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Chief Executive Officer

County of Los Angeles CHIEF EXECUTIVE OFFICE

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ADOPTED

BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

December 06, 2022

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012

25 December 6, 2022

CELIA ZAVALA
EXECUTIVE OFFICER

Dear Supervisors:

APPROVAL OF MITIGATED NEGATIVE DECLARATION AND LEASE TO CHARLES R. DREW UNIVERSITY OF MEDICINE AND SCIENCE FOR PROPOSED HEALTH PROFESSIONS EDUCATION BUILDING (SECOND DISTRICT) (3 VOTES)

SUBJECT

To adopt a Mitigated Negative Declaration (MND) for the proposed Charles R. Drew University of Medicine and Science (CDU) Health Professions Education Building (HPEB) and authorize a ground lease from the County to CDU to develop, construct, and operate the proposed HPEB on County real property located at 1743 120th Street across from the Martin Luther King Jr. Medical Campus in the Willowbrook community of South Los Angeles adjacent to the CDU campus (Project).

IT IS RECOMMENDED THAT THE BOARD:

1. Consider the MND for the Project (Environmental Plan No. RPPL2022002289), find that the MND was completed in compliance with the applicable provisions of California Environmental Quality Act (CEQA) and the State and County CEQA Guidelines related thereto; find that the MND reflects the independent judgment and analysis of the Board as to the environmental consequences of the Project; adopt the Mitigation Monitoring and Reporting Program (MMRP), finding that it is adequately designed to ensure compliance with the mitigation measures during Project implementation; determined that on the basis of the whole record before the Board that there is no substantial evidence that the Project will have a significant effect on the environment, and adopt the MND.

2. Find that pursuant to Government Code section 26227, the recommended actions to authorize the proposed ground lease with CDU will serve public purposes and make available County real property not needed for County purposes to be used to carry out programs in the best interests of the County and general public.

3. Authorize and direct the Chief Executive Officer, or her designee, to sign the proposed ground lease with CDU to develop, construct, and operate a five-story, 92,618 square foot HPEB.
4. Authorize the Chief Executive Officer, or her designee, to execute any other ancillary documentation, approved as to form by County Counsel, necessary to effectuate the terms of the proposed ground lease and authorize the Chief Executive Officer, or her designee, to take other actions necessary and appropriate to implement and effectuate the terms of the proposed ground lease.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to approve and adopt the MND for the proposed CDU HPEB and to authorize a proposed ground lease from the County of Los Angeles (County) to CDU to develop, construct, and operate the HPEB.

On November 21, 2017, the Board of Supervisors approved a motion directing the Chief Executive Office to negotiate an Exclusive Negotiation Agreement (ENA) with CDU for the potential development of County-owned parcels along 120th Street adjacent to the CDU campus. The motion set forth three priorities: the first being an entrance to the CDU campus, the second being synergistic health related uses, and the third being an extension of the CDU campus. The Chief Executive Office subsequently entered into an ENA with CDU and has met the first two priorities by leasing space to CDU for a grand entrance and a modular building for clinical and office space for both CDU and APLA Health and Wellness. Adoption of the MNDA and approval of the proposed lease will allow the third priority to be met by a proposed CDU HPEB.

The County property, the site of the proposed HPEB, is a 46,650 square foot parcel located at 1743 120th Street in the unincorporated Willowbrook area across from the Martin Luther King Jr. Medical Center and adjacent to the CDU main campus. The proposed HPEB will be five stories and will be 92,618 square feet. CDU has obtained enough donations to construct the HPEB without needing to obtain a construction loan.

The HPEB will allow for a four-year medical education program that will cultivate students with diverse backgrounds and experiences who will become physician leaders who will care for the community with the skills and dedication to provide excellent and compassionate health care to those in need. These physician leaders are more likely to practice in California and in medically disadvantaged areas than those graduating from other medical institutions.

Implementation of Strategic Plan Goals

The proposed ground lease supports the Countywide Strategic Plan Goal III.3.2, which calls to maximize use of County assets, guide strategic investments, and support economic development, in ways that are fiscally responsible and align with the County's highest priority needs. The proposed ground lease is also consistent with the Strategic Asset Management Goal of strengthen connection between service priorities and asset decisions and Key Objective No. 5, Funding Highest Priority Needs. The proposed ground lease to CDU will allow for a medical school whose graduates are more likely to practice in California and in medically challenged areas than those graduating from other medical institutions.

FISCAL IMPACT/FINANCING

The proposed ground lease to CDU will generate \$50,000 per year in rent to the County during the construction period and \$100,000 a year in rent and provide for annual 3 percent increases once the HPEB is operational.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The proposed ground lease to CDU is authorized by the California Government Code section 26227, which authorizes the leasing of County land not needed for County purposes to non-profit entities to carry out programs to be in the best interest of the County and the general public.

The proposed ground lease will include the following terms and conditions:

- An initial term of 60 years with two, 10-year extensions.
- \$100,000 yearly rent with a yearly 3 percent increase.
- 50 percent rent credit during the shorter of the preconstruction and construction phase of the project or three years.
- The County will share 50 percent of any required site remediation up to \$350,000.
- A requirement to have a reserve study performed every five years with the obligation to fund a reserve account to ensure upkeep of the HPEB.
- County shall have the right to use the meeting and conference facilities at the HPEB up to five times a year with no charge other than reimbursing CDU for actual costs incurred.
- Any revenues generated by CDU in excess of CDU's costs to operate and maintain the HPEB shall be reinvested in the HPEB.
- The proposed ground lease was submitted for review to the Board's appointed Real Estate Management Commission on October 26, 2022, and was unanimously approved.

ENVIRONMENTAL DOCUMENTATION

An Initial Study was prepared for the Project in compliance with CEQA guidelines and requirements. The Initial Study identified two potentially significant effects of the project:

(1) Hazards and Hazardous Materials related to the potential release of hazardous materials into the environment during construction, and (2) Hydrology and Water Quality related to erosion or siltation on-site and off-site, drainage patterns, or surface runoff. However, these two areas of environmental impact were found to be less than significant with mitigation measures incorporated.

Hazards and Hazardous Materials: To mitigate the potential impacts related to the potential release of hazardous materials or waste into the environment and better protect worker health and safety as well the public during construction, the applicant shall prepare and complete a Soil Management Plan prior to initiating soil disturbance and removal activities. All measures contained within the Soil Management Plan shall be implemented during all activities that involve soil disturbance. The Soil Management Plan shall be submitted to the Los Angeles County Fire Department Health Hazardous Materials Division (HHMD) for review and approval during the building permit application phase. The applicant shall also incorporate any necessary features to meet applicable standards, to the satisfaction of HHMD. HHMD shall oversee the implementation of the Soil Management Plan at the project site.

Hydrology and Water Quality: To mitigate potential impacts related to stormwater runoff, pollution loadings from impervious surfaces, erosion, and other impacts on the drainage systems, the applicant shall implement stormwater quality control measures that are consistent with the County's Low Impact Development standards (County of Los Angeles Code of Ordinance Title 12, Chapter 12.84) to reduce stormwater runoff. The measures shall be reviewed and approved by the Los Angeles County Public Works Department during the building permit application phase. The applicant shall also prepare a hydrology study to demonstrate the proposed development will not increase stormwater runoff from existing conditions. The hydrology study shall be submitted to the Department of Public Works review and approval during the building permit application phase.

Therefore, Department of Regional Planning staff determined that an MND was the appropriate environmental document for the Project. The mitigation measures necessary to ensure that the Project will not have a significant effect on the environment are contained in the MMRP prepared for the Project.

Public notice was published in the Sentinel pursuant to the California Public Resources Code section 21092 and posted pursuant to section 21092.3. Notice to commenting public agencies was completed pursuant to section 21092.5 of the California Public Resources Code.

Upon the Board's adoption of the MND, a Notice of Determination will be filed in accordance with section 21152 of the California Public Resources Code and pay the required fees to the Registrar-Recorder/County Clerk.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The lease will pose no impact to current services.

CONCLUSION

It is requested that the Executive Office of the Board return the adopted, stamped Board letter to the Chief Executive Office, Real Estate Division, at 320 West Temple Street, 7th Floor, Los Angeles, CA 90012, for further processing.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Fesia A. Davenport', with a stylized, flowing script.

FESIA A. DAVENPORT
Chief Executive Officer

FAD:JMN:JTC
JLC:MGR:gb

Enclosures

c: Executive Office, Board of Supervisors
County Counsel
Auditor-Controller

ENCLOSURE

**GROUND LEASE
(AREA 2)**

By and Between

THE COUNTY OF LOS ANGELES,
a body corporate and politic, as landlord

and

CHARLES R. DREW UNIVERSITY OF MEDICINE AND SCIENCE,
a California nonprofit corporation, as tenant

Effective: December [____], 2022

GROUND LEASE

(AREA 2)

THIS GROUND LEASE (AREA 2) (this “**Lease**”) is effective as of December ____, 2022 (the “**Effective Date**”), by and between the COUNTY OF LOS ANGELES, a body corporate and politic (“**County**”) as landlord and CHARLES R. DREW UNIVERSITY OF MEDICINE AND SCIENCE, a California nonprofit corporation (“**CDU**”) as tenant. County and CDU are each sometimes referred to individually as a “**Party**” and collectively as the “**Parties**.”

RECITALS

A. County is the fee owner of that certain real property containing approximately 3.51 acres (152,895 square feet of area), identified as Assessor’s Parcel Number 6149-028-919, which is currently developed with a surface parking lot, the Martin Luther King Medical Center’s Pediatric Hub, and modular storage units, as legally described on Exhibit A and depicted on Exhibit B (the “**County Property**”).

B. In consideration of the rents and covenants herein specified to be paid and performed by CDU and pursuant to Government Code Section 26227, which provides authority for the leasing of County property to CDU, County is prepared to lease an approximately 46,650 square foot portion of the County Property, legally described on Exhibit C-1 and depicted on Exhibit C-2 (the “**Premises**”), to CDU for CDU to construct a health professions education building (the “**HPEB**”) to locate, among other things, its independent medical school and other programs for the education and training of health professionals. The Parties acknowledge and agree that this Lease is being made at a below market cash rental rate predicated on the unique qualifications of CDU and the unique benefit CDU will bring to County and the public through the use of the Premises for the Permitted Uses (defined in Section 3.1.1).

C. The improvements to be built on the Premises by CDU, shall consist of a multi-story building of up to approximately 100,000 square feet, and other related improvements, in accordance with the entitlements, permits, plans and specifications issued or approved by the County (collectively, the “**Improvements**” and together with the Premises the “**Area 2 Project**”). The Parties envision that the Area 2 Project will be constructed substantially as set forth in the concept plan attached as Exhibits D1 and D2.

NOW, THEREFORE, in reliance on in consideration of the foregoing Recitals, which are hereby deemed a contractual part hereof, and in consideration of the mutual covenants, agreements and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, County and CDU agree as follows:

- 1 GROUND LEASE AND TERM: County hereby leases to CDU, and CDU leases from County, the Premises, subject to the terms, covenants, conditions, exceptions, and/or reservations set forth in this Lease.
- 1.1 As-is:
 - 1.1.1 CDU accepts the Premises as so improved in its present condition notwithstanding the fact that there may be certain defects in the Premises, whether or not known to either Party to this Lease, at the time of the Effective Date. CDU hereby represents that in connection with its acceptance of the Premises, CDU has been given the opportunity to perform such tests, inspections, reviews, studies and investigations (including a Phase I and Phase II Environmental Assessment Report) respecting the Premises as so improved as it considers necessary or appropriate to adequately evaluate the condition and other aspects of the Premises. CDU hereby accepts the Premises as so improved on an “**AS IS**,” “**WHERE IS**” and “**WITH ALL FAULTS**” basis and, except as expressly set forth in this Lease, CDU is not relying on any representation or warranty of any kind whatsoever, express or implied, from County or any other governmental authority or public agency, or their respective agents or employees, as to any matters concerning the Premises and/or any improvements located thereon, including without limitation representation or warranties regarding: (i) the quality, nature, adequacy and physical condition and aspects of the Premises and/or any improvements located thereon, including, but not limited to, the appurtenances, access, landscaping, parking facilities and the electrical, mechanical, utility systems, and the square footage of the land; (ii) the quality, nature, adequacy and physical condition of soils, geology and any groundwater; (iii) the development potential of the Premises, and the use, habitability, merchantability or fitness, or the suitability, value or adequacy of the Premises and/or any improvements located thereon for any particular purpose; (iv) the zoning or other legal status or entitlement or lack thereof of the Premises or any other public or private restrictions on use of the Premises; (v) the compliance of the Premises and/or any improvements located thereon with any applicable codes, laws, rules, regulations, statutes, resolutions, ordinances, covenants, conditions and restrictions now or hereafter in effect of the County of Los Angeles, State of California, the United States of America, and/or any other governmental or quasi-governmental entity (collectively, the “**Applicable Laws**”) or of any other person or entity (including, without limitation, relevant provisions of the Americans with Disabilities Act (“**ADA**”)); (vi) the presence of any underground storage tank or Hazardous Substances (defined in Section 19) on, under or about the Premises, the County Property or any other adjoining or neighboring property; (vii) the quality of any labor and materials used in any improvements on the Premises, (viii) the condition of title to the Premises, and (ix) the economics of the operation of the Premises and/or any improvements located thereon. County shall not be responsible for any land subsidence, slippage, soil instability or damage resulting therefrom at or on the Premises. CDU hereby fully and irrevocably releases County from any and all claims that it may now have or hereafter acquire against it for any cost, loss, liability, damage, expense, claim or cause of action related to any Hazardous Substances or other conditions affecting the Premises or any portion thereof. This release includes claims of which CDU is presently unaware or which CDU does not presently suspect to exist in its favor which, if known by CDU would materially affect CDU’s release of County. CDU specifically waives the provisions of California Civil Code Section 1542, which provides as follows:

“A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.”

CDU Initials

1.1.2 Reservations: CDU expressly agrees that this Lease and all rights hereunder shall be subject to all encumbrances, reservations, licenses, easements and rights of way (collectively, “**Encumbrances**”) whether or not recorded (a) existing as of the Effective Date or (b) expressly consented to in writing by CDU. Without limiting the foregoing, CDU expressly agrees that this Lease and all rights hereunder shall be subject to all prior matters of record. As of the Effective Date, to the actual knowledge of Joyce Chang, without any duty of investigation, except as described in Section 1.1.3 below, there are no unrecorded Encumbrances affecting or encumbering the Premises or any portion thereof.

1.2 Term:

1.2.1 Term: The initial term of this Lease shall commence upon the Effective Date and shall terminate on the anniversary of the Effective Date that occurs in 2082 (the “**Initial Term**”), as such date may be accelerated or extended pursuant to the terms of this Lease.

1.2.2 Option to Extend: Provided CDU is not then in default under this Lease beyond any applicable cure period, CDU may, at its option, extend this Lease for two (2) additional periods of ten (10) years each (each, an “**Additional Term**” and together with the Initial Term, the “**Term**”) by giving written notice to County of its desire to extend the Term not less than one hundred eighty (180) days prior to the expiration of the then current Term. If CDU fails timely to exercise its option, this Lease shall expire upon the expiration date of the then current Term. Upon timely exercise of CDU’s option, the Term expiration date shall be extended for, and the Term shall include, the period of the Additional Term upon the same terms and conditions of this Lease. In no event shall the total Term exceed eighty (80) years.

2 LEASE CONSIDERATION:

2.1 Rent: Subject to CDU's right to a rent credit as provided in Section 19.5, CDU shall pay rent as follows (collectively, “**Rent**”):

2.1.1 Base Rent: Base rent (“**Base Rent**”) shall be payable annually, in advance, commencing on the Effective Date and continuing thereafter on each anniversary of the Effective Date for each year of the Term, without notice or demand by County and without offset, credit, deduction, abatement, diminution or counterclaim of any type or nature whatsoever by CDU, except as expressly provided herein; provided, however, CDU may pay in advance Base Rent for future years at CDU’s election. Annual Base Rent shall be Fifty Thousand Dollars (\$50,000.00) during the shorter time period of: (a) the pre-construction and construction period or (b) the first three years of the term. Annual Base Rent shall be One Hundred Thousand Dollars (\$100,000.00) thereafter, and shall increase annually by three percent (3.0%) thereafter.

- 2.1.2 Reserved.
- 2.1.3 Additional Rent: Any additional amounts to be paid by CDU to County pursuant to this Lease, and reimbursement of any amounts otherwise incurred by County in performing any obligation of CDU following CDU's failure to perform, all of which shall constitute additional rent (collectively, "**Additional Rent**"). Except as otherwise expressly provided for in this Lease, all Additional Rent shall be due and payable thirty (30) days after written demand by County.
- 2.1.4 All general references to "rental" or words of similar import, shall mean Rent as defined pursuant to this Section 2.
- 2.2 Additional Consideration: As additional consideration for County leasing the Premises to CDU hereunder:
- 2.2.1 CDU shall, at its sole cost and expense, construct the Improvements in accordance with Section 6, and maintain and use the Improvements on a continuous basis as provided herein (collectively, "**CDU's Obligations**").
- 2.2.2 CDU shall perform all obligations of CDU required by this Lease, including those contained in the Exhibits.
- 2.2.3 CDU shall pay all costs associated with its leasing and occupancy of the Premises including without limitation all (i) development, construction, operation, maintenance, and repair of the Improvements and any other improvements constructed by CDU, (ii) grading, site work, demolition and removal of any County improvements on the Premises, and any required infrastructure upgrades, (iii) taxes (including any property or possessory taxes), assessments, insurance premiums, claims asserted by third parties, utility payments, and CDU acknowledges that the Lease shall be absolutely at no cost to County.
- 2.2.4 The Board determined at its meeting of December 6, 2022, that there is no substantial evidence that the Area 2 Project will have a significant effect on the environment and adopted the Mitigated Negative Declaration (Environmental Plan No. RPPL2022002289 and Mitigated Monitoring and Reporting Program). If the Area 2 Project is hereafter required to further comply with CEQA pursuant to Applicable Law during the Term, CDU shall pay all costs associated with such compliance, including without limitation, preparation of analyses, studies and environmental documentation, and legal descriptions related to this Lease and undertaking any required mitigation measures.
- 2.2.5 CDU shall provide the Development Documents to County in accordance with Section 6.
- 2.2.6 CDU shall reimburse County for all of County's Actual Costs (defined in this Section 2.2.6) in the event that (a) following CDU's failure to perform any of CDU's Obligations, which failure has become a Material Default, County performs such CDU's Obligation, (b) any Material Default results in Actual Costs to County, (c) CDU requests County's consent to enter into an Assignment (defined in Section 16.1.1) or a Sublease (defined in Section 16.1.2), (d) CDU requests County's consent to make any material structural changes or additions to the Improvements as approved by County pursuant to

Section 6 of this Lease, (e) CDU requests any changes or amendments to this Lease, and/or (f) CDU desires to obtain financing relating to the Area 2 Project.

“Actual Costs” means the reasonable out-of-pocket costs and expenses actually incurred by County with respect to a particular activity or procedure, including without limitation, expenditures (a) to third-party legal counsel, financial consultants and advisors, contractors, appraisers, (b) for court costs, collections fees and costs, and bank charges, and (c) a reasonable allocation of County overhead and administrative costs to fully compensate County for performing such obligations on behalf of CDU.

- 2.2.7 CDU shall manage the Premises in accordance with the standards and practices consistent with CDU’s management of its owned property and the balance of the university (but in no event lower than the standard at which other improvements on the County Property are maintained).

3 PERMITTED USES AND APPLICABLE LAWS:

3.1 Permitted Uses:

- 3.1.1 CDU is permitted to use the Premises to construct thereon the Improvements, as specified in Section 6, and once the Improvements are constructed, to utilize the Area 2 Project only for: (a) the HPEB, and (b) other university-related and incidental uses (collectively, the **“Permitted Uses”**). Except as specifically provided herein, the Premises and Improvements shall not be used for any purpose other than the Permitted Uses, without the prior written approval of County, at County’s sole and absolute discretion.

- 3.1.2 County makes no representation or warranty regarding the continued legality of the Permitted Uses or any of them, and CDU bears all risk of an adverse change in Applicable Laws.

- 3.1.3 CDU shall comply with its obligations and be subject to all applicable governmental regulatory agencies and the reasonable, non-discriminatory rules and regulations of County in connection with the operation of Area 2 Project as promulgated from time to time by County. CDU shall ensure all parking requirements are met on site and/or, as necessary, elsewhere on the CDU campus, and shall not use or count any parking located on the neighboring Dr. Martin Luther King Medical Center Campus as meeting CDU’s parking requirements for the Area 2 Project.

3.2 Prohibited Uses: Notwithstanding, and without expanding upon or enlarging the Permitted Uses:

- 3.2.1 Nuisance: CDU shall not conduct or permit to be conducted any private or public nuisance on or about the Premises or the Improvements, nor commit any waste thereon. No rubbish, trash, waste, residue, brush, weeds or undergrowth or debris of any kind or character shall ever be permitted to remain or accumulate upon any portion of the Premises, except for trash collected in appropriate receptacles intended for such purposes, nor shall any portion of the Premises or Improvements be permitted to be operated or maintained in a manner that renders the Premises or Improvements a fire hazard.

- 3.2.2 The Premises and Improvements shall not be used or developed in any way which violates any Applicable Law.
- 3.2.3 No part of the Premises shall be used by any person for any adult entertainment purposes, as such term refers to graphic, explicit and/or obscene depictions of sexual activity;
- 3.2.4 No tools, equipment, or other structure designed for use in boring for water, oil, gas or other subterranean minerals or other substances, or designed for use in any mining operation or exploration, shall hereafter be erected or placed upon or adjacent to the Premises, except (i) as is necessary to allow CDU to perform its maintenance and repair obligations pursuant to this Lease, and (ii) for such boring or drilling as necessary to perform water testing or monitoring, or any dewatering program to relieve soil water pressure.
- 3.2.5 Except as expressly set forth in Section 16, no portion (including without limitation rooftops, exterior walls, or any portion of an exterior area including parking spaces) of the Area 2 Project shall be sublet or licensed to any party, other than any license required to allow television, telecommunication, internet and other similar services to be provided directly to Area 2 Project solely for the use of the occupants of the Area 2 Project.
- 3.2.6 In compliance with County's non-smoking provision, Los Angeles County Code Chapter 2.126, no part of the Premises, which areas are not open to the sky, shall allow smoking. CDU shall designate all such areas as "no smoking" areas.
- 3.3 Active Public Use: The Parties acknowledge that County's objective in entering into this Lease is the complete and continuous use of the facilities and amenities located on the Premises by and for the benefit of the public so as to furnish the maximum educational and cultural benefits to the community, without discrimination as to race, gender or religion. Accordingly, CDU agrees and covenants that it will operate the Premises and Improvements for the Permitted Uses during reasonable hours, depending on demand and economic feasibility (except to the extent that CDU is prevented from doing so due to Force Majeure (as defined below) or due to temporary interruption as necessary for the Work, maintenance, repair, renovation, alteration or other improvement work required or permitted to be performed by CDU under this Lease) in light of these objectives. Any revenues generated by CDU from the Permitted Uses in excess of CDU's costs of operating the Permitted Uses and maintaining the Premises and the Improvements (including, without limitation, capital costs and financing costs) shall be reinvested in the Premises, the Improvements and use of the Premises for the Permitted Uses. No profits will inure to any private individual or any for-profit entity. As used herein, **Force Majeure** shall mean any cause beyond the reasonable control of, and not due to the fault or negligence of, the Party affected, and which could not have been avoided by such Party's reasonable due diligence, including drought, flood, landslide, earthquake, hurricane, tornado, storm or other unusually adverse weather condition, fire, lightning, epidemic or pandemic, war, blockade, riot, civil disturbance, famine, accident, sabotage, explosions, theft, casualty, embargo, injunction, shortages of rolling stock, third party strikes, lockouts or other third party labor difficulties, government shutdown, restrictions or restraints imposed by a change in the law by the California legislature or regulatory authority, orders or judgments

of any governmental entity, the absence, suspension, termination, interruption, delay in issuance, denial, or failure of renewal of any permit, or any changes in laws which would make the performance of an obligation impossible or illegal.

- 3.4 Compliance with Applicable Laws: CDU shall, at its sole cost and expense, conform to, and shall use commercially reasonable efforts to cause all persons using or occupying any part of the Area 2 Project to comply with, all Applicable Laws, including, without limitation, the ADA, and rules and regulations governing the Premises that may be in effect from time to time applicable to the construction of the Improvements and/or to the use of the Area 2 Project. CDU hereby warrants and covenants that the operation of the Area 2 Project shall not unreasonably interfere with any functions of County outside of the Premises. CDU covenants and agrees to indemnify and to hold County, its Special Districts, elected and appointed officials, officers, employees, agents and volunteers (collectively, the “**County Indemnitees**”) harmless from any penalties, damages, or charges imposed for any violation of any and all Applicable Laws occurring on the Premises, whether occasioned by neglect, omission, or willful act of CDU or any person (other than County, and other County Indemnatee and any of their respective officers, agents, employees, guests, and invitees) by license, invitation, sublease, assignment, or any other arrangement with CDU.
- 3.5 County Use: Upon the County’s request, which request shall be made not less than ten (10) business days prior to the desired date and time, to the extent not conflicting with a previously scheduled use for the desired facility or facilities or impeding or interfering with CDU’s use of the Premises or the Improvements, CDU shall make the meeting and conference facilities at the Premises available for County reasonable use. County’s request shall state with specificity the date(s), time(s) and purpose(s) for which use of such meeting and conference facilities is being requested. County shall not exercise its rights under this Section 3.5 more than five (5) times in any calendar year. County shall not be responsible for any fees, rent or costs for the use of the space, provided that, CDU may charge County for any reasonable, actual, out-of-pocket, third-party expenses incurred due to County’s use.

4 TAXES AND ASSESSMENTS:

- 4.1 Payment of Taxes: CDU agrees to pay before delinquency all lawful taxes, assessments, fees, or charges which at any time may be levied by the State, County, City or any tax or assessment levying body upon any interest in this Lease or any possessory right which CDU may have in or to the Premises or the Improvements thereon for any reason, as well as all taxes, assessments, fees, and charges on goods, merchandise, fixtures, appliances, equipment, and property owned by it in, on or about the Premises.
- 4.2 Possessory Interest Tax: The Parties acknowledge that the Premises shall be subject to possessory interest taxes, and that such taxes shall be paid by CDU. This statement is intended to comply with Section 107.6 of the Revenue and Taxation Code. Without limiting the foregoing, CDU shall have the right to undertake, at CDU’s sole cost and expense, a claim for property tax exemption for the Premises.

