-003	0.3912	3.1500e-003	0.3944	0.1038	2.9000e-003	0.1067		375.4961	375.4961	0.0197		375.9097
Total	**0.1336**	**0.1807**	**1.8873**	**4.6400e-003**	**0.3912**	**3.1500e-003**	**0.3944**	**0.1038**	**2.9000e-003**	**0.1067**		**375.4961**	**375.4961**	**0.0197**		**375.9097**

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	23.2776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**23.6099**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1336	0.1807	1.8873	4.6400e-003	0.3912	3.1500e-003	0.3944	0.1038	2.9000e-003	0.1067		375.4961	375.4961	0.0197		375.9097
Total	**0.1336**	**0.1807**	**1.8873**	**4.6400e-003**	**0.3912**	**3.1500e-003**	**0.3944**	**0.1038**	**2.9000e-003**	**0.1067**		**375.4961**	**375.4961**	**0.0197**		**375.9097**

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	4.7506	9.9889	41.9697	0.0871	6.0098	0.1312	6.1410	1.6058	0.1207	1.7265		7,418.2277	7,418.2277	0.3080		7,424.6960
Unmitigated	4.7506	9.9889	41.9697	0.0871	6.0098	0.1312	6.1410	1.6058	0.1207	1.7265		7,418.2277	7,418.2277	0.3080		7,424.6960

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,537.92	1,537.92	1537.92	2,834,050	2,834,050
Total	1,537.92	1,537.92	1,537.92	2,834,050	2,834,050

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
Hotel	12.80	6.50	5.30	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	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	0.1272	1.1568	0.9717	6.9400e-003		0.0879	0.0879		0.0879	0.0879		1,388.1265	1,388.1265	0.0266	0.0255	1,396.5744
NaturalGas Unmitigated	0.1455	1.3230	1.1113	7.9400e-003		0.1006	0.1006		0.1006	0.1006		1,587.6269	1,587.6269	0.0304	0.0291	1,597.2889

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					
Hotel	13494.8	0.1455	1.3230	1.1113	7.9400e-003		0.1006	0.1006		0.1006	0.1006		1,587.6269	1,587.6269	0.0304	0.0291	1,597.2889
Total		**0.1455**	**1.3230**	**1.1113**	**7.9400e-003**		**0.1006**	**0.1006**		**0.1006**	**0.1006**		**1,587.6269**	**1,587.6269**	**0.0304**	**0.0291**	**1,597.2889**

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					
Hotel	11.7991	0.1272	1.1568	0.9717	6.9400e-003		0.0879	0.0879		0.0879	0.0879		1,388.1265	1,388.1265	0.0266	0.0255	1,396.5744
Total		**0.1272**	**1.1568**	**0.9717**	**6.9400e-003**		**0.0879**	**0.0879**		**0.0879**	**0.0879**		**1,388.1265**	**1,388.1265**	**0.0266**	**0.0255**	**1,396.5744**

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	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Unmitigated	5.1508	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667

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	1.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8900e-003	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Total	**5.1508**	**2.8000e-004**	**0.0300**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0630**	**0.0630**	**1.8000e-004**		**0.0667**

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	1.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8900e-003	2.8000e-004	0.0300	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0630	0.0630	1.8000e-004		0.0667
Total	**5.1508**	**2.8000e-004**	**0.0300**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0630**	**0.0630**	**1.8000e-004**		**0.0667**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

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 Vegetation

Marina del Rey Marriott Courtyard and Residence Inn (Parcel 9U)

South Coast Air Basin, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Bore/Drill Rigs	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	0	No Change	0.00
Cranes	Diesel	No Change	0	0	No Change	0.00
Crawler Tractors	Diesel	No Change	0	2	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	0	No Change	0.00
Generator Sets	Diesel	No Change	0	0	No Change	0.00
Graders	Diesel	No Change	0	0	No Change	0.00
Off-Highway Tractors	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00

Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rough Terrain Forklifts	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Scrapers	Diesel	No Change	0	0	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Welders	Diesel	No Change	0	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	3.49300E-002	2.26390E-001	1.84110E-001	2.90000E-004	1.85100E-002	1.85100E-002	0.00000E+000	2.50219E+001	2.50219E+001	2.85000E-003	0.00000E+000	2.50817E+001
Bore/Drill Rigs	8.10600E-002	1.22946E+000	4.72640E-001	2.00000E-003	3.62300E-002	3.33400E-002	0.00000E+000	1.88627E+002	1.88627E+002	5.68500E-002	0.00000E+000	1.89821E+002
Cement and Mortar Mixers	2.71000E-003	1.70400E-002	1.41800E-002	3.00000E-005	7.00000E-004	7.00000E-004	0.00000E+000	2.10807E+000	2.10807E+000	2.20000E-004	0.00000E+000	2.11267E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Crawler Tractors	3.22710E-001	4.35953E+000	1.29900E+000	3.53000E-003	1.67870E-001	1.54440E-001	0.00000E+000	3.32876E+002	3.32876E+002	1.00330E-001	0.00000E+000	3.34983E+002
Excavators	1.35400E-002	1.58110E-001	1.11770E-001	1.70000E-004	7.80000E-003	7.18000E-003	0.00000E+000	1.63797E+001	1.63797E+001	4.89000E-003	0.00000E+000	1.64824E+001
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Off-Highway Tractors	8.43600E-002	9.76370E-001	7.09250E-001	1.06000E-003	4.95400E-002	4.55800E-002	0.00000E+000	9.98905E+001	9.98905E+001	3.01100E-002	0.00000E+000	1.00523E+002
Pavers	5.21000E-003	5.89600E-002	3.31700E-002	5.00000E-005	2.95000E-003	2.72000E-003	0.00000E+000	4.94250E+000	4.94250E+000	1.48000E-003	0.00000E+000	4.97348E+000
Paving Equipment	3.90000E-003	4.71300E-002	2.94600E-002	5.00000E-005	2.30000E-003	2.12000E-003	0.00000E+000	4.39080E+000	4.39080E+000	1.31000E-003	0.00000E+000	4.41833E+000
Rollers	4.21000E-003	3.86700E-002	2.34900E-002	3.00000E-005	2.88000E-003	2.65000E-003	0.00000E+000	2.87234E+000	2.87234E+000	8.60000E-004	0.00000E+000	2.89035E+000
Rough Terrain Forklifts	9.94100E-002	1.26236E+000	1.08092E+000	1.58000E-003	7.06100E-002	6.49600E-002	0.00000E+000	1.48727E+002	1.48727E+002	4.48300E-002	0.00000E+000	1.49668E+002
Rubber Tired Dozers	6.09990E-001	6.84444E+000	5.18833E+000	4.36000E-003	3.18700E-001	2.93210E-001	0.00000E+000	4.11679E+002	4.11679E+002	1.24000E-001	0.00000E+000	4.14283E+002
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	2.12440E-001	2.02794E+000	1.47826E+000	1.91000E-003	1.57040E-001	1.44470E-001	0.00000E+000	1.80281E+002	1.80281E+002	5.42100E-002	0.00000E+000	1.81420E+002
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					

Air Compressors	3.49300E-002	2.26390E-001	1.84110E-001	2.90000E-004	1.85100E-002	1.85100E-002	0.00000E+000	2.50219E+001	2.50219E+001	2.85000E-003	0.00000E+000	2.50817E+001
Bore/Drill Rigs	8.10600E-002	1.22946E+000	4.72630E-001	2.00000E-003	3.62300E-002	3.33400E-002	0.00000E+000	1.88627E+002	1.88627E+002	5.68500E-002	0.00000E+000	1.89821E+002
Cement and Mortar Mixers	2.71000E-003	1.70400E-002	1.41800E-002	3.00000E-005	7.00000E-004	7.00000E-004	0.00000E+000	2.10807E+000	2.10807E+000	2.20000E-004	0.00000E+000	2.11267E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Crawler Tractors	3.22710E-001	4.35953E+000	1.29900E+000	3.53000E-003	1.67870E-001	1.54440E-001	0.00000E+000	3.32876E+002	3.32876E+002	1.00330E-001	0.00000E+000	3.34982E+002
Excavators	1.35400E-002	1.58110E-001	1.11770E-001	1.70000E-004	7.80000E-003	7.18000E-003	0.00000E+000	1.63797E+001	1.63797E+001	4.89000E-003	0.00000E+000	1.64824E+001
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Off-Highway Tractors	8.43600E-002	9.76370E-001	7.09250E-001	1.06000E-003	4.95400E-002	4.55800E-002	0.00000E+000	9.98904E+001	9.98904E+001	3.01100E-002	0.00000E+000	1.00523E+002
Pavers	5.21000E-003	5.89600E-002	3.31700E-002	5.00000E-005	2.95000E-003	2.72000E-003	0.00000E+000	4.94249E+000	4.94249E+000	1.48000E-003	0.00000E+000	4.97348E+000
Paving Equipment	3.90000E-003	4.71300E-002	2.94600E-002	5.00000E-005	2.30000E-003	2.12000E-003	0.00000E+000	4.39080E+000	4.39080E+000	1.31000E-003	0.00000E+000	4.41832E+000
Rollers	4.21000E-003	3.86700E-002	2.34900E-002	3.00000E-005	2.88000E-003	2.65000E-003	0.00000E+000	2.87234E+000	2.87234E+000	8.60000E-004	0.00000E+000	2.89035E+000
Rough Terrain Forklifts	9.94100E-002	1.26235E+000	1.08092E+000	1.58000E-003	7.06100E-002	6.49600E-002	0.00000E+000	1.48727E+002	1.48727E+002	4.48300E-002	0.00000E+000	1.49668E+002
Rubber Tired Dozers	6.09990E-001	6.84443E+000	5.18832E+000	4.36000E-003	3.18700E-001	2.93210E-001	0.00000E+000	4.11678E+002	4.11678E+002	1.24000E-001	0.00000E+000	4.14282E+002
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	2.12440E-001	2.02794E+000	1.47826E+000	1.91000E-003	1.57040E-001	1.44470E-001	0.00000E+000	1.80281E+002	1.80281E+002	5.42100E-002	0.00000E+000	1.81419E+002
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19895E-006	1.19895E-006	0.00000E+000	0.00000E+000	1.19609E-006
Bore/Drill Rigs	0.00000E+000	0.00000E+000	2.11578E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21934E-006	1.21934E-006	0.00000E+000	0.00000E+000	1.21167E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Crawler Tractors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20165E-006	1.20165E-006	0.00000E+000	0.00000E+000	1.19409E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22102E-006	1.22102E-006	0.00000E+000	0.00000E+000	1.21342E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Off-Highway Tractors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20132E-006	1.20132E-006	0.00000E+000	0.00000E+000	1.19376E-006

Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.02327E-006	2.02327E-006	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.26330E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rough Terrain Forklifts	0.00000E+000	7.92167E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21027E-006	1.21027E-006	0.00000E+000	0.00000E+000	1.13585E-006
Rubber Tired Dozers	0.00000E+000	1.46104E-006	1.92740E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19025E-006	1.19025E-006	0.00000E+000	0.00000E+000	1.20691E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16485E-006	1.16485E-006	0.00000E+000	0.00000E+000	1.21266E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	61.00	PM2.5 Reduction	61.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.04	0.01	0.04	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.54	0.15	0.54	0.15	0.00	0.00
Grading	Fugitive Dust	0.13	0.07	0.05	0.03	0.61	0.61
Grading	Roads	0.03	0.01	0.03	0.01	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.62	0.62
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	7.06	7.04	7.03	7.06
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	12.58	12.57	12.57	12.41	12.59	12.59	0.00	12.57	12.57	12.70	12.66	12.57
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	6.60	6.03	6.07	6.61	6.61	6.17
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			

No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher	Hotel	30.00
DishWasher	Hotel	15.00
Fan	Hotel	50.00
Refrigerator	Hotel	15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services	
Percent Reduction in Waste Disposed	

Marina del Rey Marriott Courtyard and Residence Inn (Parcel 9U)

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	288.00	Room	2.20	196,867.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use: Hotel, 288 rooms, 2.2 lot acreage.