- 4.3 Indemnity: CDU agrees to indemnify and hold County Indemnitees harmless from the payment of taxes, including any penalties and interest associated therewith. CDU further agrees to prevent said taxes from becoming delinquency liens upon the Area 2 Project, and except where CDU notifies County in writing that CDU is contesting or proposes to contest taxes, to allow County to pay such taxes which have become more than ninety (90) days delinquent. County shall in no way be obligated to pay such taxes which become delinquent; but, if County properly makes such payments in accordance with this Section 4, they will become immediately due and payable to County by the CDU and shall include any penalties assessed.
- 4.4 CDU's Right to Contest Taxes: CDU shall have the right, at its own expense, to contest the amount or validity of any Taxes by appropriate proceedings diligently conducted in good faith which shall operate to prevent the collection of any Taxes so contested or the sale of the Area 2 Project or any part thereof to satisfy the same. Pending final judgment and appeals of any such legal proceedings, County shall not have the right to pay, remove, or discharge any Taxes thereby contested, provided that CDU shall indemnify and hold harmless County Indemnitees from and against any and all claims and liability thereto and shall protect County and the Area 2 Project from any lien by adequate surety bond or other security reasonably deemed appropriate by County.
- 4.5 Proration of Taxes: CDU shall be responsible for all real estate taxes and assessments on the Premises payable in respect to periods during the Term. Any taxes which have been prepaid by CDU shall not be prorated, but CDU shall have the sole right after the expiration or termination of this Lease to apply to the Los Angeles County Treasurer for refund of the taxes attributable to the period after the lease terminates, pursuant to Revenue and Taxation Code Section 5096.7. From the Lease expiration or termination date and the Premises are surrendered to County, County shall be responsible for all unpaid real estate taxes and assessments on the Premises.
- 4.6 Exemption: County acknowledges that CDU is a nonprofit public benefit corporation and therefore each may be exempt from payment of property taxes related to the Premises. CDU shall have the right to pursue and secure any such property tax exemption to which it is reasonably entitled.
- 4.7 Survival: The indemnities provided in this Section 4 shall survive the termination or expiration of this Lease.
- 5 UTILITIES:
- 5.1 Consent From County: CDU shall not enter into any contract or agreement with any governmental agency or body or public utility with reference to any and all sewer lines, water lines, street improvements, street lighting, or utility connections, lines, or easements without the prior written consent of County (which consent shall not be unreasonably withheld, delayed or conditioned), nor shall CDU grant, quitclaim, transfer, and/or relocate any and all easements without the prior written consent of County. CDU shall install separate meters for CDU's use for all utilities required for the Area 2 Project. CDU covenants and agrees to contract in CDU's own name and to pay directly to the providers

thereof, all charges for all utility services used, rendered or supplied to or for the Premises. All costs associated with bringing required utilities to the Area 2 Project, including related professional and service charges, and the costs of connections to the utility system shall be considered part of the construction cost of the CDU's Area 2 Project and shall be solely the CDU's responsibility.

5.2 County Utility Services: County shall not be required to furnish to CDU any water, sewer, gas, heat, electricity, light, power or any other facilities, equipment, labor, material or any services of any kind whatsoever, whether similar or dissimilar.

5.3 Ownership: As between County and CDU, title to all utility lines, transformer vaults and all other utility facilities constructed or installed by CDU upon the Premises shall vest in County upon construction or installation to the extent that they are not owned by a utility company or other third-party provider. Notwithstanding that title shall vest in County, all utility lines, transformer vaults and all other utility facilities (other than any sewer, storm drain, or other utility systems which have been dedicated to and accepted by County pursuant to a dedication separate from this Lease), shall be maintained, repaired, and replaced, if and as needed, by CDU during the Term.

6 CONSTRUCTION, OWNERSHIP OF IMPROVEMENTS AND LIENS:

6.1 Development Plan:

6.1.1 Development Plan: The “**Work**” means construction of the Improvements in accordance with the final plans and specifications submitted by CDU and approved by County, which approval County shall not unreasonably withhold, delay or condition (the “**Final Plans and Specifications**”). Within ninety (90) days after County's approval of the Final Plans and Specifications and satisfaction of the other provisions of this Section 6 that are necessary preconditions to the commencement of the Work, CDU shall commence the performance of the Work.

6.1.2 Implementation of Final Plans and Specifications: There shall be no material changes, material modifications or material exceptions to the Final Plans and Specifications, except as expressly approved in advance in writing by the County as provided in Section 6.4 of this Lease or otherwise in accordance with this Section 6. CDU shall be responsible for the acquisition and compliance with all required governmental approvals (including, without limitation, as applicable, County planning and entitlement approvals) for the Work. CDU shall be solely responsible for all costs and expenses incurred in connection with the design, entitlement and construction of the Work. The remaining Sections of this Section 6 pertain to the construction of the Work and to any other work which CDU may be required to make to the Premises during the Term.

6.2 Construction of Improvements:

6.2.1 Construction: Construction of the Improvements and performance of the Work shall be made subject to the conditions hereinafter set forth, which CDU covenants to observe and perform.

- 6.2.2 Governmental Approvals: Work shall not be undertaken until CDU shall have obtained and paid for all applicable municipal and other governmental permits and authorizations of the various municipal departments and governmental agencies having jurisdiction over the work. No zoning changes or variances may be obtained except with County's prior written consent, which is not to be unreasonably withheld, delayed or conditioned.
- 6.2.3 Commencement and Completion of Construction: All Work shall be completed at the expense of CDU, including capital and financing costs, and without expense to County. All Work shall be prosecuted to completion with due diligence. Notwithstanding the foregoing, construction of the Work shall be commenced within one month of the issuance of all necessary permits and shall be completed (except normal punch list items) within thirty-six (36) months following the commencement of construction, subject to Force Majeure. For purposes of this Lease, the commencement of permitted construction activities in accordance with the Final Plans and Specifications shall be the first date upon which construction activity for the Improvements is begun.
- 6.2.4 Payment and Performance Security: Prior to the commencement of the Work, CDU shall provide, or cause CDU's contractors to provide, Payment and Performance Security which satisfies the terms and conditions of Section 11.
- 6.2.5 Evidence of Financing: Prior to the commencement of the Work, CDU shall have provided evidence reasonably satisfactory to County (and County shall have approved in writing) of CDU having sufficient financial resources, as reasonably determined by County, to complete the Area 2 Project. To obtain the approval described in the immediately preceding sentence, CDU shall have furnished County with its financial statements evidencing available funds to complete the Area 2 Project.
- 6.2.6 Work Schedule: Prior to the commencement of the Work, County shall have approved a construction schedule for the Work (and its completion) submitted to County by CDU, and such approval by County shall not be unreasonably conditioned, denied or delayed.
- 6.3 Construction Standards:
- 6.3.1 General Construction Standards: In connection with all Work, construction, alteration, or repair work permitted herein, CDU shall take all reasonably necessary measures to minimize any damage, disruption or inconvenience caused by such Work and shall make adequate provision for the safety and convenience of all persons affected thereby. CDU shall repair, at its own cost and expense, any and all damage caused by such Work, and shall restore the area upon which such Work is performed to a condition which is at least equal to or better than the condition which existed prior to the beginning of such Work, ordinary wear and tear excepted. In addition, CDU shall pay (or cause to be paid) all Actual Costs and expenses associated therewith and shall indemnify and hold County Indemnitees harmless from all damages, losses, or claims attributable to the performance of such Work. This indemnity shall survive the termination or expiration of this Lease.
- 6.3.2 Utility Work: Any work performed by or on behalf of CDU or any occupant of the Premises to connect to, repair, relocate, maintain or install any storm drain, sanitary sewer, water

line, gas, telephone conduit or any other public utility service shall be performed so as to minimize interference with the provision of such services to occupants of neighboring properties and other persons.

- 6.3.3 Compliance with Applicable Laws: All improvements on the Premises shall be constructed in compliance with all Applicable Laws governing the Premises that may be in effect. CDU shall have the sole responsibility for obtaining all necessary permits and shall make application for such permits directly to the person or governmental agency having jurisdiction thereover.
- 6.3.4 Prevailing Wages: This is a Public Works project as defined in Section 1720 of the California Labor Code. CDU shall ensure that the performance of the Work complies with the applicable provisions of the Labor Code of the State of California, including but not limited to, prevailing wage statutes.
- 6.3.5 Countywide Local and Targeted Worker Hire Program: CDU shall comply with County's existing Local and Targeted Worker Hire Program Policy attached as Exhibit F.
- 6.3.6 Construction Safeguards: CDU shall erect and properly maintain at all times, as required by the conditions and the progress of Work performed by CDU, all necessary safeguards for the protection of workers and the public.
- 6.3.7 Rights of Access: Representatives of County shall have the right of reasonable access to the Premises and the improvements thereon at normal construction hours during the period of construction, for the purpose of ascertaining compliance with the terms of this Lease, including, but not limited to, the inspection of the construction work being performed. County's access shall not unreasonably interfere with CDU's construction and/or operations.
- 6.3.8 Notice of Completion: Upon completion of construction on the Premises and issuance of a Temporary or Final Certificate of Occupancy for the Improvements, CDU shall file or cause to be filed in the Official Records of County a Notice of Completion with respect to the Improvements. Also, promptly upon such completion of construction, CDU shall provide County's Chief Executive Office, Real Estate Division with one complete set of electronic reproducible as-built drawings.
- 6.4 Changes to Plans Following Approval: No material changes to the Final Plans and Specifications shall be made without the prior written approval of County. Any such proposed changes shall be submitted to County for County's approval or disapproval. County shall have thirty (30) days following receipt of the proposed changes in which to give its approval or disapproval. County's approval shall not be unreasonably withheld, delayed or conditioned. Any disapproval shall set forth in detail the reasons for disapproval. County's failure to approve such proposed changes within such thirty (30)-day period shall be deemed disapproval.

6.5 Protection of County:

- 6.5.1 No Consent of County: Nothing in this Lease shall be construed as constituting the consent of County, express or implied, to the performance of any labor or the furnishing of any materials or any specific improvements, alterations of, or repairs to, the Premises or any part thereof by any contractor, subcontractor, laborer or materialman, nor as giving CDU or any other person any right, power or authority to act as agent of or to contract for, or permit the rendering of, any services, or the furnishing of any materials, in such manner as would give rise to the filing of mechanics' liens or other claims against the fee of the Premises or the Area 2 Project.
- 6.5.2 Protection Against Liens: County shall have the right at all reasonable times to post, and keep posted, on the Premises any notices which County may deem necessary for the protection of County and of the Premises and the improvements thereof from mechanics' liens or other claims. CDU shall give County ten (10) days prior written notice of the commencement of the Work or any work to be done on the Premises to enable County to post such notices. In addition, CDU shall make, or cause to be made, prompt payment of all monies due and contractually owing to all persons doing any work or furnishing any materials or supplies to CDU or any of its contractors or subcontractors in connection with the Premises and the Improvements thereon in accordance with Section 9.
- 6.5.3 Notice: Should any claims of lien be filed against the Premises or the Improvements thereon, or any action affecting the title to the Premises or the Improvements thereon be commenced, the party receiving notice of such lien or action shall forthwith give the other party written notice thereof.
- 6.5.4 County Approval: County's approval, in its capacity as landlord, is given solely as an expression of County's lack of objection to the Final Plans and Specifications, any other development documents, or any action for which County's approval, in its capacity as landlord, is sought, and shall under no circumstance be deemed or construed to constitute (a) County's endorsement of such Final Plans and Specifications, such other development documents, or such action, (b) a professional opinion by County regarding the effect, safety, legality, or construction worthiness of any improvement or work conducted in accordance with such Final Plans and Specifications, such other development documents, or such action, or (c) County's acceptance or assumption of any liability arising from such Final Plans and Specifications, such other development documents, or such action.
- 6.6 Gold LEED Standard: The HPEB building shall be constructed to achieve at least a Gold LEED equivalent level of certification or a successor equivalent standard established by the USGBC.
- 6.7 Ownership of Improvements: Until the expiration of the Term or sooner termination of this Lease, and except as specifically provided herein, CDU shall own all Improvements now existing and constructed by CDU or its predecessors on the Premises, or hereafter constructed by CDU upon the Premises, and all alterations, additions or modifications made thereto by CDU. Upon the expiration of the Term or sooner termination of this Lease, whether by cancellation, forfeiture or otherwise:

- 6.7.1 County's Election to Receive Improvements: Unless CDU is expressly directed by County in writing in accordance with Section 6.7.3 to demolish and remove Improvements upon the expiration or earlier termination of the Term, all Improvements located on, in, or under the Premises (including all building fixtures and building equipment affixed thereto, but excluding trade fixtures and equipment) shall remain upon and be surrendered with the Premises as part thereof, and title to such Improvements shall vest in County without any compensation to CDU. Nothing contained herein shall be construed to deny or abrogate the right of CDU, prior to the expiration of the Term or termination of this Lease, to (a) receive any and all proceeds which are attributable to the condemnation of Improvements belonging to CDU immediately prior to the taking of possession by the condemnor, to the extent provided in Article 6 of this Lease, or (b) remove any furniture or equipment that is not affixed to the Premises and Improvements, any signage identifying CDU (as opposed to other signage used in the operation of the Premises and Improvements), or any personal property, upon the expiration of the Term or earlier termination of this Lease or at any time during the Term, subject to CDU's obligations under this Lease to use the Premises for the Permitted Uses.
- 6.7.2 Demolition and Removal Report: No earlier than ten (10) years and no later than two (2) years prior to the expiration of the Term, and provided that County shall have previously advised CDU, pursuant to Section 7.3.4, of County's intent to have all or a portion of the Improvements demolished, CDU shall deliver to County a report prepared by a construction and demolition expert reasonably approved by County that details and estimates the cost and required time period for the demolition and removal of all Improvements on the Premises at the expiration of the Term (the "**Demolition and Removal Report**").
- 6.7.3 Duty to Remove: County may elect to require CDU at the end of the Term or any earlier termination of this Lease to demolish and remove, at the sole cost and expense of CDU all or any portion of the Improvements located on, in or under the Premises, whether placed or maintained thereon by CDU or others, including, but not limited to, concrete foundations, structures and buildings; provided, however, such portion ("**Portion Subject to Demolition**") of the Improvements designated by County for demolition must be able to be demolished separately from other portions of the then-existing Improvements which County has designated to remain; and provided further, that, notwithstanding anything else to the contrary herein, CDU shall have no obligation to perform any demolition or removal unless such work can be conducted in compliance with Environmental Laws and is permitted by all governmental authorities with jurisdiction. CDU shall complete any required demolition and removal and shall surrender to County possession of the Premises in the following condition: (a) as to any portion of the Premises on which the Improvements are required to be demolished, such portion of the Premises shall be surrendered to County in a level, graded area; and (b) as to any portion of the Premises on which the Improvements are not required to be demolished, the Premises and such Improvements shall be surrendered to County in the condition in which the Premises and Improvements are required to be maintained and repaired under this Lease. In the case of the termination of the Lease at the scheduled expiration date of the Term, any election by County to require CDU to demolish and remove the Improvements or a Portion Subject to Demolition must initially have been notified to CDU as required by Section 7.3.4 and then confirmed by

County in writing to CDU (“**County Removal Notice**”) within six (6) months following delivery by CDU to County of the Demolition and Removal Report. If County elects to require CDU to demolish and remove all of the Improvements or a Portion Subject to Demolition, CDU shall complete such demolition and removal and otherwise comply with CDU’s surrender obligations under this Section 6.7.3 within the sum of (x) the time period ascribed to such demolition and removal in the Demolition and Removal Report plus (y) thirty (30) days after the expiration of the Term, subject to Force Majeure, but in no event longer than one hundred twenty (120) days after the expiration of the Term (the “**Post Term Removal Period**”); provided, however, that all of the CDU’s obligations and liabilities under the Lease (other than any rent or compensation obligations and the obligation to affirmatively operate the Premises or to maintain and repair those Improvements required to be demolished) shall be applicable during the Post Term Removal Period, including without limitation, the CDU’s obligations with respect to insurance and indemnification; and provided further, that, notwithstanding anything else to the contrary herein, CDU shall have no obligation to perform any demolition or removal unless such work can be conducted in compliance with Environmental Laws and is permitted by all governmental authorities with jurisdiction.

In the case of a termination of the Lease prior to the scheduled expiration date of the Term, any election by County to require CDU to remove the Improvements or a Portion Subject to Demolition must be made by County’s delivery of the County Removal Notice not later than sixty (60) days after the effective date of such termination, and if County elects to require CDU to demolish and remove all or a portion of the Improvements upon a termination of the Lease prior to the scheduled expiration of the Term, CDU shall complete such demolition and removal and otherwise comply with CDU’s surrender obligations under this Section 6.7.3 on or before one hundred twenty (120) days after the later of the date on which this Lease terminated and the date of County's delivery of the County Removal Notice, subject to Force Majeure. Any such demolition and removal by CDU shall be subject to any applicable requirements under Environmental Law. With respect to a County Removal Notice received in conjunction with the scheduled expiration date of the Term, CDU shall within one hundred and twenty (120) days after receipt of the County Removal Notice, provide County with a written plan which sets forth CDU’s proposed method of securing the performance of CDU’s demolition and removal obligations. Such security may include a deposit of funds, a letter of credit, bond or other form of security in form, and from an issuer, satisfactory to County, or surplus funds in the Reserve Fund to the extent permitted by the Section 7.3.6 of this Lease (the “**Demolition Security**”). The amount of the Demolition Security shall be equal to the estimated costs to demolish and remove the Improvements as set forth in the Demolition and Removal Report, increased (a) to reflect the percentage change in the ENR Index from the date of the Demolition and Removal Report to the date on which CDU delivers the Demolition Security, and (b) thereafter increased annually to reflect the year-over-year increase in the ENR Index.

If the County fails to provide the County Removal Notice as provided above, CDU shall be under no obligation to demolish or remove the Improvements or any portion thereof. CDU shall surrender possession to County of the Premises in the condition in which such Improvements are required to be repaired and maintained under this Lease.

6.7.4 Duty to Remove Personal Property: Within thirty (30) days following the expiration of the Term or sooner termination of this Lease (subject to CDU's rights with respect to the Post Term Removal Period described in Section 6.7.3 above), CDU shall in all events remove, at its cost and expense, all furniture, equipment and other personal property that is not affixed to the Improvements. Should CDU fail to remove such furniture, equipment and other personal property within said period, and said failure continues for thirty (30) days after written notice from County to CDU, CDU shall lose all right, title and interest therein, same shall be deemed abandoned by CDU and County may elect to keep the same upon the Premises and Improvements or to sell, remove, or demolish the same, in which event CDU shall reimburse County for its Actual Costs incurred in connection with any such sale, removal or demolition in excess of any consideration received by County as a result thereof.

7 MAINTENANCE OF AREA 2 PROJECT AND RESERVE FUND:

7.1 County Responsibilities: County shall not be required or obligated to make any changes, alterations, additions, improvements, or repairs in, on, or about the Area 2 Project or any part thereof, or any improvements thereon during the term of this Lease. County, in its capacity as landlord, shall have the right with reasonable prior written notice to enter upon and inspect the Premises at any reasonable time during normal business hours for cleanliness, safety and compliance with this Lease, as long as such entrance is not done in a manner which would unreasonably interfere with the operation of business at the Premises.

7.2 CDU's Responsibility: Throughout the Term, CDU shall at CDU's sole cost and expense:

7.2.1 Keep, maintain, repair, and/or restore the Premises and the Area 2 Project and all equipment, physical structures or other Improvements of any kind which may exist or be erected, installed or made on the Premises in good repair and in a good, safe, clean, wholesome, and sanitary condition, including without limitation capital improvements and structural and roof repairs and replacement, as needed, and consistent with CDU's maintenance of its campus and campus facilities, and in accordance with the requirements of: (i) all Applicable Laws; (ii) the insurance underwriting board or insurance inspection bureau having or claiming jurisdiction; (iii) any insurance companies insuring all or any part of the Area 2 Project, if applicable; (iv) County, at its reasonable discretion.

7.2.2 Use commercially reasonable efforts to protect the Premises from fire, vandalism, graffiti (which shall be removed or covered within 48 hours) and soil erosion.

7.2.3 Install, maintain and replace landscaping on the Premises consistent with CDU's landscaping of its campus and campus facilities.

7.2.4 Provide proper containers for trash and garbage which are screened from public view, to keep the Premises free and clear of rubbish and litter.

7.2.5 Not cause, or knowingly permit another to cause, any Medical Waste to be stored, handled, disposed of or otherwise treated on the Premises in violation of Applicable Law or this Lease. For purposes of this Lease, "Medical Waste" has the meaning set forth in the

California Medical Waste Management Act (Health & Safety Code, § 117690), as it may be amended. Medical Waste that is generated in the Premises may be stored, handled or disposed of and otherwise treated in the Premises so long as such storage, handling, disposal and treatment is conducted in accordance with (a) all standard industry practices the Permitted Use, (b) in compliance with all Applicable Laws, and (c) in compliance with all of the following requirements: (1) any unused sharps (i.e., discarded hypodermic, I.V. and other medical needles) and unused discarded scalpel blades shall be considered part of Medical Wastes; (2) no undue accumulations of Medical Waste shall be kept within the Premises; (3) all Medical Waste shall be kept in proper containers until disposal; (4) there shall be no mixing or disposal of any Medical Waste with any other waste in violation of any Applicable Law; (5) infectious waste (those wastes capable of causing disease), including tissue cultures, blood, tissue and organs, and other biological mater, shall be separated from other Medical Waste by containing them in disposable red plastic bags/containers which are impervious to moisture; (6) needles and sharps shall be placed in disposable rigid containers which can be sealed with a tight fitting lid; (7) all spills of Medical Waste shall be cleaned up immediately in accordance with Applicable Laws and good medical practices; (8) County shall not have any duty or obligation to remove any Medical Wastes from the Premises; and (9) CDU shall, and shall use commercially reasonable efforts to cause any permitted subtenant to, contract at all times during the Term of this Lease with a medical waste disposal company duly licensed and operating in California. Any other generation, storage, handling, or disposal of Medical Wastes is expressly prohibited.

7.2.6 Not commit or permit the commission of any waste upon the Premises.

7.2.7 Protect, indemnify and hold County Indemnitees harmless from and against any liens, fines or penalties resulting from CDU's failure to comply with all Applicable Laws.

7.2.8 Not permit conditions to exist upon the Premises or Improvements that induce, breed or harbor infectious plant diseases, rodents or noxious insects, and CDU shall take such measures as are appropriate to prevent any conditions from existing on the Premises or Improvements that create a danger to the health or safety of any persons occupying, using, working at, or patronizing the Premises or Improvements.

7.3 Reserve Fund:

7.3.1 Establishment of Reserve Fund: Commencing on the date the initial Reserve Study is prepared, CDU shall establish and maintain a reserve fund in accordance with the provisions of this Section 7.3 (the "**Reserve Fund**") for the cost of Permitted Capital Expenditures (as defined below) for the Premises. Commencing on the first day of the first month immediately following the date the initial Reserve Study is prepared and on the first day of each month thereafter and continuing through the remaining Term (and subject to reaching the Threshold Amount, as defined below), CDU shall make monthly contributions to the Reserve Fund on the same day that Monthly Minimum Rent payments are due each calendar month in the amounts established by the then most current Reserve Study (as described in this Section 7.3).

If at any time the then-existing balance in the Reserve Fund reaches the Threshold Amount (as defined below), CDU thereafter shall not be required to make further contributions to the Reserve Fund unless and until the Reserve Fund is applied in accordance with this Section 7.3, in which event CDU shall again make monthly contributions to the Reserve Fund in accordance with this Section 7.3.1 until the balance of the Reserve Fund reaches the Threshold Amount. The “**Threshold Amount**” shall mean the aggregate amount of contributions required to be made to the Reserve Fund over the five (5)-year period covered by the most recent updated Reserve Study. The Threshold Amount shall be adjusted as part of the Reserve Study update process described below.

CDU shall keep the Reserve Fund funded as required by the most recent Reserve Study (up to the Threshold Amount). All interest and earnings on the funds in the Reserve Fund shall be added to the Reserve Fund, and shall be treated as a credit against the Reserve Fund contributions otherwise required to be made by CDU pursuant to this Section 7.3.1. Failure to maintain and replenish the Reserve Fund, not cured within the time period set forth in Section 13.1.2, shall constitute an Event of Default. County shall be permitted and is authorized to engage a consultant, at County's sole cost and expense and upon reasonable prior written notice to CDU so as to not unreasonably interfere with or interrupt CDU's business operations, to review and/or monitor on an annual basis (but not more than once in any calendar year): (i) Reserve Fund expenditures, and (ii) the performance by CDU of the capital expenditures required under this Lease or the most recent Reserve Study.

- 7.3.2 Use of Reserve Fund: CDU and County agree that the purpose of the Reserve Fund shall be to provide funds for the Permitted Capital Expenditures as set forth in the most recent Reserve Study, which shall include the costs of improvements, additions, repairs, capital replacements, capital equipment, renovations or other capital upgrades that keep, maintain, repair, restore and enhance the quality of the Improvements, building systems and building equipment (the “**Unit Components**”) after completion of the Work (collectively, “**Permitted Capital Expenditures**”). The Unit Components shall include building exteriors, interiors, and building systems such as HVAC, mechanical, electrical, plumbing, vertical transportation/elevators, interior finishes, furnishings and equipment, low voltage and security systems, communications and audio video systems, landscape and irrigation systems, structural and roof components, walkways and driveways, windows and window shades, interior and exterior painting, and flooring. The Reserve Fund may be used only to fund Permitted Capital Expenditures as set forth in the then-current Reserve Study as it may be modified from time to time, or as may be approved from time to time by the Chief Executive Officer or her/his designee (the “**CEO**”). All specific purposes and costs for which CDU desires to utilize amounts from the Reserve Fund for Permitted Capital Expenditures, in each case not specified in the then-current Reserve Study, shall be subject to the CEO’s approval, which approval shall not be unreasonably withheld, conditioned or delayed. CDU shall not be required to obtain the CEO’s prior approval for the use of Reserve Funds for all Permitted Capital Expenditures as provided in the then-current Reserve Study, provided CDU delivers to the CEO at least thirty (30) days prior written notice of its intention to make said expenditures for a Permitted Capital Expenditure, which notice shall set forth the amount of such expenditure and when such Permitted Capital Expenditures will commence and be completed. In the event that during any calendar year CDU intends to spend less than required by the most recent Reserve Study, then CDU shall

be required to obtain the CEO's approval, which approval shall not be unreasonably withheld.