Construction Phase - Site Prep: Apr-Jun 2015; Grading: Apr-Jun 2015; Building Construction: Jul 2015-Apr 2017; Paving: Jul 2015; Coating: Jul 2016-Apr 2017.

Off-road Equipment - Architectural Coating: 1 air compressor.

Off-road Equipment - Building Construction: 1 bore/drill rig, 1 crane, 2 crawler tractors, 1 off-highway tractor, 2 rough terrain forklifts, 2 rubber tired dozers, 2 tractors/loaders/backhoes.

Off-road Equipment - No demolition.

Off-road Equipment - Mass Grading: 1 rubber tired dozer, 1 tractor/loader/backhoe.

Off-road Equipment - Paving: 4 cement/mortar mixers, 1 paver, 1 paving equipment, 1 roller, 1 tractor/loader/backhoe

Off-road Equipment - Site Prep/Fine Grading: 1 excavator, 3 tractors/loaders/backhoes.

Grading - Acres Disturbed: 2.2 acres. Material Exported: 28,000 cy.

Architectural Coating -

Vehicle Trips - Trip Rate: 5.34 trips/room. Trip Distances: C-C 6.5 miles, C-W 12.8 miles, C-NW 5.3 miles (land use transportation reduction).

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - Construction fugitive dust control measures: water exposed area three times daily and apply soil stabilizers/water to unpaved roads (61% PM10 and PM2.5 control).
Energy Mitigation - Energy Efficiency: Title 24 improvement of 15%, efficient appliances.

Water Mitigation - WAter: Low flow toilets.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	196.00
tblConstructionPhase	NumDays	220.00	458.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	65.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	65.00
tblConstructionPhase	PhaseEndDate	5/2/2016	4/1/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	4/1/2017
tblConstructionPhase	PhaseEndDate	9/29/2015	6/30/2015
tblConstructionPhase	PhaseEndDate	5/3/2017	7/31/2015
tblConstructionPhase	PhaseEndDate	4/1/2015	6/30/2015
tblConstructionPhase	PhaseStartDate	8/1/2015	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	4/1/2015
tblConstructionPhase	PhaseStartDate	4/2/2017	7/1/2015
tblConstructionPhase	PhaseStartDate	1/1/2015	4/1/2015
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	MaterialExported	0.00	28,000.00
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	418,176.00	196,867.00

tblLandUse	LotAcreage	9.60	2.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	32.00	69.00
tblTripsAndVMT	WorkerTripNumber	83.00	176.00
tblTripsAndVMT	WorkerTripNumber	17.00	35.00

tblVehicleTrips	CC_TL	8.40	6.50
tblVehicleTrips	CNW_TL	6.90	5.30
tblVehicleTrips	CW_TL	16.60	12.80
tblVehicleTrips	ST_TR	8.19	5.34
tblVehicleTrips	SU_TR	5.95	5.34
tblVehicleTrips	WD_TR	8.17	5.34

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					
2015	0.6548	7.1644	5.5717	9.0000e-003	0.3304	0.3214	0.6518	0.1233	0.2957	0.4190	0.0000	821.4833	821.4833	0.1517	0.0000	824.6696
2016	2.4763	10.0303	8.1162	0.0133	0.3325	0.4455	0.7780	0.0894	0.4109	0.5003	0.0000	1,187.8341	1,187.8341	0.2386	0.0000	1,192.8446
2017	0.9858	2.3674	1.9849	3.4500e-003	0.0890	0.1052	0.1943	0.0239	0.0973	0.1212	0.0000	299.5566	299.5566	0.0598	0.0000	300.8130
Total	**4.1168**	**19.5621**	**15.6727**	**0.0258**	**0.7520**	**0.8721**	**1.6241**	**0.2366**	**0.8039**	**1.0405**	**0.0000**	**2,308.8740**	**2,308.8740**	**0.4502**	**0.0000**	**2,318.3272**

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					
2015	0.6548	7.1644	5.5717	9.0000e-003	0.2475	0.3214	0.5688	0.0801	0.2957	0.3758	0.0000	821.4827	821.4827	0.1517	0.0000	824.6690
2016	2.4763	10.0303	8.1162	0.0133	0.3325	0.4455	0.7780	0.0894	0.4109	0.5003	0.0000	1,187.8333	1,187.8333	0.2386	0.0000	1,192.8437
2017	0.9858	2.3674	1.9849	3.4500e-003	0.0890	0.1052	0.1943	0.0239	0.0973	0.1212	0.0000	299.5564	299.5564	0.0598	0.0000	300.8128
Total	**4.1168**	**19.5621**	**15.6727**	**0.0258**	**0.6690**	**0.8721**	**1.5411**	**0.1934**	**0.8039**	**0.9973**	**0.0000**	**2,308.8723**	**2,308.8723**	**0.4502**	**0.0000**	**2,318.3255**

	ROG	NOx	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**	**11.04**	**0.00**	**5.11**	**18.27**	**0.00**	**4.15**	**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	tons/yr										MT/yr					
Area	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Energy	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	741.7124	741.7124	0.0271	9.3700e-003	745.1861
Mobile	0.8139	1.8523	7.6576	0.0160	1.0739	0.0238	1.0977	0.2874	0.0219	0.3092	0.0000	1,238.6014	1,238.6014	0.0508	0.0000	1,239.6672
Waste						0.0000	0.0000		0.0000	0.0000	32.0076	0.0000	32.0076	1.8916	0.0000	71.7311
Water						0.0000	0.0000		0.0000	0.0000	2.3177	29.8029	32.1206	0.2394	5.9000e-003	38.9789
Total	**1.7803**	**2.0938**	**7.8642**	**0.0175**	**1.0739**	**0.0421**	**1.1160**	**0.2874**	**0.0402**	**0.3276**	**34.3254**	**2,010.1238**	**2,044.4491**	**2.2089**	**0.0153**	**2,095.5709**

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	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Energy	0.0232	0.2111	0.1773	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	674.8808	674.8808	0.0249	8.4500e-003	678.0212
Mobile	0.8139	1.8523	7.6576	0.0160	1.0739	0.0238	1.0977	0.2874	0.0219	0.3092	0.0000	1,238.6014	1,238.6014	0.0508	0.0000	1,239.6672
Waste						0.0000	0.0000		0.0000	0.0000	32.0076	0.0000	32.0076	1.8916	0.0000	71.7311
Water						0.0000	0.0000		0.0000	0.0000	2.1648	28.0062	30.1710	0.2236	5.5100e-003	36.5738
Total	**1.7770**	**2.0635**	**7.8387**	**0.0173**	**1.0739**	**0.0398**	**1.1137**	**0.2874**	**0.0379**	**0.3253**	**34.1724**	**1,941.4955**	**1,975.6679**	**2.1908**	**0.0140**	**2,026.0009**

	ROG	NOx	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	**0.19**	**1.45**	**0.32**	**1.03**	**0.00**	**5.48**	**0.21**	**0.00**	**5.74**	**0.71**	**0.45**	**3.41**	**3.36**	**0.82**	**8.58**	**3.32**

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	1/1/2015	12/31/2014	5	0	
2	Site Preparation	Site Preparation	4/1/2015	6/30/2015	5	65	
3	Grading	Grading	4/1/2015	6/30/2015	5	65	
4	Building Construction	Building Construction	7/1/2015	4/1/2017	5	458	
5	Paving	Paving	7/1/2015	7/31/2015	5	23	
6	Architectural Coating	Architectural Coating	7/1/2016	4/1/2017	5	196	

Acres of Grading (Site Preparation Phase): 2.2

Acres of Grading (Grading Phase): 2.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 295,301; Non-Residential Outdoor: 98,434 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Excavators	1	8.00	162	0.38
Site Preparation	Graders	0	0.00	174	0.41
Site Preparation	Scrapers	0	0.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Grading	Graders	0	0.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	205	0.50
Building Construction	Cranes	0	0.00	226	0.29
Building Construction	Crawler Tractors	2	8.00	208	0.43
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Off-Highway Tractors	1	8.00	122	0.44
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Dozers	2	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	3,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	176.00	69.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

3.3 Site Preparation - 2015

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					1.1700e-003	0.0000	1.1700e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.4509	0.3187	4.4000e-004		0.0307	0.0307		0.0283	0.0283	0.0000	41.7254	41.7254	0.0125	0.0000	41.9870
Total	**0.0443**	**0.4509**	**0.3187**	**4.4000e-004**	**1.1700e-003**	**0.0307**	**0.0319**	**1.3000e-004**	**0.0283**	**0.0284**	**0.0000**	**41.7254**	**41.7254**	**0.0125**	**0.0000**	**41.9870**

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	1.4500e-003	2.1200e-003	0.0220	4.0000e-005	3.5700e-003	3.0000e-005	3.6000e-003	9.5000e-004	3.0000e-005	9.8000e-004	0.0000	3.4603	3.4603	2.0000e-004	0.0000	3.4644
Total	**1.4500e-003**	**2.1200e-003**	**0.0220**	**4.0000e-005**	**3.5700e-003**	**3.0000e-005**	**3.6000e-003**	**9.5000e-004**	**3.0000e-005**	**9.8000e-004**	**0.0000**	**3.4603**	**3.4603**	**2.0000e-004**	**0.0000**	**3.4644**

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					4.5000e-004	0.0000	4.5000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.4509	0.3187	4.4000e-004		0.0307	0.0307		0.0283	0.0283	0.0000	41.7253	41.7253	0.0125	0.0000	41.9869
Total	**0.0443**	**0.4509**	**0.3187**	**4.4000e-004**	**4.5000e-004**	**0.0307**	**0.0312**	**5.0000e-005**	**0.0283**	**0.0283**	**0.0000**	**41.7253**	**41.7253**	**0.0125**	**0.0000**	**41.9869**

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	1.4500e-003	2.1200e-003	0.0220	4.0000e-005	3.5700e-003	3.0000e-005	3.6000e-003	9.5000e-004	3.0000e-005	9.8000e-004	0.0000	3.4603	3.4603	2.0000e-004	0.0000	3.4644
Total	**1.4500e-003**	**2.1200e-003**	**0.0220**	**4.0000e-005**	**3.5700e-003**	**3.0000e-005**	**3.6000e-003**	**9.5000e-004**	**3.0000e-005**	**9.8000e-004**	**0.0000**	**3.4603**	**3.4603**	**2.0000e-004**	**0.0000**	**3.4644**

3.4 Grading - 2015

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					0.1349	0.0000	0.1349	0.0707	0.0000	0.0707	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0619	0.6628	0.4947	4.7000e-004		0.0371	0.0371		0.0341	0.0341	0.0000	44.4327	44.4327	0.0133	0.0000	44.7112
Total	**0.0619**	**0.6628**	**0.4947**	**4.7000e-004**	**0.1349**	**0.0371**	**0.1720**	**0.0707**	**0.0341**	**0.1049**	**0.0000**	**44.4327**	**44.4327**	**0.0133**	**0.0000**	**44.7112**

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	0.0356	0.5785	0.4108	1.2900e-003	0.0300	9.3900e-003	0.0394	8.2300e-003	8.6300e-003	0.0169	0.0000	119.3357	119.3357	9.5000e-004	0.0000	119.3556
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	1.1600e-003	1.7000e-003	0.0176	4.0000e-005	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.7682	2.7682	1.6000e-004	0.0000	2.7715
Total	**0.0368**	**0.5802**	**0.4285**	**1.3300e-003**	**0.0328**	**9.4200e-003**	**0.0423**	**8.9900e-003**	**8.6500e-003**	**0.0176**	**0.0000**	**122.1039**	**122.1039**	**1.1100e-003**	**0.0000**	**122.1271**

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					0.0526	0.0000	0.0526	0.0276	0.0000	0.0276	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0619	0.6628	0.4947	4.7000e-004		0.0371	0.0371		0.0341	0.0341	0.0000	44.4326	44.4326	0.0133	0.0000	44.7112
Total	**0.0619**	**0.6628**	**0.4947**	**4.7000e-004**	**0.0526**	**0.0371**	**0.0897**	**0.0276**	**0.0341**	**0.0617**	**0.0000**	**44.4326**	**44.4326**	**0.0133**	**0.0000**	**44.7112**

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	0.0356	0.5785	0.4108	1.2900e-003	0.0300	9.3900e-003	0.0394	8.2300e-003	8.6300e-003	0.0169	0.0000	119.3357	119.3357	9.5000e-004	0.0000	119.3556
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	1.1600e-003	1.7000e-003	0.0176	4.0000e-005	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.7682	2.7682	1.6000e-004	0.0000	2.7715
Total	**0.0368**	**0.5802**	**0.4285**	**1.3300e-003**	**0.0328**	**9.4200e-003**	**0.0423**	**8.9900e-003**	**8.6500e-003**	**0.0176**	**0.0000**	**122.1039**	**122.1039**	**1.1100e-003**	**0.0000**	**122.1271**

3.5 Building Construction - 2015

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	0.3915	4.7217	2.8052	3.9400e-003		0.2233	0.2233		0.2054	0.2054	0.0000	375.0806	375.0806	0.1120	0.0000	377.4321
Total	**0.3915**	**4.7217**	**2.8052**	**3.9400e-003**		**0.2233**	**0.2233**		**0.2054**	**0.2054**	**0.0000**	**375.0806**	**375.0806**	**0.1120**	**0.0000**	**377.4321**

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	0.0459	0.4681	0.5709	9.9000e-004	0.0280	7.7800e-003	0.0358	7.9900e-003	7.1500e-003	0.0152	0.0000	90.8269	90.8269	7.2000e-004	0.0000	90.8422
Worker	0.0518	0.0758	0.7878	1.5700e-003	0.1274	1.1400e-003	0.1286	0.0339	1.0500e-003	0.0349	0.0000	123.6746	123.6746	6.9800e-003	0.0000	123.8213
Total	**0.0977**	**0.5440**	**1.3587**	**2.5600e-003**	**0.1555**	**8.9200e-003**	**0.1644**	**0.0418**	**8.2000e-003**	**0.0500**	**0.0000**	**214.5015**	**214.5015**	**7.7000e-003**	**0.0000**	**214.6634**

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	0.3915	4.7217	2.8052	3.9400e-003		0.2233	0.2233		0.2054	0.2054	0.0000	375.0802	375.0802	0.1120	0.0000	377.4317
Total	**0.3915**	**4.7217**	**2.8052**	**3.9400e-003**		**0.2233**	**0.2233**		**0.2054**	**0.2054**	**0.0000**	**375.0802**	**375.0802**	**0.1120**	**0.0000**	**377.4317**

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	0.0459	0.4681	0.5709	9.9000e-004	0.0280	7.7800e-003	0.0358	7.9900e-003	7.1500e-003	0.0152	0.0000	90.8269	90.8269	7.2000e-004	0.0000	90.8422
Worker	0.0518	0.0758	0.7878	1.5700e-003	0.1274	1.1400e-003	0.1286	0.0339	1.0500e-003	0.0349	0.0000	123.6746	123.6746	6.9800e-003	0.0000	123.8213
Total	**0.0977**	**0.5440**	**1.3587**	**2.5600e-003**	**0.1555**	**8.9200e-003**	**0.1644**	**0.0418**	**8.2000e-003**	**0.0500**	**0.0000**	**214.5015**	**214.5015**	**7.7000e-003**	**0.0000**	**214.6634**

3.5 Building Construction - 2016

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	0.7461	8.9087	5.3962	7.7800e-003		0.4175	0.4175		0.3841	0.3841	0.0000	733.8452	733.8452	0.2214	0.0000	738.4936
Total	**0.7461**	**8.9087**	**5.3962**	**7.7800e-003**		**0.4175**	**0.4175**		**0.3841**	**0.3841**	**0.0000**	**733.8452**	**733.8452**	**0.2214**	**0.0000**	**738.4936**

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	0.0801	0.8175	1.0494	1.9600e-003	0.0554	0.0128	0.0682	0.0158	0.0117	0.0275	0.0000	177.6130	177.6130	1.2900e-003	0.0000	177.6402
Worker	0.0921	0.1352	1.4068	3.1000e-003	0.2520	2.1500e-003	0.2541	0.0669	1.9700e-003	0.0689	0.0000	236.0876	236.0876	0.0127	0.0000	236.3544
Total	**0.1722**	**0.9527**	**2.4562**	**5.0600e-003**	**0.3074**	**0.0149**	**0.3223**	**0.0827**	**0.0137**	**0.0964**	**0.0000**	**413.7006**	**413.7006**	**0.0140**	**0.0000**	**413.9946**

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	0.7461	8.9087	5.3962	7.7800e-003		0.4175	0.4175		0.3841	0.3841	0.0000	733.8443	733.8443	0.2214	0.0000	738.4927
Total	**0.7461**	**8.9087**	**5.3962**	**7.7800e-003**		**0.4175**	**0.4175**		**0.3841**	**0.3841**	**0.0000**	**733.8443**	**733.8443**	**0.2214**	**0.0000**	**738.4927**

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	0.0801	0.8175	1.0494	1.9600e-003	0.0554	0.0128	0.0682	0.0158	0.0117	0.0275	0.0000	177.6130	177.6130	1.2900e-003	0.0000	177.6402
Worker	0.0921	0.1352	1.4068	3.1000e-003	0.2520	2.1500e-003	0.2541	0.0669	1.9700e-003	0.0689	0.0000	236.0876	236.0876	0.0127	0.0000	236.3544
Total	**0.1722**	**0.9527**	**2.4562**	**5.0600e-003**	**0.3074**	**0.0149**	**0.3223**	**0.0827**	**0.0137**	**0.0964**	**0.0000**	**413.7006**	**413.7006**	**0.0140**	**0.0000**	**413.9946**

3.5 Building Construction - 2017

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	0.1756	2.0747	1.2975	1.9400e-003		0.0962	0.0962		0.0885	0.0885	0.0000	179.9595	179.9595	0.0551	0.0000	181.1174
Total	**0.1756**	**2.0747**	**1.2975**	**1.9400e-003**		**0.0962**	**0.0962**		**0.0885**	**0.0885**	**0.0000**	**179.9595**	**179.9595**	**0.0551**	**0.0000**	**181.1174**

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	0.0183	0.1853	0.2477	4.9000e-004	0.0138	2.8300e-003	0.0166	3.9400e-003	2.6100e-003	6.5500e-003	0.0000	43.5170	43.5170	3.1000e-004	0.0000	43.5235
Worker	0.0206	0.0304	0.3161	7.7000e-004	0.0628	5.1000e-004	0.0633	0.0167	4.7000e-004	0.0171	0.0000	56.5386	56.5386	2.9200e-003	0.0000	56.5999
Total	**0.0388**	**0.2157**	**0.5638**	**1.2600e-003**	**0.0766**	**3.3400e-003**	**0.0799**	**0.0206**	**3.0800e-003**	**0.0237**	**0.0000**	**100.0556**	**100.0556**	**3.2300e-003**	**0.0000**	**100.1235**

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	0.1756	2.0747	1.2975	1.9400e-003		0.0962	0.0962		0.0885	0.0885	0.0000	179.9593	179.9593	0.0551	0.0000	181.1172
Total	**0.1756**	**2.0747**	**1.2975**	**1.9400e-003**		**0.0962**	**0.0962**		**0.0885**	**0.0885**	**0.0000**	**179.9593**	**179.9593**	**0.0551**	**0.0000**	**181.1172**

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	0.0183	0.1853	0.2477	4.9000e-004	0.0138	2.8300e-003	0.0166	3.9400e-003	2.6100e-003	6.5500e-003	0.0000	43.5170	43.5170	3.1000e-004	0.0000	43.5235
Worker	0.0206	0.0304	0.3161	7.7000e-004	0.0628	5.1000e-004	0.0633	0.0167	4.7000e-004	0.0171	0.0000	56.5386	56.5386	2.9200e-003	0.0000	56.5999
Total	**0.0388**	**0.2157**	**0.5638**	**1.2600e-003**	**0.0766**	**3.3400e-003**	**0.0799**	**0.0206**	**3.0800e-003**	**0.0237**	**0.0000**	**100.0556**	**100.0556**	**3.2300e-003**	**0.0000**	**100.1235**

3.6 Paving - 2015

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	0.0202	0.2013	0.1282	2.0000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	17.7303	17.7303	4.8800e-003	0.0000	17.8328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0202**	**0.2013**	**0.1282**	**2.0000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**17.7303**	**17.7303**	**4.8800e-003**	**0.0000**	**17.8328**

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	1.0200e-003	1.5000e-003	0.0156	3.0000e-005	2.5200e-003	2.0000e-005	2.5500e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4488	2.4488	1.4000e-004	0.0000	2.4517
Total	**1.0200e-003**	**1.5000e-003**	**0.0156**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5500e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.4488**	**2.4488**	**1.4000e-004**	**0.0000**	**2.4517**

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	0.0202	0.2013	0.1282	2.0000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	17.7303	17.7303	4.8800e-003	0.0000	17.8328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0202**	**0.2013**	**0.1282**	**2.0000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**17.7303**	**17.7303**	**4.8800e-003**	**0.0000**	**17.8328**

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	1.0200e-003	1.5000e-003	0.0156	3.0000e-005	2.5200e-003	2.0000e-005	2.5500e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4488	2.4488	1.4000e-004	0.0000	2.4517
Total	**1.0200e-003**	**1.5000e-003**	**0.0156**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5500e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.4488**	**2.4488**	**1.4000e-004**	**0.0000**	**2.4517**

3.7 Architectural Coating - 2016

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	1.5247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.1554	0.1234	1.9000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	16.7238	16.7238	1.9700e-003	0.0000	16.7652
Total	**1.5488**	**0.1554**	**0.1234**	**1.9000e-004**		**0.0129**	**0.0129**		**0.0129**	**0.0129**	**0.0000**	**16.7238**	**16.7238**	**1.9700e-003**	**0.0000**	**16.7652**