The Reserve Fund shall not be used for any of the following, all of which shall be separately funded by CDU: (a) the cost of any portion of the Work or the cost of correcting any defect in the Work; (b) the cost of curing any deficiencies arising from the failure of CDU to maintain and repair the Improvements in accordance with the requirements of this Lease; (c) costs or expenses reimbursed by insurance, warranties or any other third party; (d) the costs of the initial construction of any new non-replacement buildings or building additions; (e) the costs of new project amenities or new furnishings that do not replace existing amenities or furnishings mandated to be replaced under the most recent Reserve Study; (f) the cost of periodic, recurring or ordinary non-capital expenditures, repairs, maintenance or replacements that keep the Improvements or their systems in good operating condition, but that do not significantly add to their value or appreciably prolong their useful life or that otherwise constitute non-capital expenditures under generally accepted accounting principles consistently applied; (g) the costs for any necessary repairs to remedy any broken or damaged Unit Component; (h) the costs of furniture or appliances, except as expressly permitted by a Reserve Study or as otherwise approved by CEO; (i) the cost of any repair or replacement of an individual or a selected group of individual items, unless (A) such capital repair or replacement is part of a larger plan (which may be a phased plan as provided in the most recent Reserve Study) of capital repair or replacement of all, or substantially all, similar, or (B) such capital repair or replacement of an individual or selected group of individual items is expressly set forth in the most recent updated Reserve Study; or (j) as otherwise approved by CEO.

Without limiting the prohibition in clause (d) above, the Reserve Fund shall not be used for additional improvements, equipment or systems that were not part of the Improvements (or in replacement of or upgrade to such improvements, equipment or systems) upon completion of the Area 2 Project or subsequently installed as an approved Alteration under this Lease with CDU's other funds, except for such upgrades as are approved by CEO and only to the extent that the then-current Reserve Study anticipates use of the applicable Reserve Fund for such purposes or is updated to adjust the future monthly Reserve Fund contributions to account for the unanticipated expenditure. Notwithstanding anything to the contrary contained hereinabove, any omission in the Reserve Study (including any failure in the Reserve Study to include an item that should be repaired, maintained or replaced), shall not release CDU from any responsibility or obligation it may have to make a capital expenditure or repair for items not foreseen or included in the Reserve Study and/or part of the Reserve Fund.

- 7.3.3 Reserve Studies: In order to provide the requisite funds for the Reserve Fund, CDU shall cause a reserve study with respect to the Improvements, Permitted Capital Expenditures, and the Unit Components to be prepared on or before four (4) months after the issuance of a Temporary and/or Final (whichever occurs earlier) Certificate of Occupancy for any of the Improvements, and update the Reserve Study four (4) months prior to December 31st of every five (5) year anniversary date commencing on January 1st of the year following the issuance of said Certificate of Occupancy ("**Required Reserve Study**" or "**Reserve Study**"). CDU shall prepare each Reserve Study at its sole cost and expense and each

Reserve Study may be conducted and prepared internally by CDU. Each Reserve Study shall address the monthly contribution required to adequately fund the Permitted Capital Expenditures and maintain the Improvements and their constituent Unit Components for the full Term of this Lease. In the event of any conflict regarding the appropriate levels of contribution to the Reserve Fund recommended by CDU in the Reserve Study, on the one hand, and any report and/or property assessment prepared for the benefit of any Encumbrance Holder, regarding its own separate reserve fund, CDU shall take the views of such consultant into consideration, but the final decision as to the appropriate levels of contribution to the Reserve Fund shall be determined solely by CDU, and the Reserve Fund shall not duplicate monies being reserved by the Encumbrance Holder for the same Improvements or Unit Components (solely by way of example and for avoidance of doubt, if CDU determines that its Reserve Fund contribution should be \$500/month, and CDU's Encumbrance Holder requires that CDU make capital expenditure reserve contributions of \$400/month under the loan documents, the maximum amount of Reserve Fund contribution that CDU can be required to make under this Lease while CDU continues to make reserve contributions under its loan documents shall be \$100/month).

The first Reserve Study shall identify any existing maintenance and repair deficiencies that exist at the date of the first Reserve Study. CDU shall be required to remedy any such maintenance deficiencies at CDU's cost (without any use of the Reserve Fund) within ninety (90) days after the delivery to County of said first Reserve Study. If CDU requires additional time to complete all existing maintenance deficiencies, then CDU shall submit a schedule of repairs for CEO's written approval, which approval will not be unreasonably withheld.

Each Reserve Study shall determine the monthly contribution amount required to be made to the Reserve Fund. If CEO approves any expenditure from the Reserve Fund outside of those anticipated under the then-current Reserve Study (as previously updated), then such Reserve Study shall be updated within ninety (90) days following the date such expenditure is made to adjust the future monthly Reserve Fund contributions to take into consideration the unanticipated expenditure. Such updated Reserve Study shall remain applicable for the ensuing five (5)-year period, unless such updated Reserve Study is required to be further updated prior to the expiration of such five (5)-year period pursuant to this sentence.

Each Reserve Study shall, at a minimum, contain the following: (i) identification of all Unit Components that have a remaining useful life of less than thirty (30) years; (ii) identification of the probable remaining useful life of all Unit Components; (iii) an estimate of the cost of repair, replacement, or restoration of the Unit Components identified in clause (i); and (iv) an estimate of the total annual contribution to the Reserve Fund necessary to defray the cost to replace or restore the Unit Components identified in clause (i) during and at the end of their useful life, after subtracting total funds then held in the Reserve Fund as of the date of the study. CDU shall have sole and absolute discretion in determining which Unit Components to consider for each Reserve Study; provided, however, that when the useful life of any Unit Component becomes thirty (30) years or less, it shall be added to the Reserve Study.

For the purpose of each Reserve Study: (a) “useful life” is defined as the number of years the individual Unit Component is expected to serve its intended purpose if given regular and proper maintenance, and (b) “remaining useful life” is defined as the expected number of years the individual Unit Component will continue to serve its intended purpose prior to repair or replacement. In determining the remaining life of a Unit Component, a certain level of continued preventative maintenance is assumed, but shall be stated explicitly wherever possible in the applicable Reserve Study. CDU hereby agrees to make all improvements to all Unit Components that the Reserve Study recommends be replaced or upgraded, except as noted in Section 7.3.4.

CDU shall be required to renovate or replace Unit Components as Permitted Capital Expenditures (as identified in the Reserve Study) at the end of the expected useful life of such Unit Components and otherwise make expenditures prescribed in the most recent updated Reserve Study. CDU shall be required to make any such renovations or replacements within ninety (90) days after the expiration of the useful life of the applicable Unit Components and thereafter diligently pursue such work to completion.

- 7.3.4 End of Term Reserve Study: An end-of-term Reserve Study (the “**End of Term Reserve Study**”) shall be prepared and delivered to County no later than ten (10) years prior to the expiration of the Term. Prior to the preparation of the End of Term Reserve Study, County shall inform CDU as to whether it intends to require the demolition of some or all of the Improvements at the end of the Term. The End of Term Reserve Study shall determine the monthly amounts, if any, required to be deposited to the Reserve Fund to fully fund (when combined with any amounts already on deposit in the Reserve Fund) the expected cost of capital improvements and replacements during the remaining Lease Term or the expected demolition costs (if County has indicated that it intends to require demolition of some or all of the Improvements). The monthly contribution amounts required for the Reserve Fund shall take into consideration any then current balance in the Reserve Fund.

If County elects not to require CDU to demolish the Improvements or a Portion Subject to Demolition at the end of the Term, then: (i) the End of Term Reserve Study shall make any adjustment for the cost for the future replacement of the Improvements during the remaining Lease Term, (ii) the Reserve Fund payments thereafter required to be made by CDU shall continue to be used for purposes permitted under this Section 7.3, and (iii) any remaining funds in the Reserve Fund at the end of the Term shall be released to CDU.

If County elects to require CDU to demolish the Improvements at the end of the Term and requires CDU to provide security for its obligation to perform such removal obligations in accordance with Section 6.7.3 of the Lease, then CDU shall contribute to the Reserve Fund amounts thereafter required to be made by CDU towards CDU’s obligations to fund the security requirements in Section 6.7.3, and continue to fund any needed capital expenditures for any remaining Improvements, as determined by CEO in CEO’s reasonable discretion. As long as CDU makes the expenditures prescribed under the Reserve Studies (as updated from time to time) and complies with its obligations under this Lease with regard to the replacement of the Improvements during the Term and the demolition and removal of the Improvements at the end of the Term (if required), any surplus funds in the

Reserve Fund at the end of the Term shall be released to CDU after subtracting any amounts then owing by CDU to County under the Lease.

- 7.3.5 Reserve Fund Account: The Reserve Fund shall be held in a separate account established with an Institutional Lender (which may be CDU's Encumbrance Holder) or such other holder as County may approve (which approval shall not be unreasonably withheld, delayed or conditioned). For purposes of this Lease, "**Institutional Lender**" means: (i) a bank (state, federal or foreign qualified to do business in California), trust company (in its individual or trust capacity), insurance company, credit union, savings bank (state or federal), pension, welfare or retirement fund or system, real estate investment trust (or an umbrella partnership or other entity of which a real estate investment trust is the majority owner), federal or state agency regularly making or guaranteeing mortgage loans, investment bank, financing subsidiary of a Fortune 500 company, real estate mortgage investment conduit, or securitization trust; (ii) an entity actively engaged in commercial real estate financing and having total assets (on the date when the Reserve Fund Account is opened) of at least \$100,000,000; or (iii) any entity that is a wholly owned subsidiary of or is a combination of any one or more of the foregoing entities described in clauses (i) and/or (ii). CDU shall make deposits into the Reserve Fund as required hereunder and make withdrawals from the Reserve Fund account as required or permitted hereunder, but only for the permitted purposes and amounts set forth herein and in accordance with the then current Reserve Study and/or as otherwise permitted herein or approved by CEO. CDU shall have the right to maintain the Reserve Fund with a Permitted Encumbrance Holder and to grant such Permitted Encumbrance Holder a security interest in CDU's interest in the Reserve Fund account, subject to administration of the Reserve Fund in accordance with the requirements of this Section 7.3. Subject to the foregoing, the Reserve Fund account may concurrently satisfy a separate reserve fund requirement of CDU's Permitted Encumbrance Holder. The amounts to be added to the Reserve Fund shall be inclusive of amounts required to be deposited with and held by a Permitted Encumbrance Holder, provided that the Permitted Encumbrance Holder acknowledges that such amounts are subject to, and administered in accordance with, the requirements of this Section 7.3. On or before March 1 of each year, CDU shall provide and deliver to CEO evidence reasonably satisfactory to CEO of the existence of the account in which the Reserve Fund is held, and a report that details all deposits to, earnings on, and withdrawals (and the purpose of such withdrawals) from the Reserve Fund during the immediately preceding calendar year, and the balance of the Reserve Fund as of December 31 of the immediately preceding calendar year; and, upon not less than thirty (30) days prior written notice from CEO to CDU (not to be delivered more than three (3) times in any calendar year), CDU shall provide and deliver evidence of the balance then in the Reserve Fund.

8 NON-SUBORDINATION; FINANCING; QUIET ENJOYMENT:

8.1 Definitions:

- 8.1.1 "Foreclosure Transfer" means any transfer of CDU's leasehold interest in the Premises, pursuant to any judicial or non-judicial foreclosure or other enforcement of remedies under or with respect to a Permitted Encumbrance, or by voluntary deed or other transfer in lieu thereof, with respect to a Permitted Encumbrance.

- 8.1.2 “Foreclosure Transferee” means any transferee (including a Permitted Encumbrance Holder) that acquires title to CDU’s leasehold estate in the Premises, pursuant to a Foreclosure Transfer.
- 8.1.3 “Permitted Encumbrance” means any direct or indirect grant, pledge, transfer, assignment, deed of trust or mortgage, or other security instrument of or in all of any portion of CDU’s leasehold estate in the Premises (including, without limitation an assignment of CDU’s right to receive rents from subtenants with respect to the Premises) in connection with a Permitted Financing.
- 8.1.4 “Permitted Encumbrance Holder” means a lender (or lenders), that is the holder of a Permitted Encumbrance, including any and all affiliates of such Permitted Encumbrance Holder, which have succeeded by assignment or otherwise to any rights, interests or liabilities of the Permitted Encumbrance Holder with respect to the Permitted Encumbrance, or which have been designated by the Permitted Encumbrance Holder to exercise any rights or remedies under the Permitted Encumbrance or to take title to CDU’s leasehold estate in the Premises.
- 8.1.5 “Permitted Encumbrance Holder Notice” means a notice issued by County to a Permitted Encumbrance Holder of a default or breach on the part of CDU under this Lease, describing the CDU default or breach and identifying the type and duration of the Permitted Encumbrance Holder Cure Period.
- 8.1.6 CDU agrees that it shall not create or suffer any encumbrance upon the Premises or the Improvements without the written consent of County, not to be unreasonably withheld, delayed or conditioned, except in connection with a Permitted Financing (as defined below) and as otherwise permitted under this Lease and in no event shall CDU create or suffer any encumbrance against County’s feehold interest in the Premises. Except as permitted in the immediately preceding sentence, CDU shall, not without obtaining the written consent of County (not to be unreasonably withheld, delayed or conditioned), assign any of CDU’s interest under this Lease as security. Any consent required by this Section 8 shall be evidenced by letter signed by the CEO or any other County representative duly authorized to provide consent. CDU shall be provided a response to any request for consent pursuant to this Section 8 within thirty (30) days of such request; provided, however, that County’s failure to timely provide a response shall be deemed its disapproval. CDU agrees, without any cost or expense to County, to execute any instrument that is necessary or is reasonably requested by County to further effect the non-subordination of this Lease. CDU further agrees that in order to obtain County’s consent hereunder any financing by CDU shall be and shall always remain subordinate to County’s feehold interest in the Premises and the terms and conditions of this Lease (including, without limitation, all of those relating to assignment, subletting, and Permitted Uses) except as otherwise provided in this Lease to the contrary. CDU acknowledges and understands that County shall be entitled to withhold its consent hereunder to any proposed financing that does not meet with all of the foregoing requirements. Nothing in this Lease shall be construed as prohibiting the subtenant under a Sublease from assigning such Sublease as security, provided that such assignment shall be subject to the terms and conditions set forth in this Lease (including the provisions of this Section 8 set forth above) and those set forth in the Sublease.

- 8.2 The Parties acknowledge that CDU may seek to secure financing related to the Area 2 Project. CDU's proposed financing shall be a "**Permitted Financing**" if such financing is consented to by County within sixty (60) days after CDU shall have submitted to County documents evidencing the structure of the financing including the loan documents and any debt ratios and pro formas provided by the proposed lender to CDU or prepared by CDU. County shall not unreasonably withhold, delay or condition its approval to a proposed financing submitted by CDU to County. Notwithstanding anything to the contrary set forth herein, (a) CDU shall have the right to encumber its interest in this Lease and the leasehold estate created hereby with a Permitted Encumbrance in connection with a Permitted Financing (provided that in no event shall County's feehold interest in the Premises be encumbered as security related to any obligation for the Permitted Financing), (b) any Permitted Encumbrance Holder may initiate and complete a foreclosure and exercise any other rights and remedies against CDU and the leasehold estate (but not the feehold) under its Permitted Encumbrance, and (c) any Foreclosure Transferee may assign this Lease. County need not join in, or "subordinate the fee estate to" any Permitted Encumbrance. The following provisions shall apply to Permitted Financings, and shall control, notwithstanding anything to the contrary set forth in this Lease:
- 8.2.1 Foreclosure Transfer: The consent of the County shall not be required with respect to any Foreclosure Transfer of a Permitted Encumbrance.
- 8.2.2 Foreclosure Transferee: Following any Foreclosure Transfer, County shall recognize the Foreclosure Transferee as the tenant under this Lease and shall not disturb its use and enjoyment of the Premises, and the Foreclosure Transferee shall succeed to all rights of tenant under this Lease and this Lease shall be a direct lease between County and such Foreclosure Transferee, provided that the Foreclosure Transferee performs the full obligations of Tenant under this Lease from and after the Foreclosure Transfer and throughout the period that such Foreclosure Transferee holds the leasehold estate in the Premises.
- 8.2.3 Permitted Encumbrance Holder Liability: No Permitted Encumbrance Holder shall become liable to County for any of CDU's obligations under this Lease unless and until such Permitted Encumbrance Holder becomes a Foreclosure Transferee with respect to CDU's leasehold estate in the Premises. Foreclosure Transferee shall only be responsible for Tenant's obligations under this Lease during (and not after) the period of such Foreclosure Transferee's ownership of the leasehold estate in the Premises.
- 8.2.4 No Right to Terminate: No Foreclosure Transfer shall trigger any termination right under this Lease.
- 8.2.5 Modification of Lease. No modification or amendment of this Lease made without the prior written consent of a then-existing Permitted Encumbrance Holder shall be binding on any such Permitted Encumbrance Holder or Foreclosure Transferee.
- 8.3 Reserved.

- 8.4 Notice and Cure Rights of Permitted Encumbrance Holders: In the event of a conflict between the provisions set forth in this Section 8.4 and the provisions set forth in any other section of this Lease, the provisions of this Section 8.4 shall prevail.
- 8.4.1 Right to Cure: Each Permitted Encumbrance Holder shall have the right, but not the obligation, at any time during the term of its Permitted Encumbrance and in accordance with the provisions of this Section 8.4, to do any act or thing required of CDU in order to prevent termination of CDU's rights hereunder, and all such acts or things so done hereunder shall be treated by County the same as if performed by CDU.
- 8.4.2 Notice of Default: County shall not exercise its right to terminate this Lease or dispossess CDU unless and until (a) Permitted Encumbrance Holder Notice has been provided and (b) such Material Default remains uncured after the expiration of the applicable Permitted Encumbrance Holder Cure Period set forth in Section 8.4.3. The Permitted Encumbrance Holder Notice shall be sent simultaneously with any similar notice or notices of a CDU breach or default that County may be required to provide to CDU pursuant to Article 13.
- 8.4.3 Manner of Curing Default: A Permitted Encumbrance Holder shall have the right and the power to cure any CDU breach or default specified in a Permitted Encumbrance Holder Notice within the periods set forth in this Section 8.4.3, subject to County's right to cure CDU breaches and defaults pursuant to Sections 13.2.1 and 13.2.4, and, if such CDU breach or default is so cured, this Lease shall remain in full force and effect. CDU breaches and defaults may be cured by any Permitted Encumbrance Holder in the following manner within the time frames set forth below.
- 8.4.3.1 For CDU breaches or defaults in the payment of amounts due and owing under this Lease ("**CDU Payment Default**"), a Permitted Encumbrance Holder shall have the later of (i) thirty (30) days after its receipt of the earliest Permitted Encumbrance Holder Notice setting forth such CDU Payment Default, or (ii) expiration of the applicable cure period set forth in Section 13.1.1, to cure such CDU Payment Default by paying the unpaid amount causing such CDU Payment Default, together with any late fee or accrued interest payable thereon (if such late fee or accrued interest are set forth in the Permitted Encumbrance Holder Notice) to County, or such other applicable payee.
- 8.4.3.2 For CDU breach or defaults in the performance of any non-monetary covenants and/or obligations under this Lease ("**CDU Performance Default**"), a Permitted Encumbrance Holder shall have thirty (30) days (as extended by Unavoidable Delay) after the later of (a) its receipt of the earliest Permitted Encumbrance Holder Notice setting forth such CDU Performance Default or (b) expiration of the applicable cure period set forth respectively in Section 13.1.2 or elsewhere in this Lease, to cure such CDU Performance Default, if such CDU Performance Default can reasonably be cured within such thirty (30)-day period; or, if a Permitted Encumbrance Holder has promptly commenced to cure such CDU Performance Default within such thirty (30)-day period and has been diligently prosecuting the same, such CDU Performance Default cannot reasonably be cured within such thirty (30)-day period, then such Permitted Encumbrance Holder shall be provided with such reasonable additional time as is necessary to complete the cure, provided such Permitted Encumbrance Holder continues to diligently pursue such cure to completion.

8.4.3.3 If a CDU Performance Default cannot practicably be cured by a Permitted Encumbrance Holder without the need for such Permitted Encumbrance Holder to obtain possession of CDU's leasehold interest in this Lease, or if a CDU Performance Default cannot be cured by a Permitted Encumbrance Holder (for example, the insolvency of CDU, or abandonment of the Premises by CDU), then, in each case, if a Permitted Encumbrance Holder has delivered to County within thirty (30) days after its receipt of a Permitted Encumbrance Holder Notice a written undertaking wherein such Permitted Encumbrance Holder agrees (a) that it will commence foreclosure proceedings forthwith, and (b) will cure, or will ensure that the Foreclosure Transferee cures all tenant Lease breaches and defaults upon completion of the foreclosure and from and after the resultant Foreclosure Transfer, and if thereafter any such Permitted Encumbrance Holder actually commences foreclosure proceedings and prosecutes the same thereafter with due diligence, then the Permitted Encumbrance Holder Cure Period shall not commence until completion of such foreclosure proceedings and the resultant Foreclosure Transfer; provided, that if such Permitted Encumbrance Holder is prevented from commencing or continuing foreclosure proceedings by any bankruptcy stay, or any order, judgment or decree of any court or regulatory body of competent jurisdiction, and such Permitted Encumbrance Holder diligently seeks release from or reversal of such stay, order, judgment or decree, then the Permitted Encumbrance Holder shall have such additional time as reasonably necessary to complete such foreclosure proceedings and the resultant Foreclosure Transfer. Upon completion of any such Foreclosure Transfer, the Foreclosure Transferee shall have until the expiration of the applicable Permitted Encumbrance Holder Cure Periods set forth in this Article 8.4 to cure tenant Lease breaches and defaults upon completion of the foreclosure and from and after the resultant Foreclosure Transfer. The Permitted Encumbrance Holder shall have the right to terminate its foreclosure proceedings hereunder, in the event of a cure of a CDU Payment Default and/or CDU Performance Default giving rise to such foreclosure proceedings. Foreclosure Transferees shall not be responsible for curing CDU Payment Defaults and/or CDU Performance Defaults arising prior to a Foreclosure Transfer, and the County hereby acknowledges and agrees its recourse and remedies for such uncured CDU Payment Defaults and/or CDU Performance Defaults shall be against CDU.

8.4.4 Obligation to Enter Into New Lease: In the event that this Lease is terminated by reasons of bankruptcy, assignment for the benefit of creditors, insolvency or any similar proceedings, by operation of law, or for any other reason, County shall, upon the written request of the senior-most Permitted Encumbrance Holder holding a Permitted Encumbrance on CDU's entire leasehold estate under this Lease enter into a new lease (which shall be effective as of the date of termination of this Lease) with such Permitted Encumbrance Holder upon such Permitted Encumbrance Holder's written notice of its desire to enter into a new lease (the "**Designated Encumbrance Holder**"), for the then-remaining Term of this Lease on the same terms and conditions as are then contained in this Lease ("**New Lease**"), provided that the Designated Encumbrance Holder (i) makes its request for a New Lease within thirty (30) days after the date it receives the notice set forth in the following sentence from County, and (ii) promptly cures all then-existing CDU Payment Defaults which are reasonably curable, and thereafter diligently pursues such cure until completion. County shall notify all of the Permitted Encumbrance Holders (which have provided their addresses to, and have requested such notice from, County in writing)

holding a Permitted Encumbrance on either CDU's entire leasehold estate under this Lease of any Lease termination described in this Section 8.4.4 within thirty (30) days after the occurrence of such termination, which notice shall state (x) that this Lease has terminated in accordance with this Section 8.4.4 and (y) that such Permitted Encumbrance Holder has thirty (30) days following receipt of such notice within which to exercise their rights to a New Lease under this Section 8.4.4, or else they will lose such right. The Designated Encumbrance Holder's election to enter into a New Lease with County pursuant to this Section 8.4.4, shall be made by giving County written notice of such election within thirty (30) days after the Designated Encumbrance Holder's receipt of the above-described notice from County. Within a reasonable period after request therefor, County and the Designated Encumbrance Holder shall execute the New Lease, and from and after the effective date of the New Lease, the Designated Encumbrance Holder shall have the same rights provided to a Foreclosure Transferee under this Article 8. Any other subsequent transfer or assignment of the Designated Encumbrance Holder's rights and obligations under the New Lease shall be subject to all of the requirements of Article 8. If there are multiple Permitted Encumbrance Holders, then, upon execution of the New Lease, the lien priority of each of the more senior Permitted Encumbrance Holders (if any) shall be maintained in accordance with all terms and conditions of such Permitted Encumbrances, and the rights of the more junior Permitted Encumbrance Holders shall cease and terminate.

- 8.4.5 Fee Mortgages and Encumbrances: Any mortgage, deed of trust or other similar encumbrance granted by County upon its fee interest in the Premises after the Effective Date shall be subject and subordinate to all of the provisions of this Lease and to all Permitted Encumbrances (whether then in existence or later created) and, if requested by CDU or any Permitted Encumbrance Holder such fee encumbrance holder shall execute such recognition agreement reasonably required by CDU or such Permitted Encumbrance Holder to confirm such subordination.
- 8.4.6 No Merger: Without the written consent of each Permitted Encumbrance Holder, the leasehold interest created by this Lease shall not merge with the fee interest in all or any portion of the Premises, notwithstanding that the fee interests and the leasehold interests are held at any time by the same Person. This Section 8.4.6 shall have no effect upon the right of County to terminate CDU's leasehold interest by a termination of this Lease in accordance with the terms and provisions of this Lease, including without limitation, this Article 8.
- 8.4.7 Permitted Encumbrance Holder Third Party Beneficiary: Each of County and CDU agree that each Permitted Encumbrance Holder is a third-party beneficiary of this Lease to the extent of provisions relating to Permitted Encumbrance Holders and shall have the right to enforce the rights granted to Permitted Encumbrance Holders under this Lease directly against County and/or CDU, as applicable.
- 8.4.8 Permitted Encumbrance Holder Notification: Following recordation of a Permitted Encumbrance, any person or entity that is the holder of such Permitted Encumbrance desiring to avail itself of all the rights and benefits of a Permitted Encumbrance Holder hereunder shall send a written notice to the County, at the address set forth in Section 22.2, including (i) such Permitted Encumbrance Holder's name, (ii) confirmation of its interest

under a Permitted Encumbrance, and (iii) its address for receipt of Permitted Encumbrance Holder Notices hereunder. If any default occurs for which County intends to exercise any remedy, County shall promptly give each Permitted Encumbrance Holder a notice of such default. Any notice of default or termination from County to CDU shall have no effect unless and until County gives a copy of such notice to all Permitted Encumbrance Holders.