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	9.1900e-003	0.0135	0.1404	3.1000e-004	0.0252	2.1000e-004	0.0254	6.6800e-003	2.0000e-004	6.8800e-003	0.0000	23.5646	23.5646	1.2700e-003	0.0000	23.5912
Total	**9.1900e-003**	**0.0135**	**0.1404**	**3.1000e-004**	**0.0252**	**2.1000e-004**	**0.0254**	**6.6800e-003**	**2.0000e-004**	**6.8800e-003**	**0.0000**	**23.5646**	**23.5646**	**1.2700e-003**	**0.0000**	**23.5912**

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	1.5247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.1554	0.1234	1.9000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	16.7238	16.7238	1.9700e-003	0.0000	16.7652
Total	**1.5488**	**0.1554**	**0.1234**	**1.9000e-004**		**0.0129**	**0.0129**		**0.0129**	**0.0129**	**0.0000**	**16.7238**	**16.7238**	**1.9700e-003**	**0.0000**	**16.7652**

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	9.1900e-003	0.0135	0.1404	3.1000e-004	0.0252	2.1000e-004	0.0254	6.6800e-003	2.0000e-004	6.8800e-003	0.0000	23.5646	23.5646	1.2700e-003	0.0000	23.5912
Total	**9.1900e-003**	**0.0135**	**0.1404**	**3.1000e-004**	**0.0252**	**2.1000e-004**	**0.0254**	**6.6800e-003**	**2.0000e-004**	**6.8800e-003**	**0.0000**	**23.5646**	**23.5646**	**1.2700e-003**	**0.0000**	**23.5912**

3.7 Architectural Coating - 2017

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	0.7565					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.0710	0.0607	1.0000e-004		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	8.2981	8.2981	8.8000e-004	0.0000	8.3165
Total	**0.7673**	**0.0710**	**0.0607**	**1.0000e-004**		**5.6300e-003**	**5.6300e-003**		**5.6300e-003**	**5.6300e-003**	**0.0000**	**8.2981**	**8.2981**	**8.8000e-004**	**0.0000**	**8.3165**

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	4.0900e-003	6.0500e-003	0.0629	1.5000e-004	0.0125	1.0000e-004	0.0126	3.3100e-003	9.0000e-005	3.4100e-003	0.0000	11.2435	11.2435	5.8000e-004	0.0000	11.2557
Total	**4.0900e-003**	**6.0500e-003**	**0.0629**	**1.5000e-004**	**0.0125**	**1.0000e-004**	**0.0126**	**3.3100e-003**	**9.0000e-005**	**3.4100e-003**	**0.0000**	**11.2435**	**11.2435**	**5.8000e-004**	**0.0000**	**11.2557**

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	0.7565					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.0710	0.0607	1.0000e-004		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	8.2981	8.2981	8.8000e-004	0.0000	8.3165
Total	**0.7673**	**0.0710**	**0.0607**	**1.0000e-004**		**5.6300e-003**	**5.6300e-003**		**5.6300e-003**	**5.6300e-003**	**0.0000**	**8.2981**	**8.2981**	**8.8000e-004**	**0.0000**	**8.3165**

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	4.0900e-003	6.0500e-003	0.0629	1.5000e-004	0.0125	1.0000e-004	0.0126	3.3100e-003	9.0000e-005	3.4100e-003	0.0000	11.2435	11.2435	5.8000e-004	0.0000	11.2557
Total	**4.0900e-003**	**6.0500e-003**	**0.0629**	**1.5000e-004**	**0.0125**	**1.0000e-004**	**0.0126**	**3.3100e-003**	**9.0000e-005**	**3.4100e-003**	**0.0000**	**11.2435**	**11.2435**	**5.8000e-004**	**0.0000**	**11.2557**

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	0.8139	1.8523	7.6576	0.0160	1.0739	0.0238	1.0977	0.2874	0.0219	0.3092	0.0000	1,238.6014	1,238.6014	0.0508	0.0000	1,239.6672
Unmitigated	0.8139	1.8523	7.6576	0.0160	1.0739	0.0238	1.0977	0.2874	0.0219	0.3092	0.0000	1,238.6014	1,238.6014	0.0508	0.0000	1,239.6672

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,537.92	1,537.92	1537.92	2,834,050	2,834,050
Total	1,537.92	1,537.92	1,537.92	2,834,050	2,834,050

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
Hotel	12.80	6.50	5.30	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	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	445.0609	445.0609	0.0205	4.2300e-003	446.8026
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	478.8630	478.8630	0.0220	4.5500e-003	480.7370
NaturalGas Mitigated	0.0232	0.2111	0.1773	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.8199	229.8199	4.4000e-003	4.2100e-003	231.2186
NaturalGas Unmitigated	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	262.8494	262.8494	5.0400e-003	4.8200e-003	264.4491

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					
Hotel	4.92561e+006	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	262.8494	262.8494	5.0400e-003	4.8200e-003	264.4491
Total		**0.0266**	**0.2415**	**0.2028**	**1.4500e-003**		**0.0184**	**0.0184**		**0.0184**	**0.0184**	**0.0000**	**262.8494**	**262.8494**	**5.0400e-003**	**4.8200e-003**	**264.4491**

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					
Hotel	4.30666e+006	0.0232	0.2111	0.1773	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.8199	229.8199	4.4000e-003	4.2100e-003	231.2186
Total		**0.0232**	**0.2111**	**0.1773**	**1.2700e-003**		**0.0160**	**0.0160**		**0.0160**	**0.0160**	**0.0000**	**229.8199**	**229.8199**	**4.4000e-003**	**4.2100e-003**	**231.2186**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.67337e+006	478.8630	0.0220	4.5500e-003	480.7370
Total		**478.8630**	**0.0220**	**4.5500e-003**	**480.7370**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.55525e+006	445.0609	0.0205	4.2300e-003	446.8026
Total		**445.0609**	**0.0205**	**4.2300e-003**	**446.8026**

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	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Unmitigated	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003

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	0.2281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Total	**0.9399**	**4.0000e-005**	**3.7400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.1500e-003**	**7.1500e-003**	**2.0000e-005**	**0.0000**	**7.5700e-003**

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	0.2281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Total	**0.9399**	**4.0000e-005**	**3.7400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.1500e-003**	**7.1500e-003**	**2.0000e-005**	**0.0000**	**7.5700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.1710	0.2236	5.5100e-003	36.5738
Unmitigated	32.1206	0.2394	5.9000e-003	38.9789

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	7.30563 / 0.811737	32.1206	0.2394	5.9000e-003	38.9789
Total		**32.1206**	**0.2394**	**5.9000e-003**	**38.9789**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	6.82346 / 0.811737	30.1710	0.2236	5.5100e-003	36.5738
Total		**30.1710**	**0.2236**	**5.5100e-003**	**36.5738**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.0076	1.8916	0.0000	71.7311
Unmitigated	32.0076	1.8916	0.0000	71.7311

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	157.68	32.0076	1.8916	0.0000	71.7311
Total		**32.0076**	**1.8916**	**0.0000**	**71.7311**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	157.68	32.0076	1.8916	0.0000	71.7311
Total		**32.0076**	**1.8916**	**0.0000**	**71.7311**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Marina del Rey Marriott Courtyard and Residence Inn (BAU)

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	288.00	Room	2.20	196,867.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Business-as-Usual Condition

Land Use - Land Use: Hotel, 288 rooms, 2.2 lot acreage.

Construction Phase - Site Prep: Apr-Jun 2015; Grading: Apr-Jun 2015; Building Construction: Jul 2015-Apr 2017; Paving: Jul 2015; Coating: Jul 2016-Apr 2017.

Off-road Equipment - Architectural Coating: 1 air compressor.

Off-road Equipment - Building Construction: 1 bore/drill rig, 1 crane, 2 crawler tractors, 1 off-highway tractor, 2 rough terrain forklifts, 2 rubber tired dozers, 2 tractors/loaders/backhoes.

Off-road Equipment - No demolition.

Off-road Equipment - Mass Grading: 1 rubber tired dozer, 1 tractor/loader/backhoe.

Off-road Equipment - Paving: 4 cement/mortar mixers, 1 paver, 1 paving equipment, 1 roller, 1 tractor/loader/backhoe

Off-road Equipment - Site Prep/Fine Grading: 1 excavator, 3 tractors/loaders/backhoes.

Grading - Acres Disturbed: 2.2 acres. Material Exported: 28,000 cy.

Architectural Coating -

Vehicle Trips - Trip Rate: 5.34 trips/room. Trip Distances: C-C 8.4 miles, C-W 16.6 miles, C-NW 6.9 miles (standard).

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - Construction fugitive dust control measures: water exposed area three times daily and apply soil stabilizers/water to unpaved roads (61% PM10 and PM2.5 control).

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	196.00
tblConstructionPhase	NumDays	220.00	458.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	65.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	65.00
tblConstructionPhase	PhaseEndDate	5/2/2016	4/1/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	4/1/2017
tblConstructionPhase	PhaseEndDate	9/29/2015	6/30/2015
tblConstructionPhase	PhaseEndDate	5/3/2017	7/31/2015
tblConstructionPhase	PhaseEndDate	4/1/2015	6/30/2015
tblConstructionPhase	PhaseStartDate	8/1/2015	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	4/1/2015
tblConstructionPhase	PhaseStartDate	4/2/2017	7/1/2015
tblConstructionPhase	PhaseStartDate	1/1/2015	4/1/2015
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	AcresOfGrading	0.00	2.20
tblGrading	MaterialExported	0.00	28,000.00
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	418,176.00	196,867.00

tblLandUse	LotAcreage	9.60	2.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	32.00	69.00
tblTripsAndVMT	WorkerTripNumber	83.00	176.00
tblTripsAndVMT	WorkerTripNumber	17.00	35.00

tblVehicleTrips	ST_TR	8.19	5.34
tblVehicleTrips	SU_TR	5.95	5.34
tblVehicleTrips	WD_TR	8.17	5.34

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					
2015	0.6548	7.1644	5.5717	9.0000e-003	0.3304	0.3214	0.6518	0.1233	0.2957	0.4190	0.0000	821.4833	821.4833	0.1517	0.0000	824.6696
2016	2.4763	10.0303	8.1162	0.0133	0.3325	0.4455	0.7780	0.0894	0.4109	0.5003	0.0000	1,187.8341	1,187.8341	0.2386	0.0000	1,192.8446
2017	0.9858	2.3674	1.9849	3.4500e-003	0.0890	0.1052	0.1943	0.0239	0.0973	0.1212	0.0000	299.5566	299.5566	0.0598	0.0000	300.8130
Total	**4.1168**	**19.5621**	**15.6727**	**0.0258**	**0.7520**	**0.8721**	**1.6241**	**0.2366**	**0.8039**	**1.0405**	**0.0000**	**2,308.8740**	**2,308.8740**	**0.4502**	**0.0000**	**2,318.3272**

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					
2015	0.6548	7.1644	5.5717	9.0000e-003	0.2475	0.3214	0.5688	0.0801	0.2957	0.3758	0.0000	821.4827	821.4827	0.1517	0.0000	824.6690
2016	2.4763	10.0303	8.1162	0.0133	0.3325	0.4455	0.7780	0.0894	0.4109	0.5003	0.0000	1,187.8333	1,187.8333	0.2386	0.0000	1,192.8437
2017	0.9858	2.3674	1.9849	3.4500e-003	0.0890	0.1052	0.1943	0.0239	0.0973	0.1212	0.0000	299.5564	299.5564	0.0598	0.0000	300.8128
Total	**4.1168**	**19.5621**	**15.6727**	**0.0258**	**0.6690**	**0.8721**	**1.5411**	**0.1934**	**0.8039**	**0.9973**	**0.0000**	**2,308.8723**	**2,308.8723**	**0.4502**	**0.0000**	**2,318.3255**

	ROG	NOx	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**	**11.04**	**0.00**	**5.11**	**18.27**	**0.00**	**4.15**	**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	tons/yr										MT/yr					
Area	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Energy	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	741.7124	741.7124	0.0271	9.3700e-003	745.1861
Mobile	0.8680	2.2781	9.0171	0.0205	1.3906	0.0301	1.4207	0.3721	0.0277	0.3998	0.0000	1,587.3397	1,587.3397	0.0637	0.0000	1,588.6763
Waste						0.0000	0.0000		0.0000	0.0000	32.0076	0.0000	32.0076	1.8916	0.0000	71.7311
Water						0.0000	0.0000		0.0000	0.0000	2.3177	29.8029	32.1206	0.2394	5.9000e-003	38.9789
Total	**1.8344**	**2.5196**	**9.2237**	**0.0220**	**1.3906**	**0.0485**	**1.4390**	**0.3721**	**0.0461**	**0.4182**	**34.3254**	**2,358.8621**	**2,393.1875**	**2.2217**	**0.0153**	**2,444.5799**

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	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Energy	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	741.7124	741.7124	0.0271	9.3700e-003	745.1861
Mobile	0.8680	2.2781	9.0171	0.0205	1.3906	0.0301	1.4207	0.3721	0.0277	0.3998	0.0000	1,587.3397	1,587.3397	0.0637	0.0000	1,588.6763
Waste						0.0000	0.0000		0.0000	0.0000	32.0076	0.0000	32.0076	1.8916	0.0000	71.7311
Water						0.0000	0.0000		0.0000	0.0000	2.3177	29.8029	32.1206	0.2394	5.9000e-003	38.9752
Total	**1.8344**	**2.5196**	**9.2237**	**0.0220**	**1.3906**	**0.0485**	**1.4390**	**0.3721**	**0.0461**	**0.4182**	**34.3254**	**2,358.8621**	**2,393.1875**	**2.2217**	**0.0153**	**2,444.5762**

	ROG	NOx	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	1/1/2015	12/31/2014	5	0	
2	Site Preparation	Site Preparation	4/1/2015	6/30/2015	5	65	
3	Grading	Grading	4/1/2015	6/30/2015	5	65	
4	Building Construction	Building Construction	7/1/2015	4/1/2017	5	458	
5	Paving	Paving	7/1/2015	7/31/2015	5	23	
6	Architectural Coating	Architectural Coating	7/1/2016	4/1/2017	5	196	

Acres of Grading (Site Preparation Phase): 2.2

Acres of Grading (Grading Phase): 2.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 295,301; Non-Residential Outdoor: 98,434 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Excavators	1	8.00	162	0.38
Site Preparation	Graders	0	0.00	174	0.41
Site Preparation	Scrapers	0	0.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	0	0.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	205	0.50

Building Construction	Cranes	0	0.00	226	0.29
Building Construction	Crawler Tractors	2	8.00	208	0.43
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Off-Highway Tractors	1	8.00	122	0.44
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Dozers	2	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	3,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	176.00	69.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

3.3 Site Preparation - 2015

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					1.1700e-003	0.0000	1.1700e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.4509	0.3187	4.4000e-004		0.0307	0.0307		0.0283	0.0283	0.0000	41.7254	41.7254	0.0125	0.0000	41.9870
Total	**0.0443**	**0.4509**	**0.3187**	**4.4000e-004**	**1.1700e-003**	**0.0307**	**0.0319**	**1.3000e-004**	**0.0283**	**0.0284**	**0.0000**	**41.7254**	**41.7254**	**0.0125**	**0.0000**	**41.9870**

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	1.4500e-003	2.1200e-003	0.0220	4.0000e-005	3.5700e-003	3.0000e-005	3.6000e-003	9.5000e-004	3.0000e-005	9.8000e-004	0.0000	3.4603	3.4603	2.0000e-004	0.0000	3.4644
Total	**1.4500e-003**	**2.1200e-003**	**0.0220**	**4.0000e-005**	**3.5700e-003**	**3.0000e-005**	**3.6000e-003**	**9.5000e-004**	**3.0000e-005**	**9.8000e-004**	**0.0000**	**3.4603**	**3.4603**	**2.0000e-004**	**0.0000**	**3.4644**

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					4.5000e-004	0.0000	4.5000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.4509	0.3187	4.4000e-004		0.0307	0.0307		0.0283	0.0283	0.0000	41.7253	41.7253	0.0125	0.0000	41.9869
Total	**0.0443**	**0.4509**	**0.3187**	**4.4000e-004**	**4.5000e-004**	**0.0307**	**0.0312**	**5.0000e-005**	**0.0283**	**0.0283**	**0.0000**	**41.7253**	**41.7253**	**0.0125**	**0.0000**	**41.9869**

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	1.4500e-003	2.1200e-003	0.0220	4.0000e-005	3.5700e-003	3.0000e-005	3.6000e-003	9.5000e-004	3.0000e-005	9.8000e-004	0.0000	3.4603	3.4603	2.0000e-004	0.0000	3.4644
Total	**1.4500e-003**	**2.1200e-003**	**0.0220**	**4.0000e-005**	**3.5700e-003**	**3.0000e-005**	**3.6000e-003**	**9.5000e-004**	**3.0000e-005**	**9.8000e-004**	**0.0000**	**3.4603**	**3.4603**	**2.0000e-004**	**0.0000**	**3.4644**

3.4 Grading - 2015

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					0.1349	0.0000	0.1349	0.0707	0.0000	0.0707	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0619	0.6628	0.4947	4.7000e-004		0.0371	0.0371		0.0341	0.0341	0.0000	44.4327	44.4327	0.0133	0.0000	44.7112
Total	**0.0619**	**0.6628**	**0.4947**	**4.7000e-004**	**0.1349**	**0.0371**	**0.1720**	**0.0707**	**0.0341**	**0.1049**	**0.0000**	**44.4327**	**44.4327**	**0.0133**	**0.0000**	**44.7112**

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	0.0356	0.5785	0.4108	1.2900e-003	0.0300	9.3900e-003	0.0394	8.2300e-003	8.6300e-003	0.0169	0.0000	119.3357	119.3357	9.5000e-004	0.0000	119.3556
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	1.1600e-003	1.7000e-003	0.0176	4.0000e-005	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.7682	2.7682	1.6000e-004	0.0000	2.7715
Total	**0.0368**	**0.5802**	**0.4285**	**1.3300e-003**	**0.0328**	**9.4200e-003**	**0.0423**	**8.9900e-003**	**8.6500e-003**	**0.0176**	**0.0000**	**122.1039**	**122.1039**	**1.1100e-003**	**0.0000**	**122.1271**

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					0.0526	0.0000	0.0526	0.0276	0.0000	0.0276	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0619	0.6628	0.4947	4.7000e-004		0.0371	0.0371		0.0341	0.0341	0.0000	44.4326	44.4326	0.0133	0.0000	44.7112
Total	**0.0619**	**0.6628**	**0.4947**	**4.7000e-004**	**0.0526**	**0.0371**	**0.0897**	**0.0276**	**0.0341**	**0.0617**	**0.0000**	**44.4326**	**44.4326**	**0.0133**	**0.0000**	**44.7112**

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	0.0356	0.5785	0.4108	1.2900e-003	0.0300	9.3900e-003	0.0394	8.2300e-003	8.6300e-003	0.0169	0.0000	119.3357	119.3357	9.5000e-004	0.0000	119.3556
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	1.1600e-003	1.7000e-003	0.0176	4.0000e-005	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.7682	2.7682	1.6000e-004	0.0000	2.7715
Total	**0.0368**	**0.5802**	**0.4285**	**1.3300e-003**	**0.0328**	**9.4200e-003**	**0.0423**	**8.9900e-003**	**8.6500e-003**	**0.0176**	**0.0000**	**122.1039**	**122.1039**	**1.1100e-003**	**0.0000**	**122.1271**

3.5 Building Construction - 2015

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	0.3915	4.7217	2.8052	3.9400e-003		0.2233	0.2233		0.2054	0.2054	0.0000	375.0806	375.0806	0.1120	0.0000	377.4321
Total	**0.3915**	**4.7217**	**2.8052**	**3.9400e-003**		**0.2233**	**0.2233**		**0.2054**	**0.2054**	**0.0000**	**375.0806**	**375.0806**	**0.1120**	**0.0000**	**377.4321**

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	0.0459	0.4681	0.5709	9.9000e-004	0.0280	7.7800e-003	0.0358	7.9900e-003	7.1500e-003	0.0152	0.0000	90.8269	90.8269	7.2000e-004	0.0000	90.8422
Worker	0.0518	0.0758	0.7878	1.5700e-003	0.1274	1.1400e-003	0.1286	0.0339	1.0500e-003	0.0349	0.0000	123.6746	123.6746	6.9800e-003	0.0000	123.8213
Total	**0.0977**	**0.5440**	**1.3587**	**2.5600e-003**	**0.1555**	**8.9200e-003**	**0.1644**	**0.0418**	**8.2000e-003**	**0.0500**	**0.0000**	**214.5015**	**214.5015**	**7.7000e-003**	**0.0000**	**214.6634**

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	0.3915	4.7217	2.8052	3.9400e-003		0.2233	0.2233		0.2054	0.2054	0.0000	375.0802	375.0802	0.1120	0.0000	377.4317
Total	**0.3915**	**4.7217**	**2.8052**	**3.9400e-003**		**0.2233**	**0.2233**		**0.2054**	**0.2054**	**0.0000**	**375.0802**	**375.0802**	**0.1120**	**0.0000**	**377.4317**

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	0.0459	0.4681	0.5709	9.9000e-004	0.0280	7.7800e-003	0.0358	7.9900e-003	7.1500e-003	0.0152	0.0000	90.8269	90.8269	7.2000e-004	0.0000	90.8422
Worker	0.0518	0.0758	0.7878	1.5700e-003	0.1274	1.1400e-003	0.1286	0.0339	1.0500e-003	0.0349	0.0000	123.6746	123.6746	6.9800e-003	0.0000	123.8213
Total	**0.0977**	**0.5440**	**1.3587**	**2.5600e-003**	**0.1555**	**8.9200e-003**	**0.1644**	**0.0418**	**8.2000e-003**	**0.0500**	**0.0000**	**214.5015**	**214.5015**	**7.7000e-003**	**0.0000**	**214.6634**

3.5 Building Construction - 2016

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	0.7461	8.9087	5.3962	7.7800e-003		0.4175	0.4175		0.3841	0.3841	0.0000	733.8452	733.8452	0.2214	0.0000	738.4936
Total	**0.7461**	**8.9087**	**5.3962**	**7.7800e-003**		**0.4175**	**0.4175**		**0.3841**	**0.3841**	**0.0000**	**733.8452**	**733.8452**	**0.2214**	**0.0000**	**738.4936**