- 8.4.9 Special Cure Right: Without limiting the foregoing Permitted Encumbrance Holder cure rights under this Lease, County agrees that Permitted Encumbrance Holders shall have the right to cure any CDU Payment Defaults and/or CDU Performance Defaults through the exercise of remedies under the Permitted Encumbrance, provided such Permitted Encumbrance Holder commences the exercise such remedies within the time periods set forth in this Lease, and diligently pursues such cure to completion.
- 8.4.10 No Personal Liability. No Permitted Encumbrance Holder or Foreclosure Transferee shall ever have any liability under this Lease beyond its interest in this Lease and the Area 2 Project, even if it assumes this Lease. Any such liability shall: (a) not extend to or include any default that occurred before such Foreclosure Transferee took title to this Lease (or a New Lease), except as identified in a default notice delivered to Permitted Encumbrance Holder before such Foreclosure Transferee took title; and (b) terminate if and when any such Foreclosure Transferee assigns (and the assignee assumes) or abandons this Lease (or a New Lease).
- 8.4.11 Quiet Enjoyment. So long as this Lease has not been terminated and CDU is not in Material Default, County covenants that CDU (and any of its permitted assignees and subtenants) shall and may peaceably and quietly have, hold, and enjoy the Premises for the Term, subject to the terms of this Lease, without molestation, hindrance, or disturbance by or from County or by anyone claiming by or through County, and free of any encumbrance created or suffered by County.
- 8.4.12 Estoppel Certificates. Up to twice a year, each Party (a “**Requesting Party**”) may require the other party (a “**Certifying Party**”) to execute, acknowledge, and deliver to the Requesting Party (or directly to a designated third party) up to four original counterparts of a statement addressed to the Requesting Party, containing assurances as Requesting Party reasonably requests (an “**Estoppel Certificate**”). The Certifying Party shall sign, acknowledge, and return such Estoppel Certificate within 15 days after request, even if the Requesting Party is in default. Any Estoppel Certificate shall bind the Certifying Party
- 8.4.13 Further Assurances. Each party shall execute and deliver such further documents, and perform such further acts, as may be reasonably necessary to achieve the parties’ intent in entering into this Lease and/or assist in obtaining Permitted Financing (including execution of any reasonable forms of subordination, nondisturbance, and attornment agreements). Upon request from CDU or any Permitted Encumbrance Holder (prospective or current), County shall promptly, under documentation reasonably satisfactory to the Requesting Party: (a) agree directly with Permitted Encumbrance Holder that it may exercise all Permitted Encumbrance Holder’s rights in this Lease; (b) certify (subject to any then exception reasonably specified) that this Lease is in full force and effect, that no Lease

impairment has occurred, that to County's knowledge no default exists, the date through which Rent has been paid, and other similar matters as reasonably requested; and (c) provided CDU reimburses County's reasonable attorneys' fees and expenses, amend this Lease as any current or prospective Permitted Encumbrance Holder reasonably requests, provided such amendment does not materially adversely affect Landlord or reduce any payment.

9 LIENS:

9.1 General: CDU hereby covenants to keep the Premises and every part thereof free and clear of any and all liens or encumbrances of any kind whatsoever created by CDU's acts or omissions and/or created by the performance of any labor or furnishing of any material, supplies, or equipment contemplated hereunder. CDU further agrees to hold County and the Premises and all parts thereof free and harmless from any such CDU created liens, claims, or demands. County covenants to keep the Area 2 Project and every part thereof free and clear of any and all liens or encumbrances of any kind whatsoever created by County's acts or omissions or those of its agents, employees or contractors, and shall indemnify and hold CDU harmless from any such County-created liens or demands; provided, however, County's fee interest in the County Property (including the Premises) may be used as collateral by County (subject to the requirements in Section 8).

9.2 Mechanics' and other Liens: CDU shall pay, or cause to be paid, the total cost and expense of all works of improvement as that phrase is defined in the applicable mechanics' lien law in effect when the Work begins. CDU shall not permit any mechanic's, materialman's, contractor's, subcontractor's or other lien, arising out of the performance of the Lease, to stand against the Premises or the Area 2 Project, or any part thereof, except as provided in this Section 9.2. If any such lien shall be filed against the Premises or the Area 2 Project, CDU shall cause the same to be discharged within thirty days after actual notice of such filing, by payment, deposit, or bond. If CDU fails to discharge any such lien timely, County may, but shall not be obligated to, discharge the same, and any amount so paid or deposited by County and all Actual Costs and expenses incurred by County, including reasonable attorney's fees, shall become immediately due and payable by CDU to County, together with interest thereon computed at the rate of seven percent per annum. If CDU desires to contest any such lien, CDU shall notify County in writing of CDU's intention to do so within ten (10) business days after CDU's receipt of actual notice of the filing of and service upon CDU of such lien, or lose the right to contest. In such case, provided that CDU shall furnish the bond required by California Civil Code Section 3143 (or any comparable statute hereafter enacted for providing a bond freeing the Premises and the Area 2 Project from the effect of such lien), CDU shall not be in default until ten (10) business days after the final determination of the validity thereof, within which time CDU shall satisfy and discharge any such lien to the extent held valid, but the satisfaction and discharge of any such lien shall not, in any case, be delayed until execution is had upon any judgment rendered thereto. In the event of any such contest, CDU shall protect and indemnify County Indemnitees against all loss, Actual Cost, expense and damage, including reasonable attorneys' fees, directly resulting therefrom.

10 INDEMNIFICATION AND INSURANCE:

10.1 Indemnification:

10.1.1 CDU shall indemnify, defend and hold harmless the County Indemnitees from and against any and all liability, loss, injury or damage including (but not limited to) demands, claims, actions, fees, costs and expenses (including attorney and expert witness fees), arising from or caused by (a) the operation, maintenance, use, or occupation of the Premises by CDU or its agents, officers, employees, licensees, concessionaires, permittees or subtenants, (b) the acts, omissions, or negligence of CDU, its agents, officers, employees, licensees, concessionaires, permittees or subtenants, (c) the failure of CDU, its agents, officers, employees, licensees, concessionaires, permittees or subtenants to observe and abide by any of the terms or conditions of this Lease or any applicable law, ordinance, rule, or regulation, or (d) the performance of the Work. This indemnity shall survive the termination or expiration of the Lease.

10.2 At least ten (10) days prior to the commencement of any Work or work, CDU's construction contractor shall provide County with the insurance policies as specified in Section 10.4.5.

10.3 General Insurance Provisions – CDU Requirements: Without limiting CDU's indemnification of County Indemnitees and during the Term, CDU shall provide and maintain at its own expense insurance coverage satisfying the requirements specified in this Lease. These minimum insurance coverage terms, types and limits (the “**Required Insurance**”) are in addition to and separate from any other contractual obligation imposed on CDU pursuant to this Lease or by Permitted Encumbrances. County in no way warrants that the Required Insurance is sufficient to protect CDU for liabilities which may arise from or relate to this Lease.

10.3.1 Evidence of Coverage and Notice to County: Certificate(s) of insurance coverage (“**Certificate**”) satisfactory to County, and a copy of an Additional Insured endorsement (ISO form CG 20 26 or equivalent) confirming County and its Agents (defined below) has been given Insured status under CDU's General Liability policy, shall be delivered to County at the address shown below and provided prior to the start day of this Lease. Renewal Certificates shall be provided to County prior to CDU's policy expiration dates. County reserves the right to obtain complete, certified copies of any required CDU insurance policies at any time.

10.3.1.1 Certificates shall identify all Required Insurance coverage types and limits specified herein, reference this Lease by name or County assigned number, and be signed by an authorized representative of the insurer(s). The Insured party named on the Certificate shall match the name of CDU identified in this Lease. Certificates shall provide the full name of each insurer providing coverage, its NAIC (National Association of Insurance Commissioners) identification number, the amounts of the policy deductibles exceeding twenty-five thousand dollars (\$25,000.00), and list any County required endorsement forms.

10.3.1.2 Neither County's failure to obtain, nor County's receipt of, or failure to object to a non-complying insurance certificate or endorsement, or any other insurance documentation or information provided by CDU, its insurance broker(s) and/or insurer(s), shall be construed as a waiver of any of the Required Insurance provisions.

10.3.1.3 Certificates, copies of any required endorsements, and notices of cancellation shall be delivered to:

County of Los Angeles
Chief Executive Office
Real Estate Division
320 West Temple Street, 7th Floor
Los Angeles, California 90012
Attn: Dean Lehman, Senior Manager

10.3.1.4 CDU also shall promptly report to County any injury or property damage accident or incident, including any injury to a CDU employee occurring on the Premises, and any loss, disappearance, destruction, misuse, or theft of County property entrusted to CDU. CDU also shall promptly notify County of any third- party claim or suit filed against CDU and/or CDU's construction contractor(s) which arises from or relates to this Lease and/or the performance of Work, and could result in the filing of a claim or lawsuit against CDU and/or County.

10.3.2 Additional Insured Status and Scope of Coverage: County, which is the County of Los Angeles, its Special Districts, Elected Officials, Officers, Agents, Employees and Volunteers (collectively, County and its Agents), shall be provided additional insured status under CDU's General Liability policy with respect to liability arising from or connected with CDU's acts, errors, and omissions arising from and/or relating to CDU's operations on and/or its use of the Premises. County's additional insured status shall apply with respect to liability and defense of suits arising out of the CDU's acts or omissions, whether such liability is attributable to CDU or to County. The full policy limits and scope of protection also shall apply to County as an additional insured, even if they exceed CDU's minimum Required Insurance specifications herein. Use of an automatic additional insured endorsement form is acceptable providing it satisfies the Required Insurance provisions herein.

10.3.3 Cancellation of or Changes in Insurance: CDU shall provide County with, or CDU's insurance policies shall contain a provision that County shall receive, written notice of cancellation or any change in Required Insurance, including insurer, limits of coverage, term of coverage or policy period. The written notice shall be provided to County at least ten (10) days in advance of cancellation for non-payment of premium and thirty (30) days in advance for any other cancellation or policy change.

10.3.4 Failure to Maintain Insurance: CDU's failure to maintain or failure to provide reasonably acceptable evidence that it maintains the Required Insurance within ten (10) business days of request therefor from County shall constitute a material breach of the Lease, upon which County immediately may terminate this Lease. County, at its sole discretion, may obtain

damages from CDU resulting from said breach. Alternatively, County may purchase the Required Insurance and without further notice to CDU, pursue CDU reimbursement.

- 10.3.5 Insurer Financial Ratings: CDU's insurance is to be provided by an insurance company authorized to do business in California, with an A.M. Best rating of not less than A:VII, unless otherwise approved by County.
- 10.3.6 CDU's Insurance Shall be Primary: CDU's insurance policies, with respect to any claims related to this Lease, shall be primary with respect to all other sources of coverage available to County. Any County maintained insurance or self-insurance coverage or programs maintained by County shall be in excess of and not contribute to any CDU coverage.
- 10.3.7 Waiver of Subrogation: To the fullest extent permitted by law, CDU waives its and its insurer(s) rights of recovery against County under all Required Insurance policies for any loss arising from or related to this Lease. CDU shall require its insurers to execute any waiver of subrogation endorsements which may be necessary to affect such waiver.
- 10.3.8 Deductibles: CDU's policies shall not obligate County to pay any portion of any CDU deductible.
- 10.3.9 Claims Made Coverage: If any part of the Required Insurance is written on a claims made basis, any policy retroactive date shall precede the Effective Date. CDU understands and agrees it shall maintain such coverage for a period of not less than three (3) years following Lease expiration, termination or cancellation.
- 10.3.10 Application of Excess Liability Coverage: CDU may use a combination of primary and excess insurance policies which provide coverage as broad as ("follow form" over) the underlying primary policies, to satisfy the Required Insurance provisions.
- 10.3.11 Separation of Insureds: All liability policies shall provide cross-liability coverage as would be afforded by the standard ISO (Insurance Services Office, Inc.) separation of insureds provision with no insured versus insured exclusions or limitations.
- 10.3.12 County Review and Approval of Insurance Requirements: County reserves the right to review and adjust the Required Insurance provisions, conditioned upon County's determination of changes in risk exposures.
- 10.4 Insurance Coverage Types and Limits: Without limiting CDU's indemnification of County and during the Term of this Lease, CDU shall provide and maintain the following insurance:

10.4.1 Commercial General Liability: Such insurance shall provide scope of coverage equivalent to ISO policy form CG 00 01, naming County and its Agents as an additional insured, with limits of not less than:

General Aggregate:	\$ 10 million
Products/Completed Operations Aggregate:	\$ 10 million
Personal and Advertising Injury:	\$ 5 million
Each Occurrence:	\$ 5 million

10.4.2 Automobile Liability: Such insurance shall provide scope of coverage equivalent to ISO policy form CA 00 01 with limits of not less than one million dollars (\$1,000,000) per accident for bodily injury and property damage, in combined or equivalent split limits, for each single accident. Insurance shall cover liability arising out of CDU's use of autos pursuant to this Lease, including owned, leased, hired, and/or non-owned autos, as each may be applicable.

10.4.3 Workers Compensation and Employers' Liability: Such insurance or qualified self-insurance shall satisfy statutory requirements, which includes Employers' Liability coverage with limits of not less than one million dollars (\$1,000,000) per accident. If applicable to CDU's operations, coverage also shall be arranged to satisfy the requirements of any federal workers or workmen's compensation law or any federal occupational disease law.

10.4.4 Commercial Property Insurance: Such insurance shall provide coverage for any improvements and betterments on the Premises; this coverage shall be at least as broad as that provided by the Causes-of-Loss Special Form (ISO form CP 10 30), excluding earthquake, and including flood and ordinance or law coverage. Insurance shall be written for the full replacement cost of the Improvements, with a deductible no greater than two hundred fifty thousand (\$250,000) or five percent (5%) of the Improvements' value, whichever is less. Insurance proceeds shall be payable to CDU and County as each of their interests may appear.

10.4.5 CDU Contractor Insurance Coverage Types and Limits: During the performance of the Work or any material alterations or material additional improvements to the Premises, CDU also shall provide and maintain, or cause its construction contractor to provide and maintain, the following insurance:

10.4.5.1 Commercial General Liability: Such insurance shall provide scope of coverage equivalent to ISO policy form CG 00 01, naming County and its Agents as an additional insured, with limits of not less than:

General Aggregate:	\$ 10 million
Products/Completed Operations Aggregate:	\$ 10 million
Personal and Advertising Injury:	\$ 5 million
Each Occurrence:	\$ 5 million

10.4.5.2 Builder's Risk Course of Construction Insurance: Such insurance shall:

10.4.5.2.1 Insure against damage from perils covered by the Causes-of-Loss Special Form (ISO policy form CP 10 30), and the perils of earthquake, flood, risk of transit loss, loss during storage (both onsite and offsite) and collapse during construction (without restricting collapse coverage to specified perils). Such insurance shall be extended to include boiler and machinery coverage for air conditioning, heating and other equipment during testing.

10.4.5.2.2 Cover all property to be installed (including labor) for the full contract value (without coinsurance) against loss or damage until completion.

10.4.5.3 Automobile Liability: Such insurance shall provide scope of coverage equivalent to ISO policy form CA 00 01 with limits of not less than one million dollars (\$1,000,000) per accident for bodily injury and property damage, in combined or equivalent split limits, for each single accident. Insurance shall cover liability arising out of contractor's use of autos pursuant to this Lease, including owned, leased, hired, and/or non-owned autos, as each may be applicable.

10.4.5.4 Professional Liability/Errors and Omissions: Such insurance shall cover liability arising from any error, omission, negligent or wrongful act of the contractor, its officers or employees arising from or related to engineering and/or design of the Work, with limits of not less than two million dollars (\$2,000,000) per occurrence and four million dollars (\$4,000,000) in aggregate. The coverage shall also provide an extended two (2)-year reporting period commencing upon expiration, termination or cancellation of this Lease. Alternatively, contractor shall require such coverage to be maintained by the engineer and/or designer it engages to provide such engineering and design services.

10.4.5.5 Workers Compensation and Employers' Liability: Such insurance or qualified self-insurance shall satisfy statutory requirements, which includes Employers' Liability coverage with limits of not less than one million dollars (\$1,000,000) per accident. If applicable to contractor's operations, coverage also shall be arranged to satisfy the requirements of any federal workers or workmen's compensation law or any federal occupational disease law.

11 PAYMENT AND PERFORMANCE BONDS:

11.1 Prior to the commencement of the Work, CDU shall provide, or cause CDU's contractor to provide, payment and performance security which satisfies the following terms and conditions.

11.2 All bonds shall be duly executed by a solvent surety company that is authorized by the State of California, is listed in the United States Department of the Treasury's Listing of Approved Sureties Treasury (Circular 570) (see www.fms.treas.gov/c570/) and is satisfactory to County. The CDU and/or CDU's contractor(s) shall pay all premiums and costs thereof and incidental thereto.

11.3 Each bond shall be signed by both the contractor (as Principal) and the surety company.

- 11.4 Two surety bonds shall be provided with good and sufficient sureties: the first in the sum of not less than 100% of the contract price of the Work to assure the payment of claims of material men supplying materials to the contractor(s), subcontractors and mechanics and laborers employed by the contractor(s) on the Work, and the second in the sum of not less than 100% of the contract price of the Work to assure the faithful performance of the Work. Specifically:
- 11.4.1 The materials and labor bond (the “**Payment Bond**”) shall be so conditioned as to insure to the benefit of persons furnishing materials for or performing labor upon the Work. The Payment Bond shall be maintained by the contractor(s) in full force and effect until the Work is completed and accepted in accordance with the terms of the construction contract, and until all claims for materials, labor and subcontracts are paid.
- 11.4.2 The bond for faithful performance (the “**Performance Bond**”) shall be so conditioned as to assure the faithful performance by the contractor of all Work required pursuant to the terms of the construction contract, within the time limits prescribed, including any maintenance and warranty provisions, in a manner that is satisfactory and acceptable to County, that all materials and workmanship supplied by contractor will be free from original or developed defects, and that should original or developed defects or failures appear within a period of one year from the date of acceptance of the Work and Improvements, the contractor shall, at contractor’s own expense, make good such defects and failures and make all replacements and adjustments required, within a reasonable time after being notified by County to do so. The Performance Bond shall be maintained by the contractor in full force and effect during the performance of the Work and Improvements and for a period of one (1) year after final acceptance of the Work.
- 11.5 Should either of the Payment Bond or the Performance Bond become insufficient or reasonably be deemed unsatisfactory by County, the contractor shall replace such bond with good and sufficient bond within ten (10) days after receiving notice from County that such bond is insufficient or unsatisfactory.

12 REPAIR AND RESTORATION:

- 12.1 If, during the Term, the Improvements are damaged, CDU shall promptly cause the damage to be repaired and the Improvements restored to substantially the same condition as they were in immediately before such damage, provided that the insurance proceeds received are sufficient to effect such repair and restoration; and provided, further, that if the Improvements are damaged during the last five (5) years of the Term, CDU may elect to terminate this Lease rather than repair the damage.
- 12.2 Such damage shall be repaired and the Improvements restored to satisfactory condition as they were in immediately before the damage (subject to sufficiency of insurance proceeds to effect same) as promptly as is reasonably possible. All work shall be performed in a good and workmanlike manner and shall be completed as promptly as is reasonably possible and in accordance with all Applicable Laws. Commencement of the repair and restoration shall require (a) securing the area to prevent injury to persons and/or vandalism

to the Improvements and (b) the placement of a work order or contract for obtaining the labor and materials to accomplish the repair and restoration.

12.3 Notwithstanding any provision contained in this Lease to the contrary, if the Applicable Laws existing at the time of the damage do not permit the repair or restoration of the Improvements to substantially the same condition as prior to the occurrence of the damage, then either Party may terminate this Lease by giving no less than thirty (30) days' written notice to the other Party.

12.3.1 CDU hereby expressly waives the provisions of California Civil Code Sections 1932(2) and 1933(4) which relate to termination of leases when the leased premises is destroyed and agrees that any such termination shall be governed exclusively by the terms of this Lease.

13 DEFAULT:

13.1 Material Default: The occurrence of any of the following shall constitute a material default and breach of this Lease (each a "**Material Default**"), the occurrence of which shall allow County, in addition to any other rights or remedies at law or in equity, at its election, to terminate this Lease:

13.1.1 A failure by CDU to make any payment required to be made by CDU hereunder, as and when due, when such failure continues for a period of ten (10) days after CDU has received written notice thereof from County;

13.1.2 A failure by CDU to observe and perform any of CDU's non-monetary covenants and/or obligations under this Lease, including without limitation CDU's Obligations, when such failure continues for a period of thirty (30) days after CDU has received written notice thereof from County; provided, however, that if the nature of such failure is such that it cannot reasonably be cured within such thirty (30)-day period, a Material Default shall not occur, if CDU promptly within such period commences to cure such failure and thereafter diligently prosecutes such cure to completion. Failure to observe and perform non-monetary covenants and/or obligations shall not include those instances where the Premises are not in use because of remodeling, repairs, restoration, or the replacement of equipment, provided that such remodeling, repairs, restoration, and replacement are undertaken promptly and completed in a diligent manner by CDU. CDU's failure to observe and perform Section 6.3.5 shall not constitute a breach or a Material Default under this Lease;

13.1.3 Any bankruptcy, insolvency or similar proceeding shall be filed by or against CDU and the same shall not be dismissed within ninety (90) days;

13.1.4 If CDU shall abandon or fail to occupy the Premises for a period of thirty (30) consecutive days (other than as a result of remodeling, repairs, restoration or the replacement of equipment); or

13.1.5 If CDU no longer is a nonprofit medical or nonprofit science university.

- 13.2 Remedies: So long as a Material Default has occurred and is continuing, County, without further notice to CDU shall, in addition to any other remedies available under Applicable Law, have one or more of the following remedies at County's election:
- 13.2.1 Without barring later election of any other remedy and without terminating CDU's right to possession of the Premises, or any part thereof, County may require strict performance of all covenants and obligations under this Lease as the same shall accrue or become due, without terminating this Lease, and County shall have the right of action therefor without awaiting the end of the Lease, and may seek an injunction to compel CDU's performance of any such covenants and/or obligations under this Lease.
- 13.2.2 If County obtains possession of the Area 2 Project under a judgment pursuant to Section 1174 of the California Code of Civil Procedure (unless CDU obtains relief under Section 1179 of that Code) or if County, by written notice declares the Lease to be terminated because of a Material Default, then County may enter upon the Premises and remove any and all persons and or property whatsoever situated thereon, and place all or any portion of said property in storage for the account of and at the expense of CDU and dispose of such property in accordance with Applicable Laws; provided, however, the Improvements shall automatically, with no further action by either Party, become the property of County, and notwithstanding the foregoing provision, upon written request from County, CDU shall promptly execute a notarized quitclaim deed for the Improvements in favor of County or its designee. County shall be entitled to recover in one or more awards or judgment from CDU any amount necessary to compensate County for all the detriment proximately caused by CDU's failure to perform CDU's obligations under this Lease, or which in the ordinary course of things would be likely to result therefrom. Such other amount shall include, but not be limited to, such expenses (including all Actual Costs) as County may have paid, assumed, or incurred in recovering possession of Premises and placing the Premises in good order and condition.
- 13.2.3 County may at County's election terminate this Lease by giving CDU notice of termination. On the giving of the notice to CDU, all CDU's rights in Area 2 Project shall terminate. County shall not be deemed to have terminated this Lease unless County shall have so declared in writing to CDU, nor shall County be deemed to have accepted or consented to an abandonment by CDU by performing acts intended to maintain or preserve the Premises, making efforts to relet the Premises or appointing a receiver to protect County's interest under this Lease. Promptly (but no later than thirty (30) days) after notice of termination, CDU shall surrender and vacate Area 2 Project, and County may re-enter and take possession of Area 2 Project, and the Improvements shall automatically, with no further action by either Party, become the property of County; notwithstanding the foregoing provision, upon written request from County, CDU shall promptly execute a notarized quitclaim deed for the Improvements in favor of County or its designee. Termination under this Section 13.2.3 shall not relieve CDU from any obligations under this Lease or from any claim for damages, in each case incurred or accruing against CDU prior to the date of termination. If County elects to terminate this Lease, County shall be entitled to recover from CDU: (a) the unpaid rent which had been earned at the time of termination; (b) the worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount

of such rental loss that the CDU proves could have been reasonably avoided; (c) the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss that the CDU proves could be reasonably avoided; and (d) any other amount necessary to compensate County for all the detriment proximately caused by the CDU's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including but not limited to the cost of recovering possession of the Premises, expenses of reletting, including necessary renovation and alteration of the Premises, and reasonable attorneys' fees. The worth at the time of award of the amount referred to in provision (c) of the immediately preceding sentence shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of the District within which the Premises are located at the time of award plus one percent. Efforts by County to mitigate damages caused by CDU's material default shall not waive County's right to recover any damages to which County is otherwise entitled.

- 13.2.4 Subject to CDU's and County's rights to contest as provided elsewhere in this Lease, if, at any time during the Term of this Lease, CDU fails, refuses, or neglects to fulfill any of its covenants or obligations under this Lease, County shall have the right, but not the obligation, to perform such covenant or obligation, but at the cost of and for the account CDU; provided, however, that County shall in no case perform any covenant or obligation of CDU unless and until CDU's failure to fulfill or perform such covenant or obligations has become a Material Default.
- 13.3 Relief: Nothing contained herein shall affect, change, or waive any rights of County or CDU to obtain equitable relief when such relief is otherwise appropriate, or to obtain the relief provided by Chapter 4 (commencing with Section 1159) of Title 3 of Part 3 of the Code of Civil Procedure, relating to actions for unlawful detainer, forcible entry, and forcible detainer.
- 13.4 Cumulative Remedies: The remedies of County and CDU as provided above are cumulative and in addition to, rather than exclusive of, any other remedy of County or CDU, respectively, herein given or that may be permitted by Applicable Law.
- 13.5 Nothing in this Section 13 shall be deemed to affect County Indemnitees' or CDU Indemnitees' right to indemnification under any indemnity clause or clauses set forth in this Lease.
- 14 WAIVER OF CONDITIONS OR COVENANTS: Any waiver by a Party of any default or breach by the other Party of any one or more of the covenants, conditions, terms or obligations under this Lease shall not be construed to be a waiver of any subsequent or other breach or default of the same or of any other covenant, condition, term or obligation under this Lease, nor shall failure on the part of a Party to require exact, full and complete compliance with any of the covenants, conditions, terms or obligations under this Lease be construed as in any manner changing the terms of this Lease, nor shall the terms of this Lease be changed or altered in any manner whatsoever other than by written agreement between County and CDU. No delay, failure, or omission of County to re-enter the Premises or of either Party to exercise any right, power, privilege, or option, arising from

any breach or default shall impair any such right, power, privilege, or option or be construed as a waiver of or acquiescence in such breach or default or as a relinquishment of any right. No notice to CDU or County shall be required to restore or revise “time is of the essence” after the waiver by the other Party of any breach or default. No option, right, power, remedy, or privilege of a Party shall be construed as being exhausted by the exercise thereof in one or more instance. The rights, powers, options, and remedies given to each Party by this Lease shall be cumulative.

- 15 EMINENT DOMAIN: If the whole or any part of the Premises shall be taken by any paramount public authority under the power of eminent domain, then the Term of this Lease shall cease as to the part so taken from the day the possession of that part shall be taken for any public purpose, and from that day CDU shall have the right to either cancel this Lease or to continue in the possession of the remainder of these Premises under the terms herein provided. All damages awarded for such taking shall belong to and be the property of County; provided, however, that County shall not be entitled to any portion of the award made for loss of the Improvements, or any personal property, equipment, and/or trade fixtures belonging to CDU immediately prior to the taking of possession by the condemning authority, nor for any separate claim available to CDU for any taking of its leasehold interest hereunder.