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	0.0801	0.8175	1.0494	1.9600e-003	0.0554	0.0128	0.0682	0.0158	0.0117	0.0275	0.0000	177.6130	177.6130	1.2900e-003	0.0000	177.6402
Worker	0.0921	0.1352	1.4068	3.1000e-003	0.2520	2.1500e-003	0.2541	0.0669	1.9700e-003	0.0689	0.0000	236.0876	236.0876	0.0127	0.0000	236.3544
Total	**0.1722**	**0.9527**	**2.4562**	**5.0600e-003**	**0.3074**	**0.0149**	**0.3223**	**0.0827**	**0.0137**	**0.0964**	**0.0000**	**413.7006**	**413.7006**	**0.0140**	**0.0000**	**413.9946**

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	0.7461	8.9087	5.3962	7.7800e-003		0.4175	0.4175		0.3841	0.3841	0.0000	733.8443	733.8443	0.2214	0.0000	738.4927
Total	**0.7461**	**8.9087**	**5.3962**	**7.7800e-003**		**0.4175**	**0.4175**		**0.3841**	**0.3841**	**0.0000**	**733.8443**	**733.8443**	**0.2214**	**0.0000**	**738.4927**

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	0.0801	0.8175	1.0494	1.9600e-003	0.0554	0.0128	0.0682	0.0158	0.0117	0.0275	0.0000	177.6130	177.6130	1.2900e-003	0.0000	177.6402
Worker	0.0921	0.1352	1.4068	3.1000e-003	0.2520	2.1500e-003	0.2541	0.0669	1.9700e-003	0.0689	0.0000	236.0876	236.0876	0.0127	0.0000	236.3544
Total	**0.1722**	**0.9527**	**2.4562**	**5.0600e-003**	**0.3074**	**0.0149**	**0.3223**	**0.0827**	**0.0137**	**0.0964**	**0.0000**	**413.7006**	**413.7006**	**0.0140**	**0.0000**	**413.9946**

3.5 Building Construction - 2017

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	0.1756	2.0747	1.2975	1.9400e-003		0.0962	0.0962		0.0885	0.0885	0.0000	179.9595	179.9595	0.0551	0.0000	181.1174
Total	**0.1756**	**2.0747**	**1.2975**	**1.9400e-003**		**0.0962**	**0.0962**		**0.0885**	**0.0885**	**0.0000**	**179.9595**	**179.9595**	**0.0551**	**0.0000**	**181.1174**

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	0.0183	0.1853	0.2477	4.9000e-004	0.0138	2.8300e-003	0.0166	3.9400e-003	2.6100e-003	6.5500e-003	0.0000	43.5170	43.5170	3.1000e-004	0.0000	43.5235
Worker	0.0206	0.0304	0.3161	7.7000e-004	0.0628	5.1000e-004	0.0633	0.0167	4.7000e-004	0.0171	0.0000	56.5386	56.5386	2.9200e-003	0.0000	56.5999
Total	**0.0388**	**0.2157**	**0.5638**	**1.2600e-003**	**0.0766**	**3.3400e-003**	**0.0799**	**0.0206**	**3.0800e-003**	**0.0237**	**0.0000**	**100.0556**	**100.0556**	**3.2300e-003**	**0.0000**	**100.1235**

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	0.1756	2.0747	1.2975	1.9400e-003		0.0962	0.0962		0.0885	0.0885	0.0000	179.9593	179.9593	0.0551	0.0000	181.1172
Total	**0.1756**	**2.0747**	**1.2975**	**1.9400e-003**		**0.0962**	**0.0962**		**0.0885**	**0.0885**	**0.0000**	**179.9593**	**179.9593**	**0.0551**	**0.0000**	**181.1172**

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	0.0183	0.1853	0.2477	4.9000e-004	0.0138	2.8300e-003	0.0166	3.9400e-003	2.6100e-003	6.5500e-003	0.0000	43.5170	43.5170	3.1000e-004	0.0000	43.5235
Worker	0.0206	0.0304	0.3161	7.7000e-004	0.0628	5.1000e-004	0.0633	0.0167	4.7000e-004	0.0171	0.0000	56.5386	56.5386	2.9200e-003	0.0000	56.5999
Total	**0.0388**	**0.2157**	**0.5638**	**1.2600e-003**	**0.0766**	**3.3400e-003**	**0.0799**	**0.0206**	**3.0800e-003**	**0.0237**	**0.0000**	**100.0556**	**100.0556**	**3.2300e-003**	**0.0000**	**100.1235**

3.6 Paving - 2015

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	0.0202	0.2013	0.1282	2.0000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	17.7303	17.7303	4.8800e-003	0.0000	17.8328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0202**	**0.2013**	**0.1282**	**2.0000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**17.7303**	**17.7303**	**4.8800e-003**	**0.0000**	**17.8328**

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	1.0200e-003	1.5000e-003	0.0156	3.0000e-005	2.5200e-003	2.0000e-005	2.5500e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4488	2.4488	1.4000e-004	0.0000	2.4517
Total	**1.0200e-003**	**1.5000e-003**	**0.0156**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5500e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.4488**	**2.4488**	**1.4000e-004**	**0.0000**	**2.4517**

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	0.0202	0.2013	0.1282	2.0000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	17.7303	17.7303	4.8800e-003	0.0000	17.8328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0202**	**0.2013**	**0.1282**	**2.0000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**17.7303**	**17.7303**	**4.8800e-003**	**0.0000**	**17.8328**

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	1.0200e-003	1.5000e-003	0.0156	3.0000e-005	2.5200e-003	2.0000e-005	2.5500e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4488	2.4488	1.4000e-004	0.0000	2.4517
Total	**1.0200e-003**	**1.5000e-003**	**0.0156**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5500e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.4488**	**2.4488**	**1.4000e-004**	**0.0000**	**2.4517**

3.7 Architectural Coating - 2016

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	1.5247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.1554	0.1234	1.9000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	16.7238	16.7238	1.9700e-003	0.0000	16.7652
Total	**1.5488**	**0.1554**	**0.1234**	**1.9000e-004**		**0.0129**	**0.0129**		**0.0129**	**0.0129**	**0.0000**	**16.7238**	**16.7238**	**1.9700e-003**	**0.0000**	**16.7652**

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	9.1900e-003	0.0135	0.1404	3.1000e-004	0.0252	2.1000e-004	0.0254	6.6800e-003	2.0000e-004	6.8800e-003	0.0000	23.5646	23.5646	1.2700e-003	0.0000	23.5912
Total	**9.1900e-003**	**0.0135**	**0.1404**	**3.1000e-004**	**0.0252**	**2.1000e-004**	**0.0254**	**6.6800e-003**	**2.0000e-004**	**6.8800e-003**	**0.0000**	**23.5646**	**23.5646**	**1.2700e-003**	**0.0000**	**23.5912**

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	1.5247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.1554	0.1234	1.9000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	16.7238	16.7238	1.9700e-003	0.0000	16.7652
Total	**1.5488**	**0.1554**	**0.1234**	**1.9000e-004**		**0.0129**	**0.0129**		**0.0129**	**0.0129**	**0.0000**	**16.7238**	**16.7238**	**1.9700e-003**	**0.0000**	**16.7652**

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	9.1900e-003	0.0135	0.1404	3.1000e-004	0.0252	2.1000e-004	0.0254	6.6800e-003	2.0000e-004	6.8800e-003	0.0000	23.5646	23.5646	1.2700e-003	0.0000	23.5912
Total	**9.1900e-003**	**0.0135**	**0.1404**	**3.1000e-004**	**0.0252**	**2.1000e-004**	**0.0254**	**6.6800e-003**	**2.0000e-004**	**6.8800e-003**	**0.0000**	**23.5646**	**23.5646**	**1.2700e-003**	**0.0000**	**23.5912**

3.7 Architectural Coating - 2017

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	0.7565					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.0710	0.0607	1.0000e-004		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	8.2981	8.2981	8.8000e-004	0.0000	8.3165
Total	**0.7673**	**0.0710**	**0.0607**	**1.0000e-004**		**5.6300e-003**	**5.6300e-003**		**5.6300e-003**	**5.6300e-003**	**0.0000**	**8.2981**	**8.2981**	**8.8000e-004**	**0.0000**	**8.3165**

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	4.0900e-003	6.0500e-003	0.0629	1.5000e-004	0.0125	1.0000e-004	0.0126	3.3100e-003	9.0000e-005	3.4100e-003	0.0000	11.2435	11.2435	5.8000e-004	0.0000	11.2557
Total	**4.0900e-003**	**6.0500e-003**	**0.0629**	**1.5000e-004**	**0.0125**	**1.0000e-004**	**0.0126**	**3.3100e-003**	**9.0000e-005**	**3.4100e-003**	**0.0000**	**11.2435**	**11.2435**	**5.8000e-004**	**0.0000**	**11.2557**

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	0.7565					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.0710	0.0607	1.0000e-004		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	8.2981	8.2981	8.8000e-004	0.0000	8.3165
Total	**0.7673**	**0.0710**	**0.0607**	**1.0000e-004**		**5.6300e-003**	**5.6300e-003**		**5.6300e-003**	**5.6300e-003**	**0.0000**	**8.2981**	**8.2981**	**8.8000e-004**	**0.0000**	**8.3165**

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	4.0900e-003	6.0500e-003	0.0629	1.5000e-004	0.0125	1.0000e-004	0.0126	3.3100e-003	9.0000e-005	3.4100e-003	0.0000	11.2435	11.2435	5.8000e-004	0.0000	11.2557
Total	**4.0900e-003**	**6.0500e-003**	**0.0629**	**1.5000e-004**	**0.0125**	**1.0000e-004**	**0.0126**	**3.3100e-003**	**9.0000e-005**	**3.4100e-003**	**0.0000**	**11.2435**	**11.2435**	**5.8000e-004**	**0.0000**	**11.2557**

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	0.8680	2.2781	9.0171	0.0205	1.3906	0.0301	1.4207	0.3721	0.0277	0.3998	0.0000	1,587.3397	1,587.3397	0.0637	0.0000	1,588.6763
Unmitigated	0.8680	2.2781	9.0171	0.0205	1.3906	0.0301	1.4207	0.3721	0.0277	0.3998	0.0000	1,587.3397	1,587.3397	0.0637	0.0000	1,588.6763

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,537.92	1,537.92	1537.92	3,669,740	3,669,740
Total	1,537.92	1,537.92	1,537.92	3,669,740	3,669,740

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
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	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	478.8630	478.8630	0.0220	4.5500e-003	480.7370
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	478.8630	478.8630	0.0220	4.5500e-003	480.7370
NaturalGas Mitigated	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	262.8494	262.8494	5.0400e-003	4.8200e-003	264.4491
NaturalGas Unmitigated	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	262.8494	262.8494	5.0400e-003	4.8200e-003	264.4491

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					
Hotel	4.92561e+006	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	262.8494	262.8494	5.0400e-003	4.8200e-003	264.4491
Total		**0.0266**	**0.2415**	**0.2028**	**1.4500e-003**		**0.0184**	**0.0184**		**0.0184**	**0.0184**	**0.0000**	**262.8494**	**262.8494**	**5.0400e-003**	**4.8200e-003**	**264.4491**