16 NO ASSIGNMENT OR SUBLETTING:

16.1 Definitions:

- 16.1.1 “**Assignment**” means to either directly or indirectly give, assign, hypothecate, encumber, transfer, or grant control of this Lease or any interest, right, or privilege therein, or the whole or any portion of the Premises including, without limitation, any of the following acts:

16.1.1.1 Any disposition(s) that effectuates a change in the majority control of CDU to any person(s), corporation, partnership, or legal entity other than the majority controlling interest therein at the time of execution of this Lease.

16.1.1.2 Any assignment or transfer of this Lease or any interest therein in proceedings in attachment, garnishment or execution against CDU, or in voluntary or involuntary proceedings in bankruptcy or insolvency or receivership taken by or against CDU, the making by CDU of any general assignment for the benefit of creditors, or the filing of a petition for reorganization or arrangement under any law relating to bankruptcy.

16.1.2 “**Sublease**” means any lease, license, permit, concession or other interest in the Premises or the Improvements, or a right to use the Premises or a portion thereof, which is conveyed or granted by CDU to a third party, and which constitutes less than the unrestricted conveyance of the entire CDU’s interest under this Lease.

16.2 Unique Identity; Right to Sublease or Assign: Because of its unique and specialized activities, skills and missions, the identity of the tenant under this Lease is a material benefit to County and is the most substantial and material part of CDU’s consideration to County under this Lease. CDU acknowledges that the Rent (but not the total consideration) due

under the Lease is a below market cash rental rate and that County's interest in entering into this Lease and the substantial majority of its consideration under this Lease is to provide the Premises to CDU based on (a) CDU's unique and specialized activities, skills and missions and (b) the use of the Premises for the specific Permitted Uses, which benefit the community. The foregoing and any other provision in this Lease to the contrary notwithstanding:

- 16.2.1 CDU shall have the right to assign this Lease to an entity Controlled by or under common Control with CDU (an "**Affiliate**") in conjunction with the arrangement of a Permitted Financing, provided that such Affiliate shall be bound by all terms and conditions of this Lease and provided that such Affiliate shall be a non-profit entity.
- 16.2.2 Except as otherwise permitted under Section 16.2.1 above, CDU shall not, without the prior written consent of County (which consent shall not be unreasonably withheld, delayed or conditioned), enter into an Assignment or Sublease. No Sublease shall affect any obligations of CDU or rights of County under this Lease, all of which shall continue in full force and effect notwithstanding any Sublease. Any Sublease shall expire no later than one hour before the expiration of the Term of this Lease. The fact that any subtenant causes any default shall not relieve CDU of CDU's obligation to cure it. CDU shall take all steps reasonable and necessary to prevent any such default.
- 16.3 Material Default: Any Assignment or Sublease by CDU not otherwise permitted under this Lease (other than an Assignment or Sublease consented to in writing by County or otherwise permitted by this Lease) shall immediately constitute a Material Default of this Lease which shall entitle County, at its discretion, to terminate this Lease.
- 16.4 No Contestation: CDU shall (a) not contest the non-assignability of this Lease in any manner and (b) indemnify the County Indemnified Parties in the event of any breach or default by CDU under this Section 16.
- 16.5 Assignment Ineffective: No Assignment (other than an Assignment consented to in writing by County or otherwise permitted under this Lease) by or through CDU shall vest any rights in any purported assignee, and any such Assignment shall be void and of no effect.
- 16.6 Survival: The terms of this Section 16 shall survive the termination of the Lease.
- 17 OWNERSHIP OF IMPROVEMENTS DURING TERM: Until expiration or sooner termination of this Lease, the Improvements and all alterations, additions, or betterments made thereto by CDU shall be owned by CDU. County shall have no right, title or interest therein except as expressly set forth in this Lease; provided, however, that CDU's rights and powers with respect to the Improvements are subject to the term and limitations of this Lease. Once constructed, the Improvements shall not be removed from the Premises, nor shall CDU waste, destroy or modify any Improvements except as specifically permitted by this Lease.

18 REVERSION OF IMPROVEMENTS AND SURRENDER:

- 18.1 Assignment of Improvements: At the expiration or sooner termination of the Term, at the election of County, and without notice to CDU, and provided that County has not previously elected, in accordance with this Lease, to have some or all of the Improvements demolished, all structures, buildings, Improvements and all alterations, additions, and betterments thereto, and all other improvements made to or upon the Premises shall remain upon and be surrendered with the Premises as part thereof and title thereto shall automatically vest in County without compensation therefor to CDU; notwithstanding the foregoing provision, upon County's written request, CDU shall promptly execute a notarized quitclaim deed for the Improvements in favor of County or its designee. CDU shall promptly assign or cause to be assigned to County all warranties to which CDU may have rights applicable to the Work or any portion thereof provided by any manufacturers, designers and constructors of the Work or any portion thereof. CDU agrees to take such other action as may be necessary to effectuate the assignment granted to County pursuant to this Section 18.
- 18.2 Repair of Damage: CDU shall repair all damage (structural or otherwise) caused by any such demolition or removal; provided that damage to improvements which are obsolete economically or functionally or which are not material need not be repaired so long as the Improvements are or are made structurally sound.
- 18.3 Personal Property: Any personal property and trade fixtures not removed by CDU by the end of the Term (including the Demolition Period) shall be deemed abandoned by CDU and shall, without compensation to CDU, then become County's property free and clear of all claims to or against them by CDU or any other person, except as otherwise provided in this Lease.

19 HAZARDOUS SUBSTANCES:

- 19.1 Definition: The term Hazardous Substances means:
- 19.1.1 all "hazardous substances" as defined in California Health and Safety Code Sections 25316 and 108125, those chemicals and substances identified pursuant to Health and Safety Code Section 25249.8 and all "hazardous substances or "hazardous materials" defined in Health and Safety Code Section 25501.
- 19.1.2 petroleum, any petroleum by-products, waste oil, crude oil or natural gas;
- 19.1.3 any material, waste or substance that is or contains asbestos or polychlorinated biphenyls, or is radioactive, flammable or explosive; and
- 19.1.4 any substance, product, waste or other material of any nature whatsoever which is or becomes defined, listed or regulated as a "hazardous substance," "hazardous material," "hazardous waste," "toxic substance," "solid waste," "radioactive material," or similarly defined substance pursuant to any Applicable Laws, including the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et seq.*; the Hazardous Materials Transportation Act, 49 U.S.C. §§ 1801 *et seq.*;

the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 *et seq.*; the California Health & Safety Code and all other analogous State of California and local statutes, ordinances and regulations, including, without limitation, any dealing with underground storage tanks.

- 19.1.5 Notwithstanding the foregoing, "Hazardous Substances" shall not include any of the foregoing materials or substances described in Sections 19.1.1 through 19.1.4 that are of the types and in quantities customarily used in the ordinary course of construction, use, occupancy or operation of university buildings and related parking and access similar to the Area 2 Project including, without limitation, (a) office, cleaning, building maintenance, and construction materials and supplies used in reasonable quantities and in the ordinary course of the construction, occupancy or operation of the Project, and (b) gasoline or diesel fuel in the tanks of automobiles and other machines located on the Premises (whether during construction or otherwise); but only so long as, in the case of (a) and (b) they are always stored, maintained, used and disposed of in compliance with all Applicable Laws.
- 19.2 Warranties and Representations: CDU hereby warrants and represents (a) that it will not cause the presence, use, storage, or disposal of any Hazardous Substances on or about the Premises without the prior written consent of County and (b) that it shall comply with all Applicable Laws and regulations concerning the use, release, storage, and disposal by CDU, its employees, agents, and contractors of Hazardous Substances on the Premises.
- 19.3 Notice: CDU agrees to immediately notify County upon CDU becoming aware that Hazardous Substances have been released on the Premises during the Term.
- 19.4 Indemnity: CDU agrees to indemnify, defend, and hold harmless County Indemnitees, from and against all liability, expense (including defense costs, legal fees, and response costs imposed by law) and claims for damages of any nature whatsoever which arise out of the presence or release of Hazardous Substances on the Premises during the Term, caused by CDU or its successors, assigns, subtenants, co-providers, or any of their respective employees, contractors, guests, patients, licensees, or agents, at any time after the Effective Date. The indemnities provided in this Section 19.4 shall survive the termination or expiration of this Lease.
- 19.5 Contaminated Soil: Notwithstanding anything to the contrary in this Section 19 or elsewhere in this Lease, if the soil at the Premises is determined to be contaminated and CDU is required to remove and/or remediate such soil in order to develop the Area 2 Project, or if CDU is required or needs to take action to address (by removal, remediation or otherwise) any other Hazardous Substances located on, under, within, beneath, about, or being released or moved from, the Premises, then CDU and the County shall share the costs of same 50/50 up to Seven Hundred Thousand Dollars (\$700,000.00); provided, however, that in no event shall County be required to contribute in excess of Three Hundred Fifty Thousand Dollars (the "**Contaminated Soil Reimbursement**") in the aggregate toward same; provided, further, that (i) the Contaminated Soil Reimbursement shall be paid by County to CDU in the form of a dollar-for-dollar credit against Rent, which credit may not exceed fifty percent (50%) of the Base Rent for any year of the Term and (ii) County shall have no obligation to pay the Contaminated Soil Reimbursement to CDU unless

County has provided its written consent (which consent shall not be unreasonably withheld, delayed or conditioned) to the contract in respect of such soil removal and/or remediation and/or other action addressing such Hazardous Substances pursuant to this Section 19.5, which consent may be evidenced in a writing delivered to CDU or by County's (or any other party acting on behalf of or for the benefit of County) execution of said contract.

- 20 ADMINISTRATION: The CEO or her authorized designee shall have the authority to administer this Lease on behalf of County.
- 21 COUNTY'S LOBBYISTS: CDU and each County lobbyist or County lobbying firm, if any, as defined in Los Angeles County Code Section 2.160.010, retained by CDU to lobby County shall, fully comply with County's Lobbyist Ordinance, Los Angeles County Code Chapter 2.160. Failure on the part of CDU or any County lobbyist or County lobbying firm retained by CDU to lobby County to fully comply with County's Lobbyist Ordinance shall constitute a material breach of this Lease upon which County may immediately terminate or suspend this Lease.
- 22 NOTICES: Notices desired or required to be given under this Lease or any Applicable Law may be given by enclosing such notice in a sealed envelope with postage prepaid, registered mail, return receipt requested, with the United States Postal Service or by a recognized provider of overnight delivery. Notice shall be deemed received on the date it is actually received or delivery is refused by addressee, unless such date is not a business day, in which case notice shall be deemed received on the next following business day. Addresses and persons to be notified may be changed by providing at least thirty (30) days' written notice to the other Party, except that CDU shall at all times maintain a mailing address in County.
- 22.1 Notices to CDU shall be addressed as follows:

1. Charles R. Drew University of Medicine and Science
1731 East 120th Street
Los Angeles, California 90059
Attn: Vice President of Administration and Infrastructure

With a copy to:

2. Charles R. Drew University of Medicine and Science
1731 East 120th Street
Los Angeles, California 90059
Attn: General Counsel

- 22.2 Notices to County shall be addressed as follows:

1. Chief Executive Office
Real Estate Division
320 West Temple Street, 7th Floor
Los Angeles, California 90012
Attn: Dean Lehman, Senior Manager

With a copy to:

2. County of Los Angeles
Office of the County Counsel
500 West Temple Street, 6th Floor
Los Angeles, California 90012
Attn: Property Division

23 HOLDING OVER:

- 23.1 If CDU holds over after the expiration of the Term (and any Demolition Period) for any cause, with or without the express or implied consent of County, such holding over shall be deemed to be a tenancy from month-to-month only, and shall not constitute a renewal or extension of the Term. Such holdover shall be subject to the same terms, conditions, restrictions and provisions as herein contained.

24 GENERAL PROVISIONS:

- 24.1 Marginal Headings: The Section titles in this Lease are not a part of this Lease and shall have no effect upon the construction or interpretation of any part hereof.
- 24.2 Time: Time is of the essence for this Lease and each and all of its provisions in which performance is a factor.
- 24.3 Recordation: The Parties shall promptly execute, acknowledge, and deliver duplicate originals of a memorandum of lease with their respective signatures acknowledged by a notary public in the form attached hereto as Exhibit E (the “**Memorandum of Lease**”). CDU shall pay any transfer and/or recording taxes caused by such recordation. If the Parties amend this Lease in a way that makes a prior Memorandum of Lease inaccurate or incomplete, then the Parties shall record a memorandum of such amendment, and CDU shall pay for any transfer or recording taxes associated with such recording.
- 24.4 Prior Agreements: The Lease, agreements incorporated by reference and Exhibits hereto contain all of the agreements of the Parties with respect to any matter covered or mentioned in this Lease, and no prior agreement or understanding pertaining to any such matter shall be effective for any purpose. No provision of this Lease may be amended or added to except by an agreement in writing signed by the Parties. This Lease shall not be effective or binding on any Party until fully executed by both Parties.
- 24.5 Unavoidable Delay: Any prevention, delay, non-performance or stoppage due to any of the following causes shall excuse non-performance for a period equal to any such prevention, delay, non-performance or stoppage. The causes referred to above are: strikes, lockouts, labor disputes, failure of power, irresistible superhuman cause, acts of public enemies, riots, insurrections, civil commotion, inability to obtain labor or materials or reasonable substitutes for either, casualties not contemplated by insurance provisions of this Lease, a moratorium or change in Applicable Law occurring after the Effective Date and prior to the date on which entitlements for the Project have been obtained, which reasonably, unexpectedly and temporarily, delays the entitlements or issuance of permits, or other

cause beyond the reasonable control of the Party obligated to perform. Any such delay shall be detailed in a written notice given by the Party claiming such delay to the other Party within fifteen (15) days after the Party claiming such delay reasonably should have known of the event giving rise to the claim of delay, which notice shall, at a minimum, reasonably specify the (i) nature of the delay, (ii) the date the delay commenced and (if not ongoing) ended and (iii) the reason(s) such delay is an Unavoidable Delay.

- 24.6 Severability: Provided that no Party shall be deprived of the substantial benefit of its bargain, any provision of this Lease which shall prove to be invalid, void, or illegal shall in no way affect, impair, or invalidate any other provision hereof and such other provisions shall remain in full force and effect.
- 24.7 Cumulative Remedies: No remedy or election hereunder shall be deemed exclusive but shall wherever possible be cumulative with all other remedies at law or in equity.
- 24.8 Choice of Law and Forum: This Lease shall be governed by the internal laws of the State of California. Any litigation with respect to this Lease shall be conducted in the courts of County.
- 24.9 Interpretation: Unless the context of this Lease clearly requires otherwise: (i) the plural and singular numbers shall be deemed to include the other; (ii) the masculine, feminine and neuter genders shall be deemed to include the others; (iii) “or” is not exclusive; and (iv) “includes” and “including” are not limiting.
- 24.10 Title: CDU hereby acknowledges the fee title of County in and to the Premises, and covenants and agrees never to assail, contest or resist such fee title.
- 24.11 No Presumption Against Drafter: Each of the Parties has jointly participated in the negotiation and drafting of this Lease. In the event an ambiguity or a question of intent or interpretation arises, this Lease shall be construed as if drafted jointly by each of the Parties and no presumptions or burdens of proof shall arise favoring any party by virtue of the authorship of any provisions of this Lease.
- 24.12 Independent Status; No Third Party Beneficiaries: This Lease is by and between County and CDU. It is not intended and shall not be construed to create the relationship of agent, servant, employee, partnership, joint venture or association as between County and CDU. County and CDU mutually acknowledge that no business or financial relationship exists between them other than as landlord and tenant, and that County is not responsible in any way for the debts of CDU or any other party. Without limiting any other provision of this Lease, CDU understands and agrees to bear the sole responsibility and liability for furnishing Workers’ Compensation benefits to any person for injuries arising from or connected with the Work or any other construction at the Premises. Except as for provisions expressly intended to benefit Permitted Encumbrance Holders, this Lease is not intended and shall not be construed to give any third party any interest or rights with respect to or in connection with any agreement or provision contained herein or contemplated hereby.
- 24.13 Exhibits: All references in this Lease to exhibits shall be construed as though the words “hereby made a part hereof and incorporated herein by this reference” were, in each case,

appended thereto. In the event of a conflict between this Lease and any of the exhibits attached hereto, the terms of this Lease shall govern.

- 24.14 Time For County Action: Notwithstanding anything to the contrary contained in this Lease, whenever CEO determines that a County action required hereunder necessitates approval from or a vote of one or more of County's boards or commissions or County's Board of Supervisors, the time period for County performance of such action shall be extended as is reasonably necessary in order to secure such approval or vote, and County shall not be deemed to be in default hereunder in the event that it fails to perform such action within the time periods otherwise set forth herein.
- 24.15 County Costs: CDU shall promptly reimburse County for the Actual Costs incurred by County in the review, negotiation, preparation and documentation of any County approvals or consents sought by CDU pursuant to this Lease.
- 25 NONDISCRIMINATION IN EMPLOYMENT: CDU certifies and agrees that all persons employed by CDU and/or the affiliates, subsidiaries or holding companies of CDU are and shall be treated equally without regard to or because of race, religion, ancestry, national origin, or sex, and in compliance with all anti-discrimination provisions, existing or as later amended, of the Los Angeles County Code and the laws of the United States of America and the State of California.
- 25.1 CDU certifies and agrees that its contractors, sub-contractors, vendors, and subtenants are and shall be selected without regard to or because of race, religion, ancestry, national origin, or sex and in compliance with all anti-discrimination provisions, existing or as later amended, of the Los Angeles County Code and the laws of the United States of America and the State of California.
- 25.2 All employment records of CDU shall be open for inspection and re-inspection at any reasonable time during the term of this Lease for the purpose of verifying CDU's compliance with this Section 25.
- 26 ASSURANCE OF COMPLIANCE WITH CIVIL RIGHTS LAWS: CDU hereby assures that it will comply with all applicable local, federal, and state civil rights statutes to the end that no person shall, on the grounds of race, religion, color, sex, age, physical disability, marital status, political affiliation, or national origin, be excluded from participation in, be denied the benefits of, nor be otherwise subjected to discrimination under, CDU or under any project, program, or activity supported by this Lease.
- 27 ACKNOWLEDGMENT OF INELIGIBILITY OF RELOCATION ASSISTANCE: CDU expressly acknowledges that CDU will be in possession of the Premises as a result of County's previously acquired property interest. In recognition of such fact, CDU hereby disclaims any status as a "displaced person" as such is defined in Government Code Section 7260, and hereby acknowledges its ineligibility for relocation assistance as provided in Government Code Section 7260 through 7276, inclusive, as interpreted in Title 25, Chapter 6, Section 6034(b)(1) of the California Code of Regulations.

- 28 SOLICITATION OF CONSIDERATION: It is improper for any County officer, employee or agent to solicit consideration in any form from another party with the implication, suggestion or statement that the provision of the consideration may secure more favorable treatment in the award of this Lease or that failure to provide such consideration may negatively affect County's offer to lease. No party shall offer or give, either directly or through an intermediary, consideration in any form to a County officer, employee or agent who has had any involvement in the negotiation, consummation or administration/management of this Lease.
- 28.1 Reporting of Solicitation: CDU shall immediately report any attempt by a County officer, employee or agent to solicit such improper consideration. The report shall be made either to the County Manager charged with the supervision of the employee or to the County Auditor-Controller's Employee Fraud Hotline at (213) 974-0914 or (800) 544-6861.
- 29 PUBLIC RECORDS: CDU acknowledges that any written information submitted to and/or obtained by County from CDU or any other person or entity having to do with or related to this Lease and/or the Premises, either pursuant to this Lease or otherwise may be a public record open to inspection by the public pursuant to the California Records Act (Government Code §§ 6250, *et seq.*) as now in force or hereafter amended, or any Applicable Laws in substitution thereof, or otherwise made available to the public, unless such information is exempt from disclosure pursuant to the applicable sections of the California Records Act. In the event that a public records act request is made for any financial statements and records and County determines that the records must be turned over, County shall give CDU fifteen (15) days' written notice prior to turning over such records so that CDU can take any necessary action.
- 30 NON-PROFIT COVENANT: At all times during the Term of this Lease, CDU shall (a) operate the Premises for the Permitted Use and (b) remain qualified as a 501(c)(3) Organization. CDU's breach of the foregoing covenant shall constitute a Material Default. For purposes hereof, a "501(c)(3) Organization" means an organization that (a) meets the requirements of Section 145 of the Internal Revenue Code of 1986, as amended, and (b) is operating in reliance on a determination letter from the Internal Revenue Service (which has not been revoked or withdrawn) recognizing such organization's tax exempt status under Section 501(c)(3) of the Internal Revenue Code.
- 31 COUNTERPARTS; ELECTRONIC SIGNATURES: This Lease and any other document necessary for the consummation of the transaction contemplated by this Lease may be executed in counterparts, including both counterparts that are executed on paper and counterparts that are in the form of electronic records and are executed electronically. An electronic signature means any electronic sound, symbol or process attached to or logically associated with a record and executed and adopted by a party with the intent to sign such record, including facsimile or e-mail electronic signatures. All executed counterparts shall constitute one agreement, and each counterpart shall be deemed an original. The parties hereby acknowledge and agree that electronic records and electronic signatures, as well as facsimile signatures, may be used in connection with the execution of this Lease and electronic signatures, facsimile signatures or signatures transmitted by electronic mail in so-called pdf format shall be legal and binding and shall have the same full force and effect

as if a paper original of this Lease had been delivered had been signed using a handwritten signature. County and CDU (i) agree that an electronic signature, whether digital or encrypted, of a party to this Lease is intended to authenticate this writing and to have the same force and effect as a manual signature, (ii) intended to be bound by the signatures (whether original, faxed or electronic) on any document sent or delivered by facsimile or, electronic mail, or other electronic means, (iii) are aware that the other party will rely on such signatures, and (iv) hereby waive any defenses to the enforcement of the terms of this Lease based on the foregoing forms of signature. If this Lease has been executed by electronic signature, all parties executing this document are expressly consenting under the United States Federal Electronic Signatures in Global and National Commerce Act of 2000 ("E-SIGN") and California Uniform Electronic Transactions Act ("UETA")(Cal. Civ. Code § 1633.1, et seq.), that a signature by fax, email or other electronic means shall constitute an Electronic Signature to an Electronic Record under both E-SIGN and UETA with respect to this specific transaction.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, this Lease is executed to be effective as of the Effective Date.

<p>TENANT:</p> <p>CHARLES R. DREW UNIVERSITY OF MEDICINE AND SCIENCE, a California nonprofit corporation</p> <p>By: _____ Name: David M. Carlisle, MD, PhD Title: President and CEO</p>	<p>LANDLORD:</p> <p>THE COUNTY OF LOS ANGELES, a body corporate and politic,</p> <p>FESIA A. DAVENPORT Chief Executive Officer</p> <p>By: _____ John T. Cooke Assistant Chief Executive Officer</p> <p>ATTEST:</p> <p>DEAN C. LOGAN Registrar-Recorder/County Clerk</p> <p>By _____ Deputy</p> <p>APPROVED AS TO FORM: DAWYN R. HARRISON Interim County Counsel</p> <p>By _____ Senior Deputy</p>

EXHIBIT A
Legal Description of the County Property

LEGAL DESCRIPTION

The land referred to herein is situated in the State of California, County of Los Angeles Unincorporated and described as follows:

Parcel 1:

Lots 1, 2 and 5 in Tract No. 18356, in the County of Los Angeles, State of California, as per map recorded in Book 535, Page(s) 17 and 18 of Maps, in the office of the County Recorder of said County.

Except all oil, gas, hydrocarbons and other minerals lying in and under 500 feet below, the surface of property, without right of surface entry as granted to Kesco Inc., by deed recorded December 10, 1959 in Book D-689, Page 844 of Deeds.

Parcel 2:

The Westerly 50 feet of Lot 46, Rico Acres, in the County of Los Angeles, State of California, as shown on map filed in Book 13 Page 82, of Maps, in the office of the Recorder of said County.

Parcel 3:

The Easterly 50 feet of the Westerly 100 feet of Lot 46 Rico Acres, in the County of Los Angeles, State of California, as per Map, recorded in Book 13 Page 82 of Maps, in the office of the County Recorder of said County.

Parcel 4:

That portion of Lot 46, Rico Acres, in the County of Los Angeles, State of California, as shown on map filed in Book 13 Page 82, of Maps, in the office of the Recorder of the County of Los Angeles, within, a strip of land 80 feet wide, lying 40 feet on each side of the following described center line:
Beginning at the Easterly terminus of that certain course of North 89°49'21" East 160.00 feet in the Southerly boundary of that certain 40 foot strip of land described in Parcel 22-12 of final order of condemnation in favor of the County of Los Angeles, for 120th Street, a certified copy of which was recorded as Document No. 3377, on April 16, 1968, in Book D-3872, Page 611 of Official Records in the office of said Recorder; thence North 89°51'42" East along the Easterly prolongation of said certain course 18.61 feet to the beginning of a tangent curve concave to the North and having a radius of 1200 feet, thence Easterly along said curve 617.71 feet to the beginning of a reverse curve concave to the South, tangent to a straight line which is parallel with the Southerly line of said lot and which passes through the intersection of a line parallel with and 30 feet Northerly, measured at right angles, from the Northerly line of Lot 115, Springdale Tract, as shown on map filed in Book 6, Page 194, of said Maps with a line parallel with and 30 feet Easterly, measured at right angles, from the Westerly line of said last mentioned lot, and having a radius of 1200 feet thence Easterly along said reverse curve 611.21 feet to said straight line.

Excepting therefrom that portion thereof which lies within the Westerly 100 feet. of said Lot 46.

Also excepting therefrom that portion thereof which lies within the Easterly 84.62 feet of said Lot 46.

Parcel 5:

The Westerly 61 feet of the Easterly 84.62 feet of Lot 46, Rico Acres, in the County of Los Angeles, State of California, in Book 13 Page 82 of Maps, in the office at the County Recorder of said County and state.

Parcel 6:

Lot 47 and the Easterly 23.62 feet of Lot 46, Rico Acres, in the County of Los Angeles, State of California,

as shown on a Map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Except: The Easterly 96 feet of the Southerly 105 feet of said Lot 47.

Sellers reserve all rights to oil, gas and other hydrocarbon substances below a depth of 500 feet, with no right of surface entry.

Parcel 7:

The East 48 feet of the South 105 feet of Lot 47 of Rico Acres Tract, in the Rancho Tajauta, in the County of Los Angeles, State of California, as per map recorded in [Book 13 Page 82](#) of Maps, in the office of the County Recorder of said County.