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					
Hotel	4.92561e+006	0.0266	0.2415	0.2028	1.4500e-003		0.0184	0.0184		0.0184	0.0184	0.0000	262.8494	262.8494	5.0400e-003	4.8200e-003	264.4491
Total		**0.0266**	**0.2415**	**0.2028**	**1.4500e-003**		**0.0184**	**0.0184**		**0.0184**	**0.0184**	**0.0000**	**262.8494**	**262.8494**	**5.0400e-003**	**4.8200e-003**	**264.4491**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.67337e+006	478.8630	0.0220	4.5500e-003	480.7370
Total		**478.8630**	**0.0220**	**4.5500e-003**	**480.7370**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.67337e+006	478.8630	0.0220	4.5500e-003	480.7370
Total		**478.8630**	**0.0220**	**4.5500e-003**	**480.7370**

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	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Unmitigated	0.9399	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003

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	0.2281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Total	**0.9399**	**4.0000e-005**	**3.7400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.1500e-003**	**7.1500e-003**	**2.0000e-005**	**0.0000**	**7.5700e-003**

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	0.2281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1500e-003	7.1500e-003	2.0000e-005	0.0000	7.5700e-003
Total	**0.9399**	**4.0000e-005**	**3.7400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.1500e-003**	**7.1500e-003**	**2.0000e-005**	**0.0000**	**7.5700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	32.1206	0.2394	5.9000e-003	38.9752
Unmitigated	32.1206	0.2394	5.9000e-003	38.9789

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	7.30563 / 0.811737	32.1206	0.2394	5.9000e-003	38.9789
Total		**32.1206**	**0.2394**	**5.9000e-003**	**38.9789**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	7.30563 / 0.811737	32.1206	0.2394	5.9000e-003	38.9752
Total		**32.1206**	**0.2394**	**5.9000e-003**	**38.9752**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.0076	1.8916	0.0000	71.7311
Unmitigated	32.0076	1.8916	0.0000	71.7311

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	157.68	32.0076	1.8916	0.0000	71.7311
Total		**32.0076**	**1.8916**	**0.0000**	**71.7311**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	157.68	32.0076	1.8916	0.0000	71.7311
Total		**32.0076**	**1.8916**	**0.0000**	**71.7311**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

The Marina del Rey Marriott Courtyard and Residence Inn
Addendum
Greenhouse Gases - Operational Emissions

Summary of Estimated Unmitigated Annual GHG Emissions

Source	GHG Emissions MTCO2e
Business-as-Usual Condition (Year 2017)	
Amortized Construction[1]	77
Mobile	1,589
Area	0.01
Energy - Electricity	481
Energy - Natural Gas	264
Waste	72
Water	39
Subtotal	**2,522**
Project (Year 2017)	
Amortized Construction[1]	77
Mobile	1,240
Area	0.01
Energy - Electricity	447
Energy - Natural Gas	231
Waste	72
Water	37
Subtotal	**2,103**
Draft SCAQMD Tier 4 Indicator (percent reduction target)	**15.8%**
Net Change from Business-as-Usual Condition (MTCO2e)	**(418)**
Net Change from Business-as-Usual (%)	**-16.6%**
Exceeds Significance Indicator?	**No**

Notes:

1. Total construction-related GHG emissions amortized over 30 years, per SCAQMD guidance.

Source: PCR Services Corporation, 2014.

The Marina del Rey Marriott Courtyard and Residence Inn
Addendum
Quantifying Greenhouse Gas Mitigation Measures - Transportation (Based on CAPCOA Guidance (August 2010))

PROJECT SCENARIO

Location Type	Global % VMT Reduction Cap
Urban:	75%
Less than 5 miles from central business district	
Jobs-rich (jobs/housing ratio greater than 1.5)	
Typical buildings are 6 stories or higher	
Grid street pattern	
Minimal setbacks	
Parking constrained on- and off-street	
Parking prices high/highest in the region	
High-quality rail; bus service at 10 min or less in peak hours	
Compact Infill:	40%
Typically 5 - 15 miles from central business district	
Balanced jobs-housing (jobs/housing ratio from 0.9 to 1.2)	
Typical buildings are 2 - 4 stories	
Grid street pattern	
Setbacks 0 - 20 feet	
Parking constrained	
Parking prices low/moderate	
Rail w/in 2 miles; bus service at 15 min or less in peak hours	

Location Type	Global % VMT Reduction Cap
Suburban Center:	20%
Typically 20 miles or more from central business district	
Balanced jobs-housing	
Typical buildings are 2 stories	
Grid street pattern	
Setbacks 0 - 20 feet	
Parking somewhat constrained on-street; ample off-street	
Parking prices low (if priced at all)	
Bus service at 20 - 30 min and/or commuter rail station	
Suburban:	15%
Typically 20 miles or more from central business district	
Housing-rich	
Typical buildings are 1 - 2 stories	
Curvilinear street pattern (cul-de-sac based)	
Parking between street and buildings; large lot residential	
Parking ample; largely surface lot-based	
No parking prices	
Limited bus service at 30 minute headways or more	

Total Global Transportation VMT Reduction =	**22.81%**	Cap:	40%
Total LUT/SDT/PDT/TST VMT Reduction =	**22.81%**	Cap:	35%

Land Use/Location Transportation Measures (65% Reduction Cap)

Total LUT % VMT Reduction =	**21.24%**	Cap:	65%

LUT-1 Increase Density

% VMT Reduction = A × B [not to exceed 30%]

A (housing) = (Number of DU/acre - 7.6) / 7.6
A (jobs) = (Number of Jobs/acre - 20) / 20
B = 0.07%

% VMT Reduction =	0.00%	Cap:	30%
Number of DU/acre:	-	A =	0%
Number of Jobs/acre:	-	A =	0%

LUT-2 Increase Location Efficiency

% VMT Reduction Cap for all LUT measures

Urban LUT % VMT Reduction Cap:	65%
Compact Infill LUT % VMT Reduction Cap:	30%
Suburban Center LUT % VMT Reduction Cap:	10%

LUT-3 Increase Diversity of Urban and Suburban Developments (Mixed Use)

% VMT Reduction = Land Use × B [not to exceed 30%]
Land Use = % increase in land use index vs. single use
= (Land Use Index - 0.15) / 0.15
Land Use Index = -a / ln(6)
$a = \sum a_i \times \ln(a_i)$
a_i = building floor area / total square feet of area considered
a_1 = single family
a_2 = multi-family
a_3 = commercial B = 0.09
a_4 = industrial
a_5 = institutional
a_6 = park

% VMT Reduction =	0.00%	Cap:	30%
Single family sqft:	-	a_1 =	-
Multi-family sqft:	-	a_2 =	-
Commercial sqft:	-	a_3 =	-
Industrial sqft:	-	a_4 =	-
Institutional sqft:	-	a_5 =	-
Park sqft:	-	a_6 =	-
Total sqft:	-		

(Note: If $a_i = 0$, then set $a_i = 0.01$)

LUT-4 Increase Destination Accessibility

% VMT Reduction = Center Distance × B [not to exceed 20%]
Center Distance = (12 - Miles to downtown or job center) / 12
B = 0.20

% VMT Reduction =	0.00%	Cap:	20%
Miles to downtown or job center:	11.5		

(Note: Only effective for 8 miles or less)

LUT-5	Increase Transit Accessibility	% VMT Reduction = Transit × B [not to exceed 30%] Transit = % project transit - % typical ITE transit % project transit = -50x + 38 [where x = 0 - 0.5 miles to transit] -4.4x + 15.2 [where x = 0.5 - 3 miles to transit] % typical ITE transit = 1.3% B = 0.67	% VMT Reduction = 21.24% Cap: 30% Miles to transit: 0.10 (Note: Only effective for 3 miles or less)	
LUT-6	Integrated Affordable and Below Market Rate Housing	% VMT Reduction = 4% × % units BMR	% VMT Reduction = 0.00% % of units below market rate: 0.0% (Note: Only effective up to 30%)	
LUT-7	Orient Project Toward Non-Auto Corridor	Not quantified separately; Assumed to be included in LUT-3 (If included in LUT-3, VMT reduction should be at least 0.5% per 1% inprovement in transit frequency and 0.5% per 10% increase in transit ridership)		
LUT-8	Locate Project near Bike Path/Bike Lanes	Not quantified separately; Assumed to be included in LUT-4 (If included in LUT-4, VMT reduction should be at least 0.625%)		
LUT-9	Improve Design of Development	% VMT Reduction = Intersections × B Intersections = % increase vs. typical ITE suburban = (Intersections per square mile of project - 36) / 36 B = 0.12	% VMT Reduction = 0.00% Intersections per square mile: - (Note: Only effective up to 100)	
Neighborhood/Site Enhancement Measures (5% Reduction Cap without NEV; 15% Reduction Cap with NEV)			**Total SDT % VMT Reduction = 2.00%**	Cap: 5% without NEV Cap: 15% With NEV
SDT-1	Provide Pedestrian Network Improvements	VMT reduction based on urban/rural context and pedestrian accomodations	% VMT Reduction = 2.00% Pedestrian network on-site and connecting off-site (urban/suburban): X 2% Pedestrian network on-site (urban/suburban): 1% (Mark an "X" in one of the above)	
SDT-2	Provide Traffic Calming Measures	Marked crosswalks, count-down signal timers, curb extensions, speed tables, rasied crosswalks, raised intersections, median islands, tight corner radii, roundabouts, on-street parking, planter strips with trees, chicanes/chokers, and others.	% VMT Reduction = 0.00% 25% of streets with improvements: A 50% of streets with improvements: B 75% of streets with improvements: C 100% of streets with improvements: D 25% of intersctions with improvements: W 50% of intersctions with improvements: X 75% of intersctions with improvements: Y 100% of intersctions with improvements: Z (Mark an "X" in one of the above for each group)	% of intersections with improvements / % of streets with improvements

% of intersections with improvements	% of streets with improvements: A	B	C	D
W	0.25%	0.25%	0.50%	0.50%
X	0.25%	0.50%	0.50%	0.75%
Y	0.50%	0.50%	0.75%	0.75%
Z	0.50%	0.75%	0.75%	1.00%

SDT-3	Neighborhood Electric Vehicle Network	% VMT Reduction = Pop × Number × NEV Pop × Number = NEVs per household [0.04 to 1.0] NEV = VMT reduction rate per household [12.7%]	% VMT Reduction =	0.00%	
			Low NEVs per Household:	0.04	
			High NEVs per Household:	1.0	
			(Mark an "X" in one of the above)		
SDT-4	Create Urban Non-Motorized Zones	Not quantified separately; Assumed to be included in SDT-1 (If included in SDT-1, VMT reduction should be at least 0.01% to 0.2%)			
SDT-5	Incorporate Bike Lane Street Design	Not quantified separately; Assumed to be included in LUT-9 (If included in LUT-9, VMT reduction should be at least 1% of worker commute per additional mile of bike lanes per square mile)			
SDT-6	Provide Bike Parking in Non-Residential Projects	Not quantified separately; Assumed to be included in LUT-9 (If included in LUT-9, VMT reduction should be at least 0.625%)			
SDT-7	Provide Bike Parking in Multi-Unit Residential Projects	Not quantified separately; Assumed to be included in LUT-9			
SDT-8	Provide Electric Vehicle Parking	Not quantified separately; Assumed to be included in SDT-3			
SDT-9	Dedicated Land for Bike Trails	Not quantified separately; Assumed to be included in LUT-9			
Parking Policy/Pricing (20% Reduction Cap)			**Total PDT % VMT Reduction =**	**0.00%**	Cap: 20%
PDT-1	Limit Parking Supply	% VMT Reduction = = (Actual Parking - ITE Parking) / ITE Parking × 0.5	% VMT Reduction =	0.00%	Cap: 12.50%
			Actual Parking Spaces:	-	
			ITE Parking Spaces:	-	
PDT-2	Unbunble Parking Costs from Property	% VMT Reduction = Change in vehicle cost × elasticity × A Change in vehicle cost = Monthly parking cost × (12/$4000) Elasticity = 0.4 A = 85%	% VMT Reduction =	0.00%	Cap: 13%
			Monthly parking cost:	$ -	
PDT-3	Implement Market Price Public Parking (On-Street)	% VMT Reduction = Park$ × B Park$ = Percent increase in on-street parking prices [minimum of 25%] B = 0.11	% VMT Reduction =	0.00%	Cap: 5.5%
			Actual On-Street Parking Price:	$ -	
			Baseline On-Street Parking Price:	$ -	
PDT-4	Require Residential Area Parking Permits	Not quantified separately; Assumed to be included in PDT-1, -2-, and -3 (If included in LUT-9, VMT reduction should be at least 0.09% to 0.36% depending on land use)			