Parcel 8:

The Westerly 48 feet of the Easterly 96 feet of the Southerly 105 feet of Lot 47, Rico Acres, in the County of Los Angeles, State of California, as shown on Map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Parcel 9:

The Westerly 50 feet of Lot 48 of Rico Acres, in the County of Los Angeles, State of California, as per map recorded in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Parcel 10:

The Easterly 41 feet of the Westerly 91 feet of Lot 48, Rico Acres, in the County of Los Angeles, State of California, as shown on Map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Excepting therefrom all oil, gas, petroleum, minerals, hydrocarbon substances, and kindred substances deposited in, lying under, or flowing through, without, however, the right to the use of the surface or subsurface areas of said property to a depth of 500 feet measured vertically from the surface of said property for the purpose of production or development of any such substances as described in deed recorded April 30, 1970 as Instrument No. [150](#) of Official Records.

Parcel 11:

The Easterly 54.14 feet of Lot 48 of Rico Acres, in the Rancho Tajauta, in the County of Los Angeles, State of California, as per map recorded in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Parcel 12:

The East 42 feet of the West 133 feet of Lot 48 of Rico Acres, in the County of Los Angeles, State of California, as per map recorded in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Parcel 13:

The Southerly 100 feet of Lot 49, of Rico Acres, in the County of Los Angeles, State of California, as shown on map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of the County of Los Angeles.

Parcel 14:

Lot 49, Rico Acres, in the County of Los Angeles, State of California, as shown on map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of the County of Los Angeles.

Excepting therefrom the Southerly 100 feet thereof.

Parcel 15:

The Southerly 85.52 feet of the East half of Lot 50, Rico Acres, in the County of Los Angeles, State of California, as shown on map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of the County of Los Angeles.

Parcel 16:

The East half of Lot 50, Rico Acres, in the County of Los Angeles, State of California, as shown on map filed in [Book 13 Page 82](#) of Maps in the office of the County Recorder of the County of Los Angeles.

Excepting therefrom the Southerly 85.52 feet thereof.

Parcel 17:

The West half of Lot 50, Rico Acres, in the Rancho Tajauta, in the County of Los Angeles, State of California, as per map recorded in [Book 13 Page 82](#) of Maps in the office of the County Recorder of said County.

Parcel 18:

That portion of that abandoned 119th Street formerly Allen Avenue which would pass by operation of the law with the conveyance of said land as abandoned by resolution of the Board of Supervisors of the County of Los Angeles, a certified copy of which was recorded October 13, 1972 as Instrument No. [4121](#), of Official Records.

APN: 6149-028-919
(End of Legal Description)

EXHIBIT B

Depiction of the County Property

See Next Page

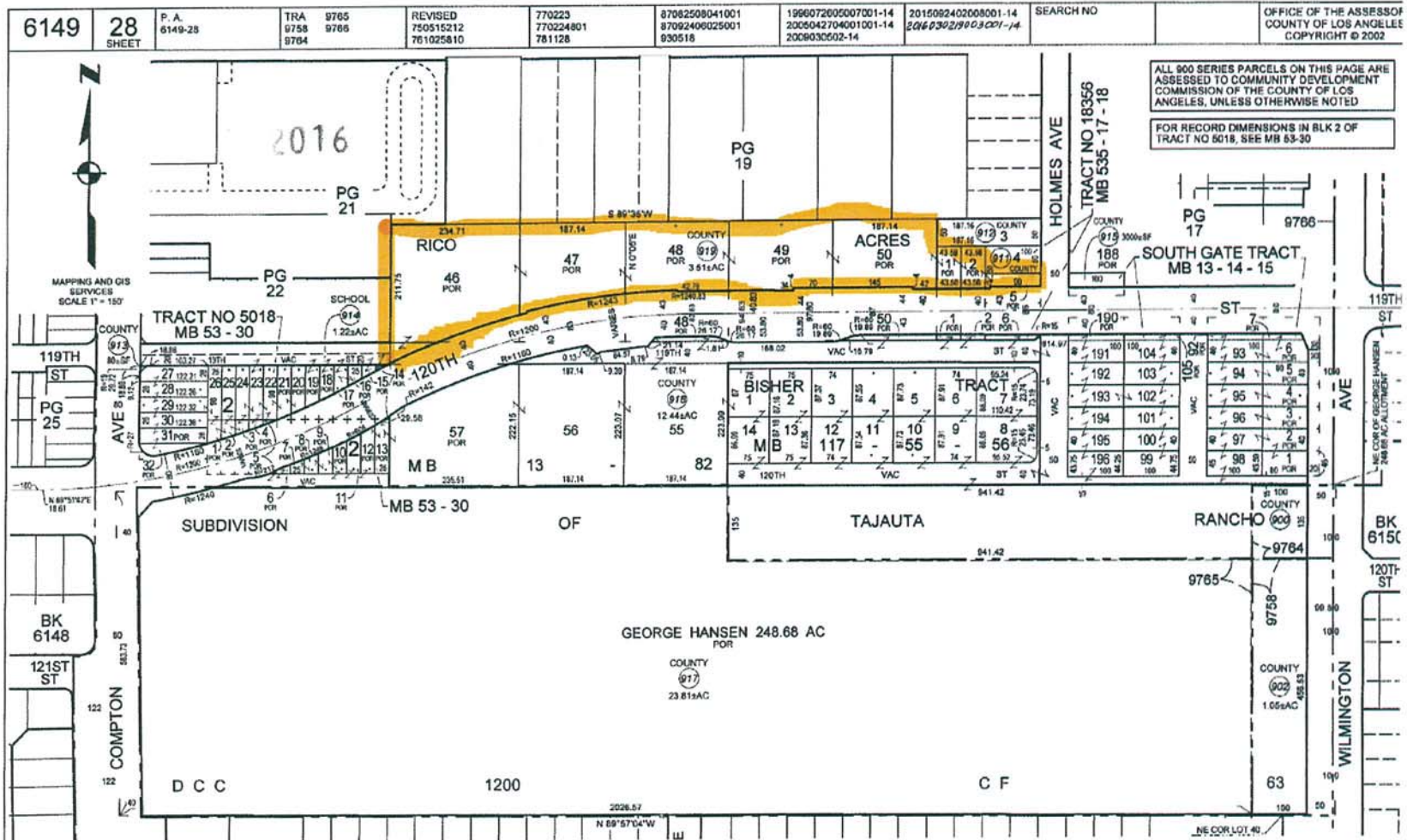


EXHIBIT C-1

Charles Drew University – Medical School
File with: **MARTIN LUTHER KING JR HOSPITAL (1)**
A.I.N. 6149-028-919
I.M. 084-197
S.D. 2

LEGAL DESCRIPTION

CDU Lease Parcel:

That portion of Allen Avenue, 40 feet wide and Lot 46, Rico Acres, as shown on map recorded in Book 13, page 82, of Maps, in the office of the Registrar-Recorder/County Clerk of the County of Los Angeles, within the following described boundaries:

Beginning at the intersection of the generally northerly sideline of 120th Street, as described in deed recorded on October 22, 2015, as Instrument No. 20151297208, of Official Records, in said office, and the easterly line of said lot; thence northerly, along said easterly line, to the northeasterly corner of said lot; thence westerly, along the northerly line of said lot, to the northwesterly corner of said lot; thence southerly, along the westerly line of said lot and its southerly prolongation, to said generally northerly sideline; thence generally easterly, along said generally northerly sideline, to the point of beginning.

Containing: 1.09± Acres.

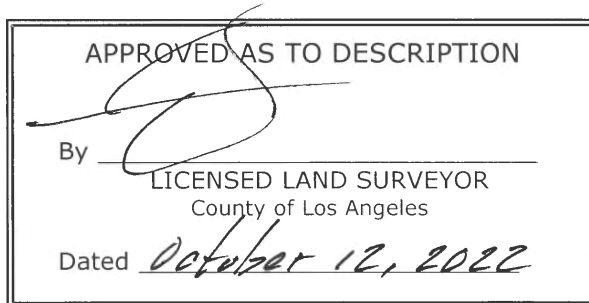
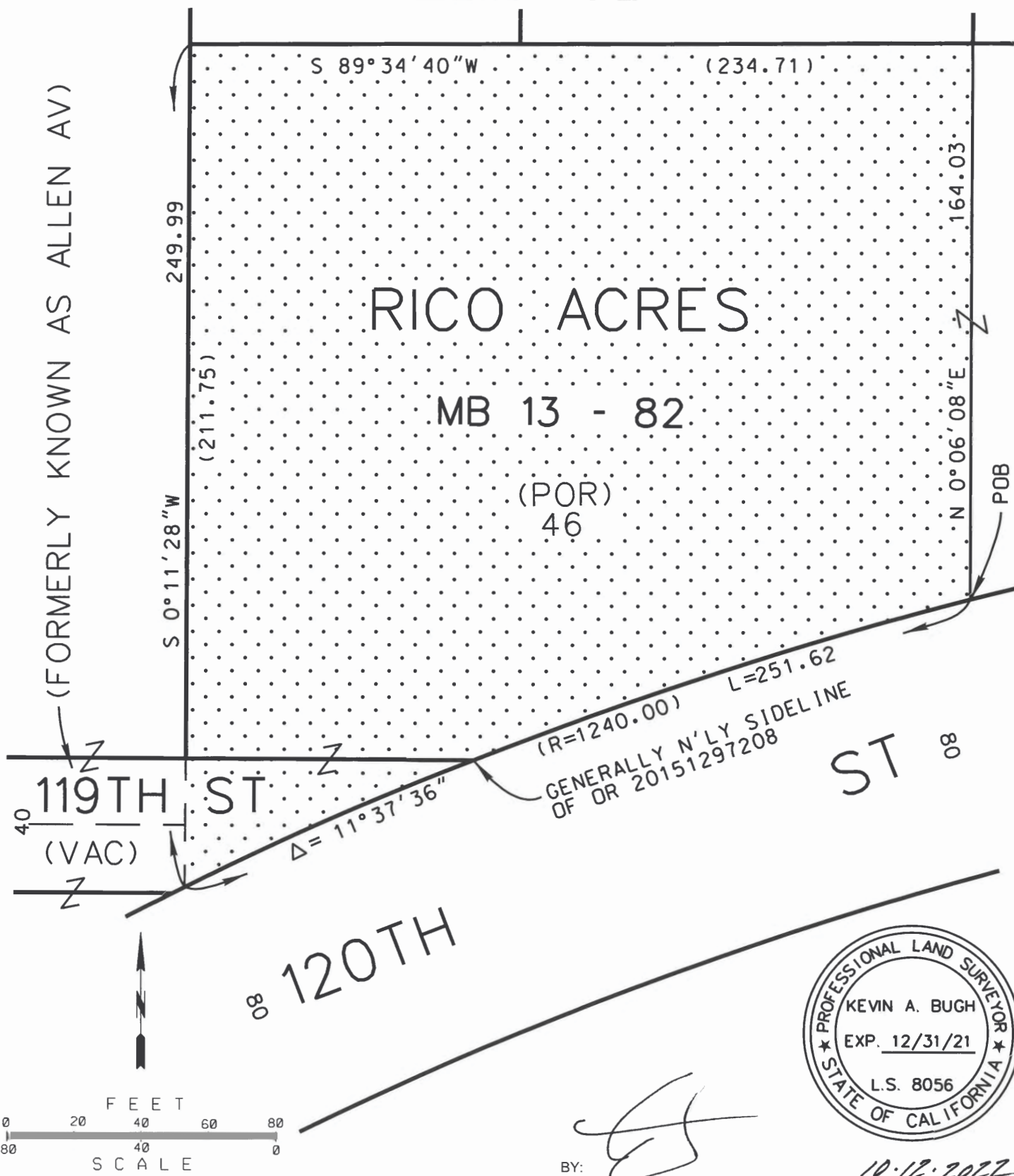


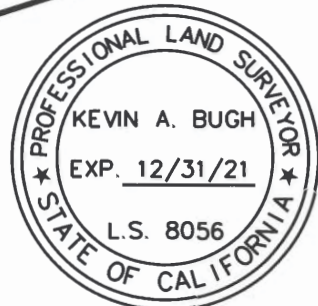
EXHIBIT C-2 Depiction of the Premises



NOTE:
 () RECORD DISTANCES.
 POB DENOTES POINT OF BEGINNING.

LEGEND:
 LEASE PARCEL AREA

BY:
 LICENSED SURVEYOR



10.12.2022
 DATE

REFERENCE:	LOS ANGELES COUNTY PUBLIC WORKS SURVEY/MAPPING & PROPERTY MANAGEMENT DIVISION			
IM 084-197 A.I.N. 6149-028-919	PROJECT: Charles Drew University - Medical School			
	FILE WITH: MARTIN LUTHER KING JR HOSPITAL (1)			
PROJECT I.D. MPM0001090	PREPARED BY J BURGESS	DATE 10/12/2022	SHEET 1 OF 1	

CDU WILLOWBROOK GREEN APARTMENTS

CDU STUDENT
CENTER

CDU KECK
BUILDING

EXISTING
WROUGHT IRON
FENCE TO REMAIN

EXISTING PARKING
TO REMAIN

234'-9 1/2"

PROPERTY LINE

PARCEL 46

PARCEL # 46

27'-9 1/2"

EXISTING
METAL GATE
TO REMAIN

EXISTING TREES
TO BE REMOVED
TYP.

27'-9"

EXISTING BUILDING
TO BE REMOVED

EXISTING BUILDING
TO BE REMOVED

CDU APLA
BUILDING
(2 - STORY)

PROPERTY LINE

248'-10 1/2"

EXISTING CURB
TO REMAIN

10'-0"

27'-9"

SETBACK
LINE

EXTENT OF SITE
IMPROVEMENT

PROPERTY LINE

EXISTING CURB
TO REMAIN

EXISTING DRIVEWAY
TO REMAIN

120TH STREET

MLK COMMUNITY

KING DREW
MAGNET
HIGH
SCHOOL

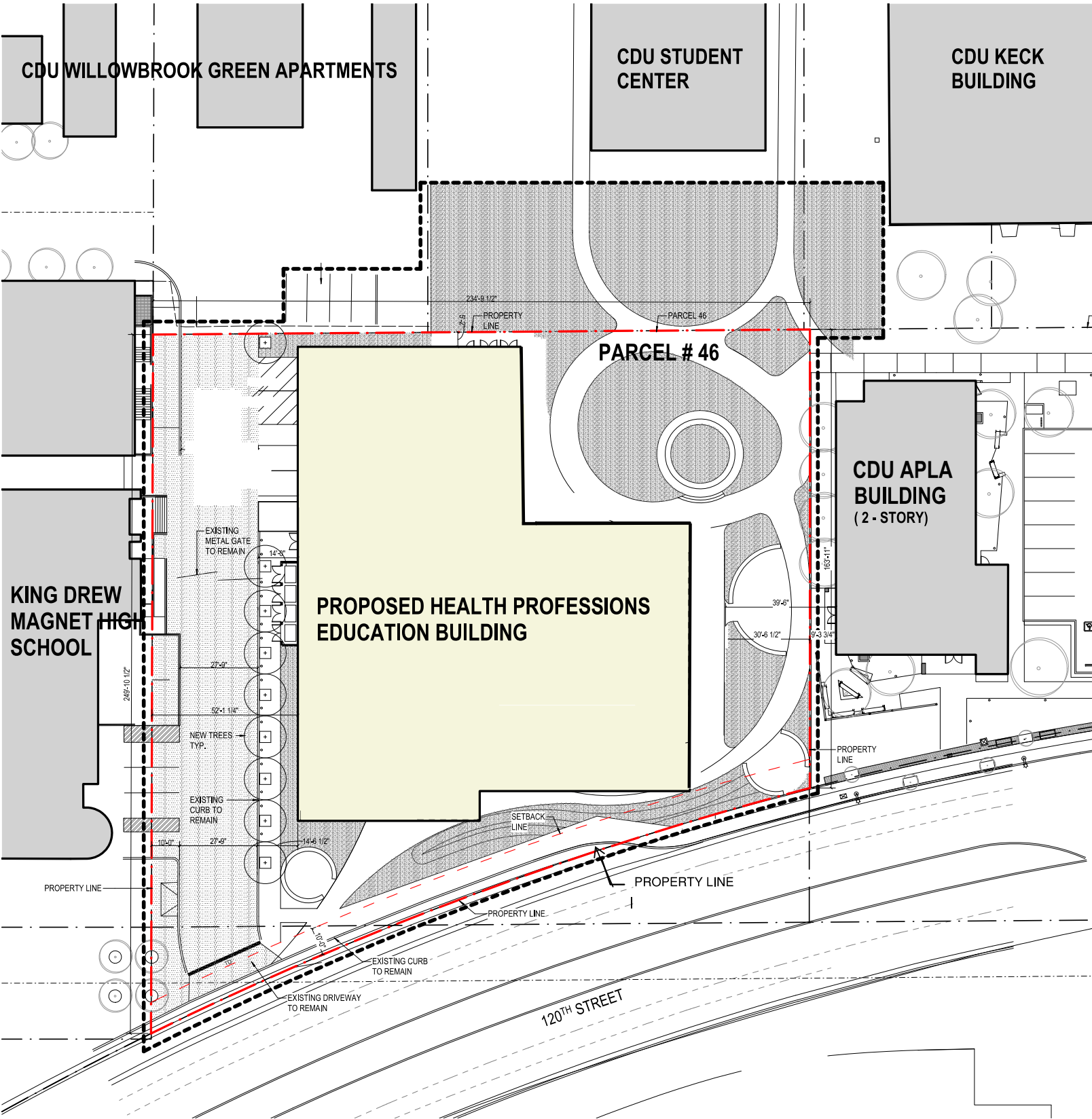


EXHIBIT E

Form of Memorandum of Lease

Recording Requested by and
When Recorded, Return to:

Latham & Watkins LLP
335 South Grand Avenue
Los Angeles, CA 90071-1560
Attention: Kim N. A. Boras

(Space above this line for Recorder's use)

MEMORANDUM OF LEASE

This MEMORANDUM OF LEASE ("**Memorandum**"), is executed as of _____, 2022 (the "**Effective Date**") by **COUNTY OF LOS ANGELES**, a body corporate and politic ("**Lessor**"), and **CHARLES R. DREW UNIVERSITY OF MEDICINE AND SCIENCE**, a California nonprofit corporation ("**Lessee**").

WITNESSETH:

WHEREAS, Lessor has control and jurisdiction over certain property identified as Assessor's Parcel Number 6149-028-919 (the "**Property**") and has demised a portion of the Property, as more particularly described on **Exhibit A** (the "**Premises**"), to Lessee pursuant to that certain Ground Lease and Agreement for Development, Construction and Operation of Area 2, dated as of the Effective Date, made by and between Lessor and Lessee (the "**Lease**"); and

WHEREAS, Lessor and Lessee wish to record this Memorandum in order to give constructive notice of Lessee's leasehold interest in the Premises;

NOW, THEREFORE, in consideration of the foregoing recitals, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Lessor and Lessee hereby agree as follows:

1. Lessor has leased to Lessee, and Lessee has leased from Lessor the Premises, for the term, at the rental and upon the terms, covenants and conditions set forth in the Lease, which Lease is by this reference incorporated herein and made a part hereof as fully as if set forth herein at length.

2. Subject to the terms, covenants and conditions contained in the Lease, the Premises is leased for an initial term that commenced on Effective Date and that expires on the sixtieth (60th) anniversary of the Effective Date, subject to Lessee's option to extend the term for two additional ten (10) year terms.

3. This Memorandum is being made and entered into solely for the purpose of providing notice of the Lease. In the event of any conflict between this Memorandum and the Lease, the Lease shall control.

4. This Memorandum may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signature and acknowledgment pages may be detached from counterparts to form one original instrument which may be recorded.

[Remainder of page intentionally left blank - signature page follows]

IN WITNESS WHEREOF, the undersigned have executed this Memorandum as of the Effective Date.

LESSEE:

**CHARLES R. DREW UNIVERSITY OF
MEDICINE AND SCIENCE, a California
nonprofit corporation**

By: _____
Name: David M. Carlisle, MD, PhD
Title: President and CEO

LESSOR:

COUNTY OF LOS ANGELES

FESIA A. DAVENPORT
Chief Executive Officer

By: _____
John T. Cooke
Assistant Chief Executive Officer

ATTEST:

DEAN C. LOGAN
Registrar-Recorder/County Clerk

By: _____
Deputy

APPROVED AS TO FORM:

DAWYN R. HARRISON
Interim County Counsel

By: _____
Deputy

Lessor

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
)
County of Los Angeles)

On _____, 2022, before me, _____,
a Notary public, personally appeared

_____, who proved to me on the
basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within
instrument and acknowledged to me that he/she/they executed the same in his/her/their
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or
the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

Lessee

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
)
County of Los Angeles)

On _____, 2022, before me, _____,
a Notary public, personally appeared

_____, who proved to me on the
basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within
instrument and acknowledged to me that he/she/they executed the same in his/her/their
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or
the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)



COUNTY OF LOS ANGELES

LOCAL AND TARGETED WORKER HIRE POLICY IMPLEMENTATION GUIDELINES

May 2020

NOW HIRING
LOCAL CONSTRUCTION JOBS AVAILABLE



LOCAL AND TARGETED WORKER HIRE PROGRAM – IMPLEMENTATION GUIDELINES

Pre

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Note: The Local and Targeted Worker Hire Policy Program Implementation Guidelines are meant to be a guide, and should only be used as a supplement to your understanding of the County of Los Angeles Board of Supervisors Policy Number 5.270, Countywide Local and Targeted Worker Hire Policy approved by the Board on June 11, 2019. These guidelines may be modified at the Chief Executive Office's discretion.

INTRODUCTION

The County of Los Angeles Board of Supervisors recognizes the use of Los Angeles County's investment in public works, County-financed affordable housing projects and developer-financed economic development projects on County property as a catalyst for local job creation, construction careers training, and revenue generation for the County. On September 6, 2016, the County Board of Supervisors approved the Countywide Local and Targeted Worker Hire Policy (Policy). This Policy establishes a pathway for the County to enhance employment opportunities for Local and Targeted Workers who face multiple barriers to employment.

Purpose and Scope

The purpose of these guidelines is to assist County departments, commissions and agencies administering project development agreements, including but not limited to; ground leases, loan agreements, grant agreements, design-build contracts and contracts for County capital and construction projects that require Board approval with implementation of the Policy. The Chief Executive Office, in consultation with County Counsel, Public Works, Internal Services, and Community Development Commission has developed these guidelines for purposes of implementing this Policy.

How to Use These Guidelines

These guidelines are a ready reference for County departments, commissions and agencies; and are meant to be a guide to supplement your understanding of this Policy for inclusion in contractual documents regarding County-sponsored construction related projects. Sample forms, Terms and Definitions, Frequently Asked Questions, Local and Targeted Worker Hire Referral Process, Program Reporting and Monitoring Requirements, and Other Resources are provided in this booklet. These materials were designed to assist County departments, commissions and agencies to meet the minimum requirements provided in the Policy.

LOCAL AND TARGETED WORKER HIRE POLICY – HIRING GOALS

All prime Contractors providing services under the above-mentioned project agreements and/or contracts must comply with the Policy requirements and hiring goals established by the County, as outlined below. Depending on the total Project Budget as determined by the County, or the total Job Order Contract Work Order amount, one of the following Hiring Goals of the Policy requirements shall apply:

- Mandatory Hiring Goals
- Best Efforts Hiring Goals
- All Projects Hiring Goals

Project Budget Greater than \$2.5 Million (Mandatory Hiring Goals)

For projects with a total project budget greater than \$2.5 million, with the exception of affordable housing projects, there shall be a **mandatory** hiring goal of at least 30 percent of California Construction Labor Hours performed by either Tier 1 or Tier 2 Qualified Local Residents on each project.

California Construction Labor Hours is defined as all craft worker hours performed on the project by California residents, excluding the hours performed by off-site material fabricators, designers, project office staff, or vendors.

For projects with a total project budget greater than \$2.5 million, with the exception of affordable housing projects, there shall be a **mandatory** hiring goal of at least 10 percent of California Construction Labor Hours on the project performed by those classified as a Targeted Worker.

Hours worked by a Targeted Worker who is also a Tier 1 or Tier 2 Qualified Local Resident may be applied towards the 30 percent goal; and

For projects with a total project budget greater than \$2.5 million, with the exception of affordable housing projects, there shall be a **mandatory** requirement to use a Jobs Coordinator to facilitate implementation of the Targeted hiring requirement of this Policy. The costs for a Jobs Coordinator shall be negotiated between the contractor and the Jobs Coordinator, and shall be paid for by the contractor. The County is not and shall not be in privity of contract with any Jobs Coordinator.

The Jobs Coordinator shall play an integral part in the success of Contractors/Subcontractors in meeting the Targeted Worker hiring requirement. The Jobs Coordinator may be selected from the approved Jobs Coordinators list available at the Los Angeles County Metropolitan Transportation Authority (Metro) website. The link to this list is:

http://media.metro.net/about_us/pla/images/job_coordinator_panel.pdf. The approved Jobs Coordinators list in effect as of the date of the publication of this guideline is attached as Attachment 1. Alternatively, contractors that can demonstrate internal capacity through their human resources to meet Targeted Worker hiring requirements may do so. Minimum qualification and responsibilities of Jobs Coordinators are Attachment 2 and 3.

The Contractor shall ensure the **mandatory** hiring requirements provided for Local and Targeted Workers are met in accordance with this Policy.

Project Budget of \$500,000 to \$2.5 million (Best Efforts Hiring Goals)

For projects with a total project budget of \$500,000 to \$2.5 million, with the exception of affordable housing projects, there shall be a **best effort** hiring goal of at least 30 percent of California Construction Labor Hours performed by either Tier 1 or Tier 2 Qualified Local Residents on each project. There is no Targeted Worker hiring requirement;

Job Order Contracts Work Order and Hiring Goals

For Job Order Contracts (JOCs), each work order amount issued pursuant to the contract shall determine the mandatory and best effort hiring goals. Each JOC work order amount greater than \$2.5 Million will comply with the Mandatory Hiring Goals as indicated above. Each JOC work order amount between \$500,000 to \$2.5 million will comply with the Best Efforts Hiring Goals as indicated above.

Housing Projects Hiring Goals

For affordable housing projects and mixed-use affordable housing projects that include County-funded facilities receiving funds administered by Community Development Commission (CDC), and Housing Authority of County of Los Angeles (HACOLA) projects with a project budget greater than \$2.5 million, there shall be a **best effort** hiring goal of at least 30 percent of California Construction Labor Hours be performed by either Tier 1 or Tier 2 Qualified Local Residents. Also, at least 10 percent of California Construction Labor Hours on the project be performed by those classified as a Targeted Workers. Hours worked by a Targeted Worker who is also a Tier 1 or Tier 2 Qualified Local Resident may be applied towards the 30 percent goal; and

The Contractor shall ensure posting a wide array of its construction job advertisements and/or seeking the assistance of a community service provider organization if necessary to ensure the **best efforts** hiring requirement provided for Local Workers are met in accordance with this Policy.