Transit System Improvements (10% Reduction Cap)

Total TST % VMT Reduction = 0.00% Cap: 10%

TST-1	Provide a Bus Rapid Transit System	% VMT Reduction = Riders × Mode × Lines × D Riders = 28% Mode = 17% Urban Center 4% Urban 1.30% Suburban Lines = Percent of lines serving project converting to BRT D = 0.67	% VMT Reduction = 0.00% Cap: 3.2% Urban Center: 17% Urban: 4% Suburban: 1.30% (Mark an "X" in one of the above) Lines Converting to BRT: 0% Total Baseline Lines:				
TST-2	Implement Transit Access Improvements	Not quantified separately; Assumed to be included in TST-3 and -4					
TST-3	Expand Transit Network	% VMT Reduction = Coverage × B × Mode × D Coverage = % increase in transit network coverage B = 0.65 Urban Center 0.72 Urban 1.01 Suburban Mode = 17% Urban Center 4% Urban 1.30% Suburban D = 0.67	% VMT Reduction = 0.00% Cap: 8.2% Urban Center: 17% 0.65 Urban: 4% 0.72 Suburban: 1.30% 1.01 (Mark an "X" in one of the above) Coverage:				
TST-4	Increase Transit Service Frequency/Speed	% VMT Reduction = Headway × B × C × Mode × E Headway = % reduction in headways [15% - 80%] B = 0.32 Urban 0.36 Suburban C = 50% < 50% lines improved 85% >= 50% lines improved Mode = 17% Urban Center 4% Urban 1.30% Suburban E = 0.67	% VMT Reduction = 0.00% Cap: 2.5% Urban Center: 17% 0.32 Urban: 4% 0.32 Suburban: 1.30% 0.36 (Mark an "X" in one of the above) Headway: Percent of Lines Improved:				
TST-5	Provide Bike Parking Near Transit	Not quantified separately; Assumed to be included in TST-3 and -4					
TST-6	Provide Local Shuttles	Not quantified separately; Assumed to be included in TST-3 and -4					

Commute Trip Reduction (25% Reduction Cap - WORK VMT ONLY)

Total TRT % Work VMT Reduction = 0.00% Cap: 25%
% Work VMT of Total VMT: 2.5%
Total TRT % Overall VMT Reduction = 0.00%

TRT-1	Implement Voluntary Commute Trip Reduction Program	% Work VMT Reduction = A × B A = 6.2% Urban 5.4% Suburban Center 5.2% Suburban B = % employees eligible	% Work VMT Reduction = 0.00% Cap: 6.2% Urban: 6.2% Suburban Center: 5.4% Suburban: 5.2% (Mark an "X" in one of the above) % Employees Eligible:				

TRT-2 Implement Required Commute Trip Reduction Program

% Work VMT Reduction = A × B
A = 21%
B = % employees eligible

% Work VMT Reduction = 0.00% Cap: 21.0%

% Employees Eligible:

TRT-3 Provide Ride-Sharing Programs

% Work VMT Reduction = Commute × Employee
Commute = 15% Urban
10% Suburban Center
5% Suburban
Employee = % employees eligible

% Work VMT Reduction = 0.00% Cap: 15.0%

Urban:		15%
Suburban Center:		10%
Suburban:		5%

(Mark an "X" in one of the above)

% Employees Eligible:

TRT-4 Implement Subsidized or Discounted Transit Program

% Work VMT Reduction = A × B × C
A = % reduction in commute vehicle trips
B = % employees eligible
C = Adjustment from VT to VMT [1.0]

% Work VMT Reduction = 0.00% Cap: 20.0%

Urban:		A
Suburban Center:		B
Suburban:		C
Transit Subsidy: $0.75		W
Transit Subsidy: $1.49		X
Transit Subsidy: $2.98		Y
Transit Subsidy: $5.96		Z

(Mark an "X" in one of the above for each group)

% Employees Eligible:

Daily Transit Subsidy

Setting	W	X	Y	Z
A	6.2%	12.9%	20%	20%
B	3.4%	7.3%	16.4%	20%
C	1.5%	3.3%	7.9%	20%

TRT-5 Provide End of Trip Facilities

Not quantified separately; Assumed to be included in TRT-1 through -3
(If included, Work VMT reduction should be 2% to 5%, or total VMT reduction should be 0.02% to 0.625%)

TRT-6 Encourage Telecommuting and Alternate Work Schedules

% Reduction in Commute VMT

% Work VMT Reduction = 0.00% Cap: 5.5%

9-day/80-hour Work Week:		A
4-day/40-hour Work Week:		B
Telecommuting 1.5 Days:		C
Employee Participation: 1%		V
Employee Participation: 3%		W
Employee Participation: 5%		X
Employee Participation: 10%		Y
Employee Participation: 25%		Z

(Mark an "X" in one of the above for each group)

Employee Participation

Schedule	V	W	X	Y	Z
A	0.07%	0.21%	0.35%	0.70%	1.75%
B	0.15%	0.45%	0.75%	1.50%	3.75%
C	0.22%	0.66%	1.10%	2.20%	5.50%

TRT-7 Implement Commute Trip Reduction Marketing

% Work VMT Reduction = A × B × C
A = % reduction in commute vehicle trips [4%]
B = % employees eligible
C = Adjustment from VT to VMT [1.0]

% Work VMT Reduction = 0.00% Cap: 4.0%

% Employees Eligible:

TRT-8 Implement Preferential Permit Parking Program

Not quantified separately; Assumed to be included in TRT-1 through -3

TRT-9 Implement Car-Sharing Program

% Work VMT Reduction = A × B / C
A = % reduction in car-share member annual VMT [37%]
B = number of car share members per shared car [20]
C = 1,000 Urban
2,000 Suburban

% Work VMT Reduction = 0.00% Cap: 0.74%

Urban:		1,000
Suburban:		2,000

(Mark an "X" in one of the above)

TRT-10 Implement a School Pool Program

Not applicable.

TRT-11 Provide Employer-Sponsored Vanpool/Shuttle

% Work VMT Reduction = A × B × C
A = % shift in vanpool mode share of commute trips
= 2% to 20%
B = % employees eligible
C = 0.67

% Work VMT Reduction = 0.00% Cap: 13.4%

A: Shift in Vanpool Mode Share:
B: Employees Eligible:

TRT-12 Implement Bike Sharing Program

Not quantified separately; Assumed to be included in LUT-9 and SDT-5
(If included, total VMT reduction should be at least 0.03%)

TRT-13 Implement School Bus Program

Not applicable.

TRT-14 Price Workplace Parking

% Work VMT Reduction = A × B
A = % reduction in commute VMT
B = % employees subject to priced parking

% Work VMT Reduction = 0.00% Cap: 19.7%

Urban:		A
Suburban Center:		B
Suburban:		C
Daily Parking Charge: $1		W
Daily Parking Charge: $2		X
Daily Parking Charge: $3		Y
Daily Parking Charge: $6		Z

(Mark an "X" in one of the above for each group)

Setting	Daily Parking Charge W	X	Y	Z
A	6.9%	12.5%	16.8%	19.7%
B	1.8%	3.7%	5.4%	6.8%
C	0.5%	1.2%	1.9%	2.8%

% Employees Subject to Priced Parking:

TRT-15 Implement Employee Parking Cash-Out

% Work VMT Reduction = A × B

A = 7.7% Urban
4.5% Suburban Center
3.0% Suburban
B = % employees eligible

% Work VMT Reduction = 0.00% Cap: 7.7%

Urban:		7.7%
Suburban Center:		4.5%
Suburban:		3.0%

(Mark an "X" in one of the above)

% Employees Eligible:

The Marina del Rey Marriott Courtyard and Residence Inn

Addendum

Quantifying Greenhouse Gas Mitigation Measures - Transportation (Based on CAPCOA Guidance (August 2010))

	Road Pricing Management Measures (25% Reduction Cap)		**Total RPT % VMT Reduction =**	**0.00%**	Cap: 25%
RPT-1	Implement Area or Cor	% VMT Reduction = Cordon$ × B × C	% VMT Reduction =	0.00%	Cap: 22%
		Cordon$ = % increase in pricing for passenger vehicles to cross cordon [100% to 500%]	Peak-period variable pricing:		8.80%
		B = 0.45	Static all-day pricing:		21%
		C = 8.80% peak-period variable pricing			
		21% static all-day pricing	(Mark an "X" in one of the above)		
			% Increase in Cordon Pricing:		
RPT-2	Improve Traffic Flow	Not quantified in this spreadsheet; See CAPCOA Guidance (This measure reduces GHGs, not VMT)			
RPT-3	Required Project Contri	Not quantified separately; Assumed to be included in RPT-2 and TST-1 though -7			
	Transportation Infrastructure Improvements Projects				
RPT-4	Install Park-and-Ride Lc	Not quantified separately; Assumed to be included in RPT-1, TST-1, and TRT-3 and -11 (If included, VMT reduction should be at least 0.1% to 0.5%)			

The Marina del Rey Marriott Courtyard and Residence Inn
Addendum
Quantifying Greenhouse Gas Mitigation Measures
- Transportation (Based on CAPCOA Guidance (August 2010))

Trip Rate	**Trip Rate**	**Unit**
Hotel	5.34	trips/room

Trip Distances	Distance	Unit
Business-As-Usual Project:		
Non-residential C-C [1]	8.4	miles
Non-residential C-W [1]	16.6	miles
Non-residential C-NW [1]	6.9	miles
Proposed Project:		
Non-residential C-C [2]	6.5	miles
Non-residential C-W [2]	12.8	miles
Non-residential C-NW [2]	5.3	miles

Notes:

1. Based on standard trip distances in CalEEMod.
2. Based on a reduction of 22.8% from the standard trip distances in CalEEMod.

PCR Irvine
2121 Alton Parkway
Suite 100
Irvine, California 92606
TEL 949.753.7001
FAX 949.753.7002

PCR Santa Monica
201 Santa Monica Boulevard
Suite 500
Santa Monica, California 90401
TEL 310.451.4488
FAX 310.451.5279

PCR Pasadena
80 South Lake Avenue
Suite 570
Pasadena, California 91101
TEL 626.204.6170
FAX 626.204.6171

PCRinfo@pcrnet.com
www.pcrnet.com