All Projects Hiring Goals

For all projects, with the exception of affordable housing projects, a minimum ratio of one apprentice hour for every five journeyman hours shall be enforced, per State Labor code requirement, and contractors shall strive to obtain half of all apprentice hours on the project be performed by Local and Targeted Workers. Hours worked by an apprentice who is also a Targeted Worker or a Local Resident may be applied towards the 30 percent Local Resident and/or the 10 percent Targeted Worker hire goals.

Policy Exemptions

Exceptions for projects in jurisdictions enforcing their own local hiring policy, and for projects with Federal or State funding prohibitions on geographic preferences will be determined on a case-by-case basis by Chief Executive Office (CEO), in consultation with the County Board of Supervisors Offices and County Counsel, and the exemption shall be stated in the corresponding Board letter.

Affordable housing projects financed with federal funds subject to 24 CFR Part 135 will follow local hiring and training guidelines promulgated through section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by certain Housing and Urban Development financial assistance can be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons.

For public housing modernization projects, bidding contractors must fill out a Business Hiring Survey (Survey) that identifies available job openings. The Survey is included in all solicitation materials, reviewed at pre-bid conferences, and discussed at regular meetings with construction project contractors.

LOCAL AND TARGETED WORKER HIRE POLICY – RESIDENCY AND ELIGIBILITY REQUIREMENTS

Local Worker Residency Preference Areas:

Area	Residency Requirement	Contractor Requirement
Tier 1	<p>An individual's primary residency is within five (5) miles of the proposed project site and is within a Qualifying Zip Code.</p> <p>If a qualifying Zip Code is partially located within the 5-mile radius, then the entire Zip Code is considered as a Tier I Zip Code, and workers living in that entire Zip Code area may qualify as Tier I hire.</p> <p>If a project is to be constructed at multiple non-contiguous locations, the qualifying Tier 1 zip codes will be calculated based upon a 5-mile radius of all of the combined project locations. Should the determination of a 5-mile radius of the combined project locations site prove to be impractical, all qualified Tier 1 and Tier 2 zip codes may be utilized without consideration of the 5-mile radius.</p>	<p>The Contractor and its subcontractors shall <u>first</u> meet the Local Worker Hire participation requirement by employing Qualified Local Residents from Tier 1. If the Contractor is unable to meet their entire Local Worker Hire need from this area, it must submit to the Project Manager or designated County representative a statement on company letterhead certifying that it has exhausted all available qualified Local Workers from this area during a 48-hour period before pursuing Qualified Local Residents from Tier 2.</p>
Tier 2	<p>An individual's primary residency is within a Qualifying Zip code; and (2) that Qualifying Zip Code is beyond five (5) miles of the proposed project site.</p>	

Targeted Worker Eligibility Criteria:

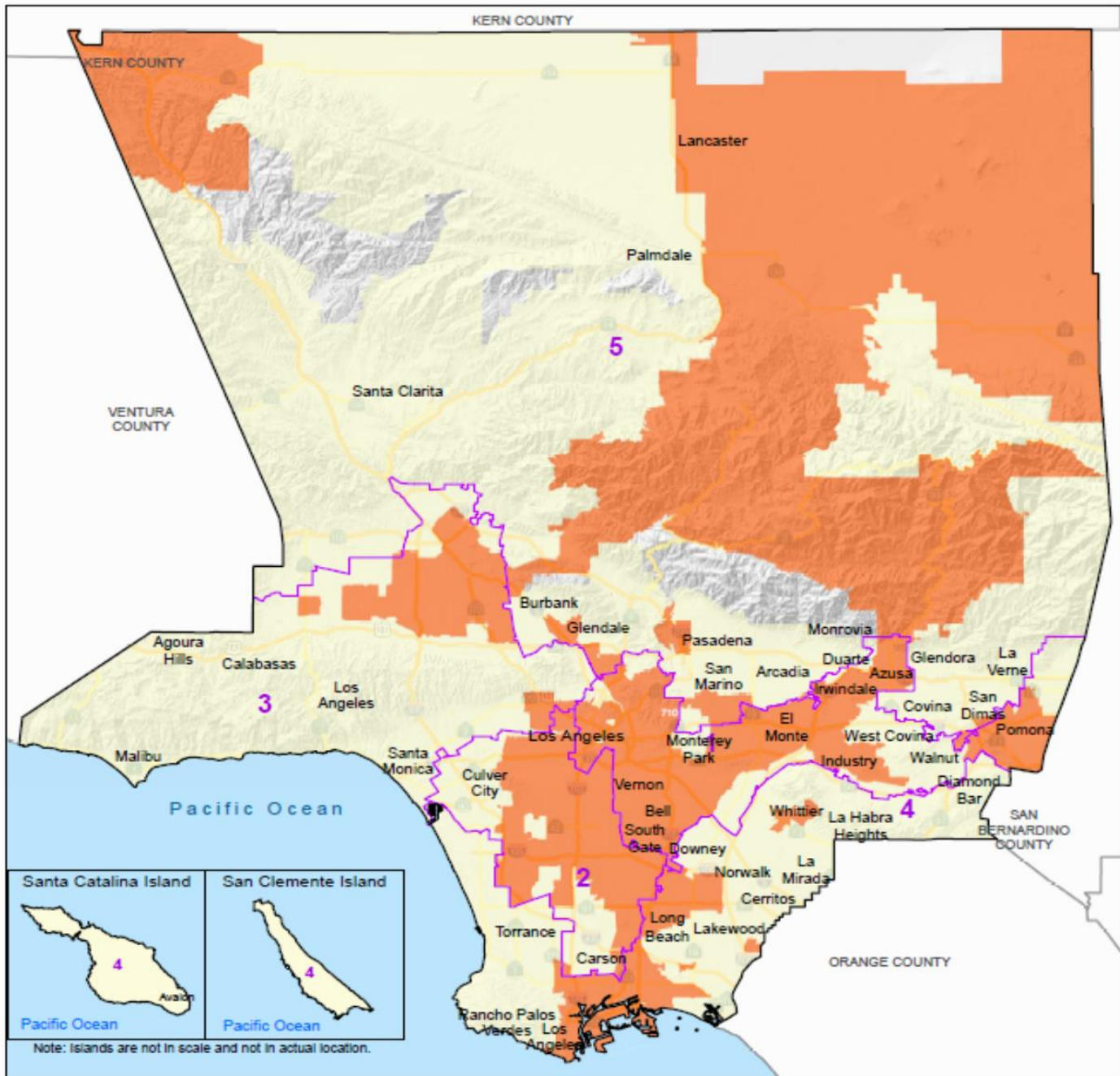
	Policy
Category	<p>A targeted worker is an individual who is both a County resident and faces one or more of the following barriers to employment:</p> <ol style="list-style-type: none">1. Has a documented annual income at or below 100 percent of the Federal Poverty Level;2. Has no high school diploma or GED;3. Has a history of involvement with the criminal justice system;4. Is experiencing protracted unemployment (receiving unemployment benefits for at least 6 months);5. Is a current recipient of government cash or food assistance benefits;6. Is homeless or has been homeless within the last year;7. Is a custodial single parent;8. Is a former foster youth;9. Is a veteran, or is the eligible spouse of a veteran of the United States armed forces, under Section 2(a) of the Jobs for Veterans Act (38 U.S.C.4215[a]);10. Is an eligible migrant and seasonal farmworker;11. Is currently an English language learner;12. Is an older Individual (55+);13. Is disabled; or14. Is an individual with a low level of literacy.

POLICY REQUIREMENT HIRING GOALS

	Project Budget Greater than \$2.5 Million Mandatory Hiring Goals	Project Budget of \$500,000 to \$2.5 million Best Efforts Hiring Goals	Affordable Housing Projects
Local Worker Hiring Tier 1 or Tier 2	At least 30 percent of California Construction Labor Hours performed.	At least 30 percent of California Construction Labor Hours performed.	Affordable housing projects financed with federal funds subject to 24 CFR Part 135 will follow local hiring and training guidelines promulgated through section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by certain Housing and Urban Development financial assistance can be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons. For public housing modernization projects, bidding contractors must fill out a Business Hiring Survey (Survey) that identifies available job openings. The Survey is included in all solicitation materials, reviewed at pre-bid conferences, and discussed at regular meetings with construction project contractors
Targeted Hiring	At least 10 percent of California Construction Labor Hours on the project performed by those classified as a Targeted Worker. Hours worked by a Targeted Worker who is also a Tier 1 or Tier 2 Qualified Local Resident may be applied towards the 30 percent goal.	N/A	
Job Coordinator	Use of a Job Coordinator to facilitate implementation of the Targeted hiring requirement.	N/A	
Apprentice Hours	A minimum ratio of one apprentice hour for every five journeyman hours shall be enforced, per State Labor code requirement, and contractors will strive to obtain half of all apprentice hours on the project be performed by Local and Targeted Workers. Hours worked by an apprentice who is also a Targeted Worker or a Local Resident may be applied towards the 30 percent Local Resident or the 10 percent Targeted Worker hire goal.	A minimum ratio of one apprentice hour for every five journeyman hours shall be enforced, per State Labor code requirement, and contractors will strive to obtain half of all apprentice hours on the project be performed by Local Workers. Hours worked by an apprentice who is also a Local Resident may be applied towards the 30 percent Local Resident hire goal.	

COUNTY MAP

Zip Code Tabulation Areas Where Percentage of Families Below 200% FPL is Higher Than Countywide Percentage - Los Angeles County



COUNTY OF LOS ANGELES – COUNTYWIDE LOCAL AND TARGETED WORKER HIRE PROGRAM

Qualifying Zip Codes (Under 200% Federal Poverty Level)¹

Zip Code	Region	SD1	SD2	SD3	SD4	SD5
90001	Florence /South Central (City of LA)	X	X			
90002	Watts (City of LA)		X			
90003	South Central (City of LA)		X			
90004	Hancock Park (City of LA)	X	X	X		
90005	Koreatown (City of LA)		X	X		
90006	Pico Heights (City of LA)	X	X			
90007	South Central (City of LA)	X	X			
90008	Baldwin Hills /Crenshaw (City of LA) /Leimert Park (City of LA)		X			
90010	Wilshire Blvd (City of LA)		X	X		
90011	South Central (City of LA)	X	X			
90012	Civic Center (City of LA) /Chinatown (City of LA)	X				
90013	Downtown Los Angeles (City of LA)	X	X			
90014	Los Angeles	X	X			
90015	Downtown Los Angeles (City of LA)	X	X			
90016	West Adams (City of LA)		X			
90017	Downtown Los Angeles (City of LA)	X				
90018	Jefferson Park (City of LA)		X			
90019	Country Club Park (City of LA) /Mid City (City of LA)		X			
90020	Hancock Park (City of LA)		X	X		
90021	Downtown Los Angeles (City of LA)	X	X			
90022	East Los Angeles	X				
90023	East Los Angeles (City of LA)	X				
90026	Echo Park /Silverlake (City of LA)	X				
90028	Hollywood (City of LA)			X		
90029	Downtown Los Angeles (City of LA)	X	X	X		
90031	Montecito Heights (City of LA)	X				
90032	El Sereno (City of LA) /Monterey Hills (City of LA)	X				X
90033	Boyle Heights (City of LA)	X				
90034	Palms		X			
90035	West Fairfax		X	X		
90036	Park La Brea		X	X		
90037	South Central (City of LA)		X			
90038	Hollywood (City of LA)			X		
90040	Commerce, City of	X				
90042	Highland Park (City of LA)	X				X
90043	Hyde Park (City of LA) /View Park /Windsor Hills		X			
90044	Athens		X			
90047	South Central (City of LA)		X			
90057	Westlake (City of LA)	X	X			
90058	Vernon	X	X			
90059	Watts (City of LA) /Willowbrook		X			
90061	South Central (City of LA)		X			
90062	South Central (City of LA)		X			

¹ Source: 2017 ACS 5YR SF

Zip Code	Region	SD1	SD2	SD3	SD4	SD5
90063	City Terrace	X				
90065	Cypress Park (City of LA) /Glassell Park (City of LA) /Mt. Washington	X				
90089	USC (City of LA)	X	X			
90201	Bell /Bell Gardens /Cudahy	X				
90220	Compton /Rancho Dominguez		X			
90221	East Rancho Dominguez		X		X	
90222	Compton /Rosewood /Willowbrook		X			
90242	Downey				X	
90247	Gardena		X		X	
90250	Hawthorne (Holly Park)		X			
90255	Huntington Park /Walnut Park	X	X			
90260	Lawndale		X		X	
90262	Lynwood		X		X	
90270	Maywood	X				
90280	South Gate		X			
90301	Inglewood		X			
90302	Inglewood		X			
90303	Inglewood		X			
90304	Lennox		X			
90501	Torrance		X		X	
90601	Whittier	X			X	
90602	Whittier				X	
90640	Montebello	X				
90706	Bellflower				X	
90710	Harbor City (City of Los Angeles)		X		X	
90716	Hawaiian Gardens				X	
90723	Paramount				X	
90731	San Pedro (City of LA) /Terminal Island (City of LA)				X	
90744	Wilmington (City of LA)		X			
90802	Long Beach				X	
90804	Long Beach				X	
90805	North Long Beach (Long Beach)		X		X	
90806	Long Beach				X	
90810	Carson /Long Beach		X		X	
90813	Long Beach				X	
91001	Altadena					X
91042	Tujunga (City of LA)					X
91046	Glendale (Verdugo City)					X
91103	Pasadena					X
91201	Glendale					X
91203	Glendale					X
91204	Glendale (Tropico)					X
91205	Glendale (Tropico)					X
91303	Canoga Park (City of LA)			X		
91331	Arleta (City of LA) /Pacoima (City of LA)			X		
91335	Reseda (City of LA)			X		
91340	San Fernando			X		
91343	North Hills (City of LA)			X		X
91352	Sun Valley (City of LA)			X		X

Zip Code	Region	SD1	SD2	SD3	SD4	SD5
91401	Van Nuys (City of LA)			X		
91402	Panorama City (City of LA)			X		
91405	Van Nuys (City of LA)			X		
91406	Van Nuys (City of LA)			X		
91411	Van Nuys (City of LA)			X		
91502	Burbank					X
91601	North Hollywood (City of LA)			X		
91605	North Hollywood					X
91606	North Hollywood			X		
91702	Azusa	X				X
91706	Baldwin Park /Irwindale	X				X
91731	El Monte	X				X
91732	El Monte	X				X
91733	South El Monte					X
91744	City of Industry /La Puente /Valinda	X				
91746	Bassett /City of Industry /La Puente	X				
91755	Monterey Park	X				
91766	Phillips Ranch /Pomona	X				
91767	Pomona	X				X
91768	Pomona	X			X	X
91770	Rosemead	X				
91776	San Gabriel	X				X
91801	Alhambra					X
93243	Lebec					X
93534	Lancaster					X
93535	Hi Vista	X	X			
93543	Littlerock /Juniper Hills					X
93544	Llano					X
93550	Palmdale /Lake Los Angeles					X
93552	Palmdale					X
93560	Rosamond					X
93591	Palmdale /Lake Los Angeles					X

POLICY IMPLEMENTATION

This Implementation Guidelines issued in conjunction with the Local and Targeted Worker Hire Policy provides standard language and definitions as a guide to notify proposers of the County's Policy for compliance of hiring Local and Targeted Workers. These guidelines are meant to facilitate the hiring of Local and Targeted Workers and should be used by all County departments, commissions and agencies administering related construction projects as well as Contractors and Subcontractors. Applicable referenced policy language shall be included in all Board-awarded County construction and development project documents. In addition:

- All requests for Solicitation/Proposal/Invitations for Bid (RFP/IFB), specifications must require all contractors submitting bids or proposals to agree to the terms of the County of Los Angeles (County) Local and Targeted Worker Hiring Policy.
- All construction project general contracts must include a provision obligating the Contractor and its Subcontractors to comply with the terms of the Countywide Local and Targeted Worker Hiring Policy through execution of an agreement.
- The construction contract must include provisions establishing enforcement and compliance of the Local and Targeted Worker Hiring Policy.

Administration and Compliance

County Departments, Commissions and Agencies:

All participating County departments, commissions and agencies shall submit a Quarterly Summary Report of its contractors' data measures including, compliance of the Apprentice and Local and Targeted worker hiring for the preceding three months, as directed by the CEO.

Contractors:

Prior to commencing work, the Contractor, on behalf of itself and its Subcontractors, shall submit a report to the County Project manager or designated County representative that contains a workforce hiring plan (source of hiring Local and Targeted worker, trades to be requested, number of workers per trade, etc.) for the hiring of qualified Local and Targeted Workers and the assignment and use of the subcontractors' workforce to meet the Local and Targeted Worker Hiring requirement. The Contractor, on behalf of itself and its Subcontractors, shall submit monthly a Workforce Utilization Report (Form B) to report the actual number of California Construction Labor hours worked and the actual number of hours worked by Local and Targeted workers. Contractors shall submit Workforce Utilization Report (Form B) as directed by the County to the Project Manager or designated County representative no later than fifteenth calendar day of each month for the preceding month. If the fifteenth day falls on a weekend or holiday, the Report shall be due the following business day.

The Contractor and its Subcontractors shall use the Craft Employee Request Form (Form A) for all requests for dispatch of qualified Local Residents and Targeted workers, apprentices and journeymen from: the County's Department of Workforce Development, Aging and Community Services – America's Job Centers, a community service provider, a union hiring hall, or another source, in the event that assistance from these entities in obtaining such workers is needed

The Contractor and its subcontractors shall first meet the Local Worker Hire participation requirement by employing Qualified Local Residents from Tier 1. If the Contractor is unable to meet their entire Local Worker Hire need from this area, it must submit to the Project Manager or

designated County representative a statement on company letterhead certifying that it has exhausted all available qualified Local Workers from this area during a 48-hour period before pursuing Qualified Local Residents from Tier 2.

The Contractor, on behalf of itself and its Subcontractors, shall submit monthly a Status Report (Form D) to report actual Apprentice and journeyman hours worked, Targeted worker data and workers demographic profile. Contractors shall submit Status Report (Form D) as directed by the County to the Project Manager or designated County representative no later than fifteenth calendar day of each month for the preceding month. If the fifteenth day falls on a weekend or holiday, the Status Report shall be due the following business day.

The County may, in its sole discretion, elect to provide an online system for the Contractor and its Subcontractors to input the data required in the Status and Workforce Utilization Reports. If the County so elects, the Contractor and Subcontractors shall utilize that online system in lieu of completing and submitting the Status and Workforce Utilization Reports (forms B and D).

Monthly Mandatory Compliance Withholding

The Contractor's compliance with the Policy requirements will be evaluated monthly.

To enforce compliance on contracts containing **mandatory** hiring goals, an amount will be withheld from the monthly progress payment to the Contractor in proportion to the deficit percentage of the mandated Local and Targeted Hiring Goal percentage and the actual percentage obtained. This possible withholding shall commence with the second full month after issuance of the Notice to Proceed, to allow the contractor to fully mobilize for the project. The maximum that may be withheld during the duration of the project is one percent (1%) of the total construction contract amount, but not to exceed \$500,000, comprised of 0.75% for Local Worker goal compliance, and 0.25% for Targeted Worker goal compliance. This amount is called the Mandatory Compliance Withholding (MCW) amount. The MCW will be divided by the number of construction months in the baseline construction schedule to determine the Monthly Mandatory Compliance Withholding (MMCW) amount for non-compliance.

Mandatory compliance withholding (MCW) amount is determined as follows:

- Construction contract amount multiplied by Local/Targeted Worker goal compliance percentage (0.75% / 0.25%).

Construction Contract amount X .75% = Mandatory Compliance Withholding (MCW) for Local Workers

Construction Contract amount X .25% = Mandatory Compliance Withholding (MCW) for Targeted Workers

Monthly Mandatory Compliance Withholding (MMCW) amount is determined as follows:

- Mandatory Compliance Withholding amount divided by the baseline duration of the construction contract (number of months).

$$\frac{\text{Mandatory Compliance Withholding (MCW)}}{\text{Baseline Duration of Contract (in months)}} = \text{Monthly Mandatory Compliance Amount (MMCW)}$$

The actual amount, if any, withheld each month will be determined in the following manner:

- 1) Actual Local/Targeted Hire Percentage for the month (a) = divide the actual Local/Targeted hire worker hours for the month by the actual California Construction Labor hours for the month
 - If this number is greater than or equal to 30% for Local Worker Hire, then there will be no amount withheld during this month.

- If this number is greater than or equal to 10% for Targeted Worker Hire, then there will be no amount withheld during this month.
- 2) Obtained Percentage of Actual Local/Targeted Hire for the month (c) = divide the actual Local/Targeted worker hire percentage (a) by the mandatory Local/Targeted hire percentage (b)
 - 3) Unmet percentage of the Local/Targeted Hire (d) = one minus percentage of actual Local/Targeted hire (c)
 - 4) Monthly Withholding Amount (f) = multiply unmet percentage of Local/Targeted hire by the MMCW (d x e)

The mathematical process for the above is as follows:

Local Worker Monthly Withholding Calculation ²

Actual Local Worker Hire Percentage (a)	Mandatory Local Worker Hire Goal (b)	Obtained Percentage Local Worker Hire (c) (c=a / b)	Unmet Percentage of Local Worker Hire (d) (d=1-c)	Local Worker MMCW (e)	Monthly Withholding Amount (f) (f=d*e)
Actual Local Worker Hire Hours Actual California Construction Labor Hours	30%	Actual Local Worker Hire Percentage Mandatory Local Worker Hire Percentage (30%)	1-Percentage of Local Worker Hire	\$XXX	Unmet Percentage of Local Worker Hire * \$XXX

Targeted Worker Monthly Withholding Calculation¹

Actual Targeted Worker Hire Percentage (a)	Mandatory Targeted Worker Hire Goal (b)	Obtained Percentage Targeted Worker Hire (c) (c=a / b)	Unmet Percentage of Targeted Worker Hire (d) (d=1-c)	Targeted Worker MMCW (e)	Monthly Withholding Amount (f) (f=d*e)
Actual Targeted Worker Hire Hours Actual California Construction Labor Hours	10%	Actual Targeted Worker Hire Percentage Mandatory Targeted Worker Hire Percentage (10%)	1-Percentage of Targeted Worker Hire	\$XXX	Unmet Percentage of Targeted Worker Hire * \$XXX

Final Reconciliation of MCW

If, at the completion of a project, the County has withheld funds due to the monthly MMCW calculations, a final reconciliation will be performed to determine the contractor's ultimate compliance with the Local and Targeted Work Hiring **mandatory** requirements based on the total actual Local and Targeted Worker hours incurred on the project. This reconciliation will be based on the same formulae specified above for the monthly withholding calculations, except that: (1) the Actual Local and Targeted Worker Hire percentages shall be calculated based on the total project hours instead of the monthly hours; and (2) the MCW shall be used instead of the MMCW. If, after taking into account all hours of project work performed, the Local and Targeted Worker Hiring **mandatory** requirements of the Policy have been satisfied for a Project, then the Contractor and its Subcontractors working on that Project shall be deemed to be in compliance,

² Local and Targeted Worker Monthly Withholding Calculation Examples available in Attachment 4

and all withheld funds shall be paid to the contractor. The County will not be required to pay interest on any amounts withheld during the term of the contract.

If, after taking into account all hours of project work performed, the Local and Targeted Worker Hiring **mandatory** requirements of the Policy have not been satisfied for a Project, then the Contractor and its Subcontractors working on that Project shall be deemed to not be in compliance, and the final calculated withholding amount shall be retained by the County as liquidated damages for the contractor's failure of compliance.

Construction Contract Amount

Construction contract amount is the base construction contract value and does not include change orders. Change orders requiring Board approval will increase construction contract value. Construction contract value increased as a result of Board approved change order(s) does not affect the initial Hiring Goal (from best effort to mandatory). Change orders approved by the Board which result in Design-build construction contract value does not include design allowance.

Baseline Contract Duration

Baseline construction duration may be adjusted due project circumstances, with County approval. Should baseline construction duration be adjusted, it will become effective the month the County approves the adjustment. The MMCW will be recalculated for the effective month and months to follow. The final project compliance evaluation will be based on the adjusted baseline construction duration.

Exception to Full Compliance with Targeted Worker Hiring Mandatory Requirements

If the Targeted Worker Hiring mandatory requirements of the Policy have not been satisfied as required for a Project, the Contractor nonetheless may be deemed to be in compliance if the Contractor demonstrates both (a) that the Contractor and each of its Subcontractors have complied with all other requirements of the Policy, and (b) that the Contractor and each of its Subcontractor have satisfactorily demonstrated the following:

- Documented contact with the union, Department of Workforce Development, Aging and Community Services, America Job Centers or with an agency that supports and provides employment and training services for Targeted Workers in construction employment, and in which instance the agency did not refer a qualified Targeted Worker to the Contractor or Subcontractor within 48 hours of the job request for fair consideration of the Targeted Worker.

Best Effort Compliance

In concert with the Policy **best efforts** requirements, at the conclusion of the project, the County will conduct a final evaluation of the Contractor's compliance with the Local Worker Hiring to assess if the Contractor has applied its **best efforts** to meet the Local Worker Hiring requirements of the Policy.

All applicable construction contracts shall contain a provision whereby the County and the Contractor specifically agree that the Local and Targeted Hire participation MCW amount, minus the total value of previous releases, in direct proportion to the actual Local and Targeted hire participation levels achieved by the Contractor shall be imposed as liquidated damages, and not as a forfeiture or penalty. It shall be further specifically agreed that the aforesaid amount is presumed to be the amount of damages sustained due to the Contractor's inability to achieve the Local and Targeted Worker Hiring **mandatory** requirements.

For construction contracts where the work is performed for a private County Lessee, the Lessee shall be responsible for administration of all aspects of the Local and Targeted Worker Policy, including the calculation and deduction of the Local and Targeted Hire participation MCW. At the conclusion of the project, the Lessee shall pay the designated County representative any such amounts collected, and shall provide a full report to the designated County Representative of all monthly information required to be collected in accordance with the Policy.

County Reporting

CEO will provide quarterly reports to the Offices of the Board of Supervisors and the Economic Development Policy Committee on the compliance of data measures of the Local and Targeted and Apprentice Worker Hire Policy requirements. CEO will annually, report if the goal requirement percentages can be feasibly increased based on documented performance.

County departments, commissions, and agencies administering construction projects under this Policy will be required to monitor and provide enforcement of the Policy. It should be noted the Contractor is ultimately responsible for its and its Subcontractors' compliance with the County's Policy requirements.

Referral Process for Local and Targeted Worker Hiring Policy

The following resources may be used to connect Contractors/Subcontractors to workers meeting the definition of a Local and Targeted Worker, should the Contractor/Subcontractor require assistance. Additional Community Service Providers may be used by Contractors/Subcontractors to identify Local Residents and Targeted Workers.

- Los Angeles County Workforce Development, Aging, and Community Services: <http://wdacs.lacounty.gov/>
- LA Jobs: <https://www.jobsla.org/vosnet/Default.aspx>
- Cal Jobs: <http://www.caljobs.ca.gov/vosnet/Default.aspx>
- Helmets to Hardhats: <https://www.helmetstohardhats.org>
- America's Job Center of California: <http://www.americasjobcenter.ca.gov/>

Terms and Definitions

America Job Centers	A network of public and private partners working together to support workers and businesses by serving their employment and training needs. Centers are funded by the Federal Workforce Investment Act (WIA) and most services are available at no cost.
Best Effort	Documentation that Contractor has complied with all requirements of the Policy including documented contact to hire local workers the unions, Department of Workforce Development, Aging and Community Services, America Job Centers or with an agency that supports and provides employment and training services for local and targeted workers in construction employment.
California Construction Labor Hours	All craft worker hours performed on the project by California residents, excluding the hours performed by off-site material fabricators, designers, project office staff, or vendors.
Certified Payroll Reports	In accordance with the requirements of Section 1776 of the Labor Code, State of California Certified Payroll Reports.
Community Service Provider	A network of public and private partners working to support workers and businesses by serving their employment and training needs. Some centers are funded by the Federal Workforce Investment Act (WIA) and most services are available at no cost.
Craft Employee Request Form	Form A used by the contractor/subcontractor to request dispatch of craft workers (including, but not limited to, apprentices and journeymen), who are Local Residents or Targeted Workers, from a Community Service Provider or union hiring hall in the event that assistance in obtaining such workers is needed.
Jobs Coordinator	An individual or firm that facilitates implementation of the Targeted Worker hiring requirements of the County of Los Angeles for the contractors/subcontractors. The Jobs Coordinator must be able to demonstrate or document to the County the requisite qualifications and/or experience to fulfill the duties and responsibilities as outlined in this Implementation Guidelines.
Local and Targeted Worker Hire Policy	On June 11, 2019, the County Board of Supervisors approved Board Policy No. 5.270 to implement Countywide Local and Targeted Worker Hire requirements on ALL construction projects based on the project budgets or work order amount (for JOC) provided for these projects.
Local Worker (Resident)	An individual who resides in the County of Los Angeles in a zip code within a five-mile radius of the project or resides within a County zip code where the average percentage of households living below 200 percent of the FPL is greater than the County average for such households.
Targeted Worker	An individual who resides in County of Los Angeles and face at least one of the barriers to employment, as outlined in the Local and Targeted Worker Hire Policy.
Status Report	Form D used by the contractor/subcontractor to report actual project hours worked by Apprentice and Journeyman. Targeted Worker categories and demographic profiles are also reported on this form.
Workforce Utilization Report	Form B used by the contractor/subcontractor to report the actual project hours and percentage worked by Tier 1 and 2 Local and Targeted Workers, including the hours of the subcontractors' workforce to meet the Policy hiring goal.
Qualifying Zip Codes	Form C reflects a Zip Code within the County of Los Angeles, where either: (1) the average percentage of households living below 200 percent of the Federal Poverty Level (FPL) for that individual's primary residency's Zip Code is greater than the County average for such households; or (2) the Zip Code is one of 11 additional Zip Codes determined by the Board on September 6, 2011 to be a Zip Code where at least 30 percent of the population is living in poverty, and with an unemployment rate of at least 150 percent of the national average.

Frequently Asked Questions

Q: Which County departments are affected by the new Local and Targeted Worker Hire Policy?

A: All County departments, commissions and agencies administering project development agreements, including but not limited to; ground leases, loan agreements, grant agreements, design-build contracts, and contracts for County capital and construction projects that require Board approval are affected in accordance with the project value thresholds.

Example: County Funded Projects

Project Budget	Policy Threshold	Local Hire Required	Targeted Worker Required	Apprentice Hours Required	Policy Goal	Exception(s)
≤\$499,999	N/A	N/A	N/A	N/A	N/A	N/A
\$2.501M	>\$2.5M	YES	YES	YES	Mandatory: 30% labor hours from Local Hires Mandatory: 10% labor hours from Targeted Worker Hire Best Efforts: 1 apprentice hour for every five journeyman hours – half of apprentice hours performed by Local and Targeted Workers	Affordable Housing
\$1M	\$500,000 to \$2.5M	YES	N/A	YES	Best Efforts: 30% labors hours from Local Hires Best Efforts: 1 apprentice hour for every five journeyman hours – half of apprentice hours performed by Local Workers	Affordable Housing
State/Federal Funds	See Above	See Above	See Above	See Above	See Above	May ask for Exemption

Example: Affordable Housing and Mixed-Use Housing Projects

Project Budget	Policy Threshold	Local Hire Required	Targeted Worker Required	Apprentice Hours Required	Policy Goal	Exception(s)
≤\$499,999	N/A	N/A	N/A	N/A	N/A	N/A
>\$2.5M w/County Funds		>\$2.5M	YES	YES	Best Efforts: 30% labor hours from Local Hires Best Efforts: 10% Targeted Worker Hire Best Efforts: 1 apprentice hour for every five journeyman hours – half of apprentice hours performed by Local and Targeted Workers	Jurisdictions enforcing its own local hire or targeted worker hire policy; and projects with Federal and State funding

Q: Does the new Local and Targeted Worker Hire Policy apply to private development on County property?

A: Yes, the new policy applies to all project development agreements, including ground leases, loan agreements; grant agreements, design/build contracts, and construction contracts.

Q: Does the new Local and Targeted Worker Hire Policy apply to Amendments?

A: Only if the amendment requires Board approval.

Q: Does the Local and Targeted Worker Hire Policy apply to maintenance and repair projects?

A: The Policy applies to Board approved contracts. If any part of a maintenance or repair project is performed using a Board approved contract and the Policy monetary threshold is met then the Policy applies. If the maintenance or repair is performed without a Board approved contract or the monetary threshold of the Policy is not met then the Policy does not apply.

Q: Are there any exemptions to the policy?

A: Exemptions may be granted for projects in which jurisdictions enforcing their own local hiring policy, and for projects with Federal or State funding prohibitions on hiring preferences. Exemption requests must be stated in the Board letter seeking approval of the contract or the project with sufficient justification.

Q: Is there a Local hire requirement for programs that receive Federal funding of any kind?

A: Yes, Affordable housing projects financed with federal funds subject to 24 CFR Part 135 will follow local hiring and training guidelines promulgated through section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by certain Housing and Urban Development financial assistance can be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons.

Q: What is the definition of a Targeted Worker?

A: A targeted worker is an individual who is both a County resident and faces one or more of the following barriers to employment:

1. Has a documented annual income at or below 100 percent of the Federal Poverty Level;
2. Has no high school diploma or GED;
3. Has a history of involvement with the criminal justice system;
4. Is experiencing protracted unemployment (receiving unemployment benefits for at least 6 months);
5. Is a current recipient of government cash or food assistance benefits;
6. Is homeless or has been homeless within the last year;
7. Is a custodial single parent;
8. Is a former foster youth;
9. Is a veteran, or is the eligible spouse of a veteran of the United States armed forces, under Section 2(a) of the Jobs for Veterans Act (38 U.S.C.4215[a]);
10. Is an eligible migrant and seasonal farmworker;
11. Is currently an English language learner;
12. Is an older Individual (55+);
13. Is disabled; or
14. Is an individual with a low level of literacy.

Q: Are there penalties for failing to meet the hiring requirements?

A: Yes, to enforce compliance on contracts containing **mandatory** hiring goals, an amount will be withheld from the monthly progress payment to the Contractor in proportion to the deficit percentage of the mandated Local and Targeted Hiring Goal percentage and the actual percentage obtained. The maximum that may be withheld during the duration of the project

is one percent (1%) of the total construction contract amount, but not to exceed \$500,000. This amount is called the Mandatory Compliance Withholding (MCW) amount.

Q: How often are the Contractor/Subcontractors required to report to the County?

A: Contractors/Subcontractors must provide required reports (Worker Utilization Report – Form B and Status Report – Form D) monthly to the Project Manager or designated County representative.

Q: How often are departments, commissions, and agencies required to report?

A: Departments, commissions and agencies provide quarterly compliance data measures of the Local and Targeted and Apprentice Worker Hire requirements to the CEO. The CEO provides a summary level to the Board of Supervisors quarterly based on data received from departments, commissions and agencies.

ATTACHMENTS

Attachment 1: Prequalified Jobs Coordinators

Attachment 2: Jobs Coordinator Minimum Qualifications

Attachment 3: Responsibilities of The Jobs Coordinator

FORMS

Form A: Craft Employee Request Form

Form B: Workforce Utilization Report

Form B: Workforce Utilization Report – Sample Calculations

Form C: Status Report

Form D: Sample Local and Targeted Worker Hiring Withholding Calculations

Prequalified Jobs Coordinators (5/3/2017)

Attachment 1

A-Selah, LLC Dr. OnyekamBuashie Amatokwu 10650 S. Gramercy Place Los Angeles, CA 90047 TEL: 323.755.2783 FAX: 323.755.2783 a.selah@yahoo.com	Casamar Group, LLC Joe Garcia 23445 Glenridge Drive Santa Clarita, CA 91321 TEL: 661.254.2373 FAX: 661.253.0549 jgarcia@casamargroup.com
Del Richardson & Associates, Inc. Del Richardson 510 S. La Brea Avenue Inglewood, CA 90301 TEL: 310.645.3729 FAX: 310.645.3355 Del.Richardson@drainc.com	DPA – D. Pickett & Associates, Inc. Donetta Pickett 2909 San Francisco Avenue Long Beach, CA 90806 TEL: 213.422.0646 dpickett@dpa-grp.com
Gail Charles Consulting Services Gail Charles 33655 Wild Horse Way Yucaipa, CA 92399 TEL: 909.797.0692 FAX: 909.797.0675 Gail.charles@charleslegalservices.com	Harris & Associates John W. Harris 865 S. Figueroa Street, Suite 2750 Los Angeles, CA 90017 TEL: 213.489.9833 FAX: 213.489.3761 john@jwharrislaw.com
Managed Career Solutions, Inc. Dr. Philip Starr 3333 Wilshire Blvd., Suite 405 Los Angeles, CA 90010 TEL: 213.355.5312 FAX: 213.381.5053 pstarr@mcscareergroup.com	Modern Times, Inc. Joseph Hernandez 1892 E. Alta Dena Drive Altadena, CA 91001 TEL: 213.810.6105 FAX: 626.316.7103 joe@moderntimesinc.com
Parsons Constructors, Inc. Daniel Sloan 100 West Walnut Street Pasadena, CA 91124 TEL: 206.295.3303 FAX: 626.440.2516 Dan.sloan@parsons.com	PDA Consulting, Inc. Michael Ector 110 La Brea Avenue, Suite 420 Inglewood, CA 90301 TEL: 310.680.3740 FAX: 310.680.4098 mike.ector@pdaconsultinggroup.com
Playa Vista Job Opportunities and Business Services Ernest Roberts 4112 S. Main Street Los Angeles, CA 90037 TEL: 323.432.3955 FAX: 323.432.3995 eroberts@pvjobs.org	SGI Construction Management Evan M. Scott 199 S. Hudson Avenue Pasadena, CA 91101 TEL: 626.395.7474 FAX: 626.395.9494 escott@sgicm.com
The Solis Group Gary A. Hamm 145 Vista Avenue, Suite 104 Pasadena, CA 91107 TEL: 626.685.6989 FAX: 626.685.6985 ghamm@thesolisgroup.com	UAW – Labor Employment and Training Corporation Southeast Los Angeles Crenshaw Work Source Center Roy Kim 3965 South Vermont Avenue Los Angeles, CA 90037 TEL: 323.730.7900 ext. 221 FAX: 323.334-2558 rbkim@selawsc.com

Jobs Coordinator Minimum Qualifications

A minimum of 3 years' experience as a firm providing Jobs Coordinator services. Successful candidates for Jobs Coordinators must be able to demonstrate the in-depth ability, experience, and possess the necessary staff capable of providing required services.

A successful Jobs Coordinator firm must demonstrate they possess working relationships with the Building Trades, Targeted Workers and signatory craft councils and unions operating within County of Los Angeles' jurisdiction by describing previous interactions, relationships, and partnerships with these party's/groups.

A successful Jobs Coordinator firm must be able to demonstrate that it has experience on small and large-scale projects.

A successful Jobs Coordinator firm must demonstrate that they possess experience with Targeted Worker populations.

A successful Jobs Coordinator firm must have experience in working with work-source centers, faith-based organizations and other Community Based Organizations (CBOs).

A successful Jobs Coordinator firm must be familiar with incentive programs and tax credit subsidies provided by the State and Federal government to hire workers that fit the corresponding category. Jobs Coordinator to describe their experience in working with these programs.

Responsibilities of The Jobs Coordinator

Play an integral part in the success of its partners in obtaining the Targeted Workers hiring percentages. It is the responsibility of the Prime Contractor to designate a Jobs Coordinator who will effectively perform the following:

- The Jobs Coordinator shall develop, create, design and market specific programs to attract Targeted Workers for construction opportunities (e.g. handouts and fliers for “walk-ins” demonstrating program entrance procedures).
- The Jobs Coordinator shall coordinate services for contractors to use in the recruitment of Targeted Workers.
- The Jobs Coordinator shall educate and assist contractors on incentives provided by state or federal programs for on-the-job training and employer tax credits.
- The Jobs Coordinator shall conduct orientations, job fairs and community outreach meetings in the local community.
- The Jobs Coordinator shall screen and certify the Targeted Workers status.
- The Jobs Coordinator shall establish a referral and retention tracking mechanism for placed Targeted workers and apprentices.
- The Jobs Coordinator shall network with the various work source centers, community and faith-based organizations and other non-profit entities that provide qualified Local and/or Targeted Workers.
- The Jobs Coordinator shall coordinate with the various building trades crafts for referral and placement of Targeted Workers.
- The Jobs Coordinator shall maintain a database of pre-qualified Targeted Workers for referral.
- The Jobs Coordinator shall be the point of contact to provide information about available job opportunities on projects.
- The Jobs Coordinator shall assist the Subcontractors with their documentation effort and other reports as it relates to their Targeted Worker hiring requirements.
- The Jobs Coordinator shall work closely with County staff, the building trades and Subcontractors in achieving the Targeted hiring goals.
- The Jobs Coordinator shall work closely with Workforce Development, Aging and Community Services, local agencies, such as America’s Job Centers of California, Social Enterprises, and local community-based organizations to outreach, recruit and create a pipeline to employ residents from the community in which the project is located.

COUNTY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT
MITIGATED NEGATIVE DECLARATION

PROJECT TITLE: Charles R. Drew University of Medicine and Science Health Professions Education Building

LOCATION AND BRIEF DESCRIPTION OF PROJECT: The project site is located at the southwesterly end of the Charles R. Drew University campus at 1731 East 120th Street in the unincorporated Willowbrook community of Los Angeles County. (APN 6149-028-919). The project site is an irregularly shaped 46,650-square foot parcel and currently has two one-story modular buildings that are used for offices, maintenance, facilities support, security, and other administration support for the university. One of the modular buildings is 4,400 square feet, and the second modular building is 5,228 square feet.

The proposed project involves demolishing the existing two modular buildings, removing the existing landscaping, and the construction of a five-story, 92,618-square-foot Health Professions Education Building (HPEB) on the project site. Approximately three feet of fill material would be replaced on-site. The proposed building would have a maximum height of 75 feet and a floor area ratio (FAR) of 2.15. The existing uses in the two modular buildings would be moved into other buildings on the CDU campus. The proposed building would be “L”-shaped and would have a landscaped student-oriented central courtyard, which would link to the proposed building to the existing CDU campus, specifically the CDU Student Center and Keck Building College of Science and Health. The proposed building would have classrooms, a lecture hall, auditorium/meeting room, a café, facilities support space (e.g., shipping/receiving, janitorial, electrical, and data rooms), study rooms, staff and faculty offices, conference rooms, virtual anatomy and virtual skills rooms, simulation rooms (e.g., hospital and exam room simulation), student lounge, lockers rooms, showers, restrooms/changing rooms, and outdoor terraces. Outdoor terraces are proposed on the 5th floor at the north and east sides of the building.

A total of 73 existing and proposed parking spaces would be allocated to the proposed project. The existing surface parking lot at the northeast corner of Compton Avenue and 118th Street, which has 85 spaces, would have 65 spaces allocated to the proposed project. The proposed project does not propose any changes to this parking lot. As part of the proposed project, the parking facility on the 118th Street (between the former Abraham Lincoln Elementary School and the Park Water Company Well 19C property) would be expanded. The existing three-level parking structure at the northern part of this parking facility would extend south over the existing surface parking lot. The proposed parking structure would connect to the existing three-level parking structure. The proposed parking structure would provide an additional 8 parking spaces that would support the additional square footage associated with the proposed building.

MITIGATION MEASURES INCLUDED IN THE PROJECT TO AVOID POTENTIALLY SIGNIFICANT EFFECTS: Mitigation measure is identified for Hydrology & Water Quality and Hazards & Hazardous Materials; see attached Initial Study.

FINDING OF NO SIGNIFICANT EFFECT: Based on the attached Initial Study it has been determined that the proposed project will not have a significant effect on the environment.

Any written objections together with responses of the Lead Agency to be attached prior to adoption.

CONTACT: Bryan Moller, Regional Planner
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6411
bmoller@planning.lacounty.gov

**CHARLES R. DREW UNIVERSITY OF
MEDICINE AND SCIENCE
HEALTH PROFESSIONS EDUCATION
BUILDING**

INITIAL STUDY

Lead Agency:

**COUNTY OF LOS ANGELES
DEPARTMENT OF REGIONAL PLANNING**
320 West Temple Street
Los Angeles, CA 90012
(213) 974-6411

Consultant:

TERRY A. HAYES ASSOCIATES INC.
3535 Hayden Avenue, Suite 350
Culver City, CA 90232

September 2022

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Environmental Checklist Form (Initial Study)

County of Los Angeles, Department of Regional Planning



Project title: Charles R. Drew University of Medicine and Science Health Professions Education Building.

Lead agency name and address: Los Angeles County, 320 West Temple Street, Los Angeles, CA 90012

Contact Person and phone number: Edward Rojas, (213) 974-6411

Project sponsor's name and address: Charles R. Drew University, 1731 East 120th Street, Los Angeles, CA 90059

Project location: 1731 East 120th Street, Los Angeles, CA 90059

APN: 6149-028-919 **USGS Quad:** South Gate

Gross Acreage: 1.07 acre

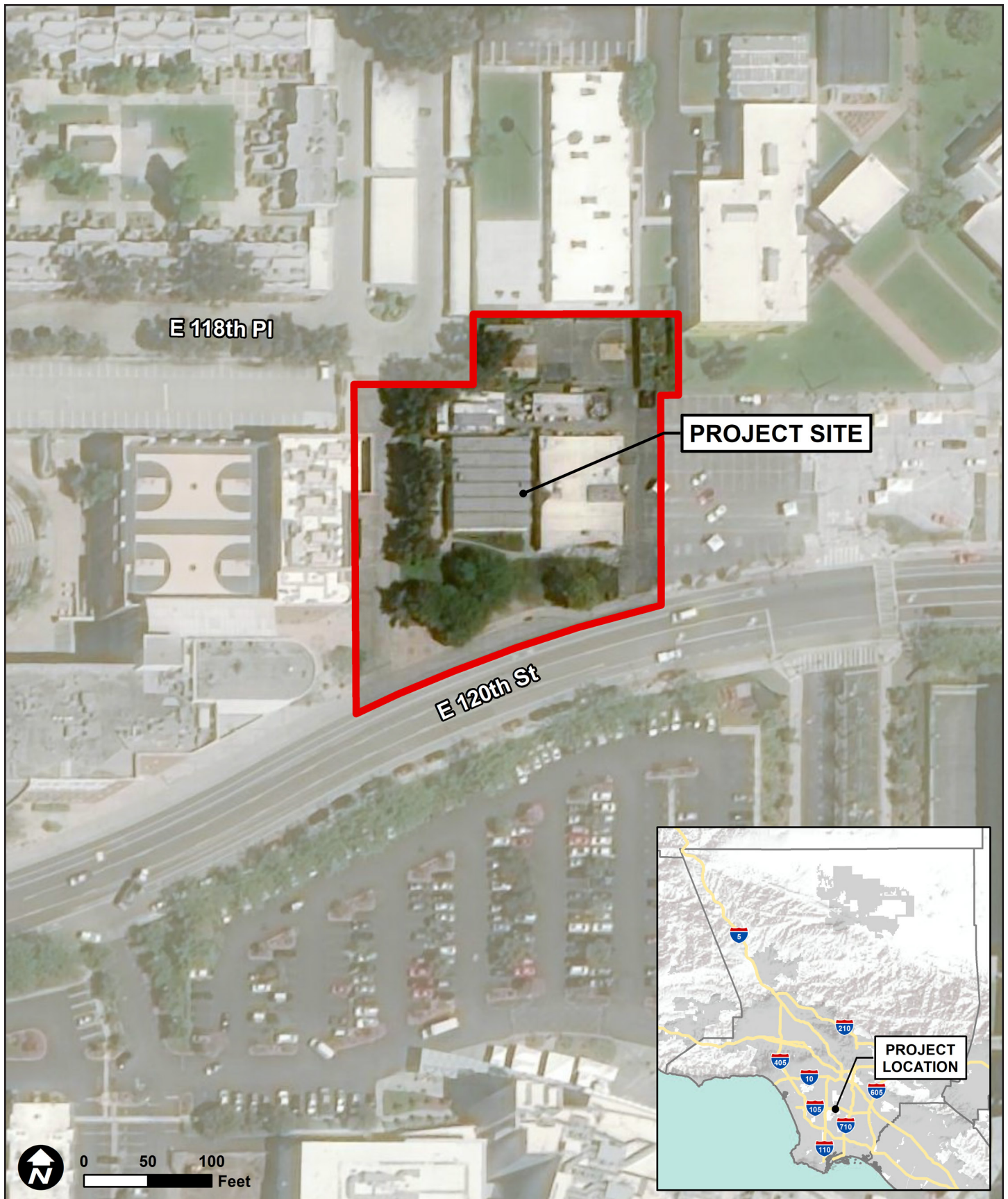
General plan designation: SP (Willowbrook Transit Oriented District Specific Plan)

Community/Area-wide Plan designation: Drew Education Specific Plan Zone

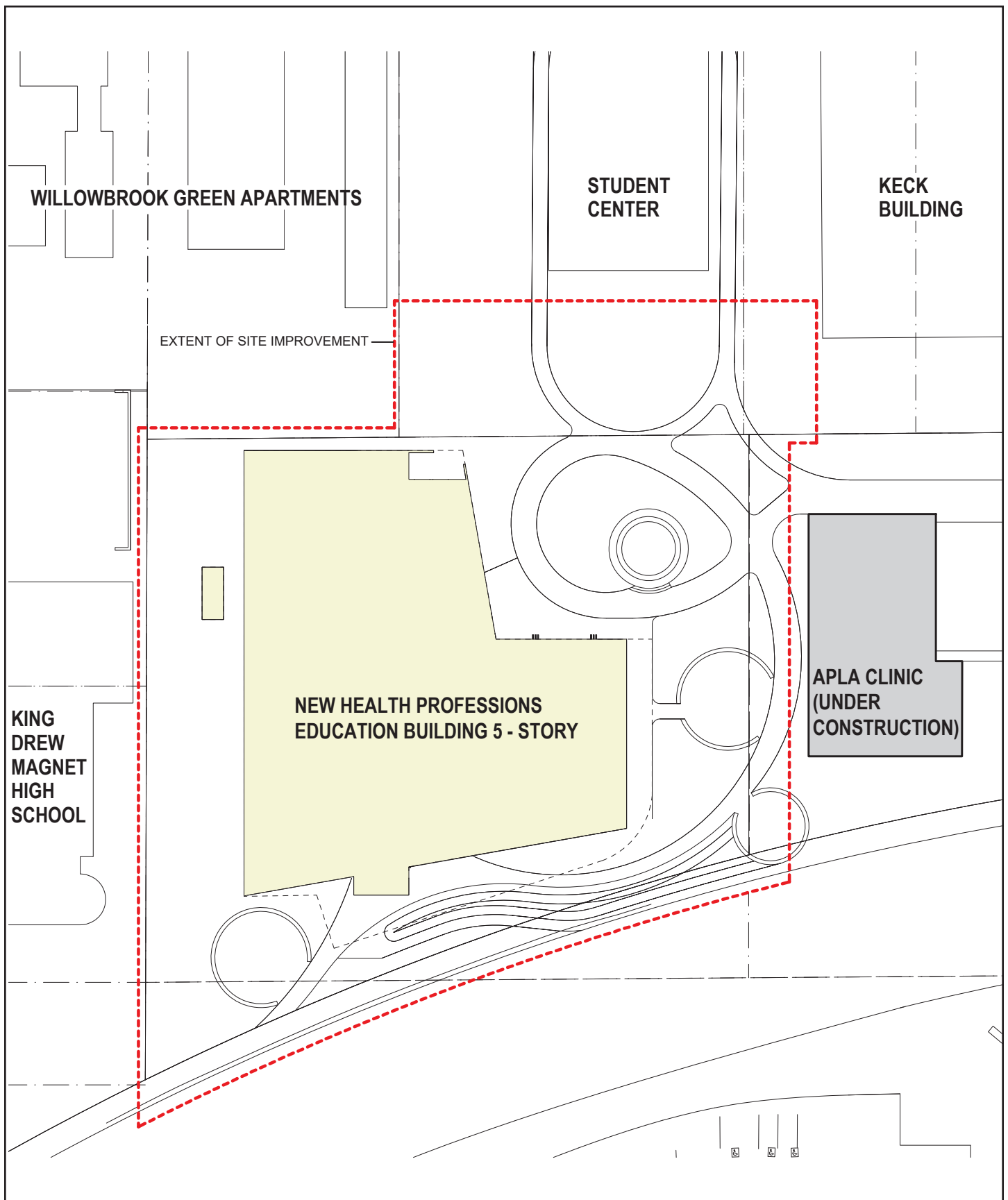
Zoning: Specific Plan (SP)

Description of project: The project site is located at the southwest corner of the Charles R. Drew University of Medicine and Science (CDU) campus at 1731 East 120th Street in the unincorporated Willowbrook community of Los Angeles County (County) (**Figure 1**). The project site is an irregularly shaped 46,650-square foot parcel that is currently being leased from the County of Los Angeles. The project site is relatively flat and currently has two one-story modular buildings that are used for offices, maintenance, facilities support, security, and other administration support for the university. One of the modular buildings is 4,400 square feet, and the second modular building is 5,228 square feet. An access road is located on the westerly portion of the project site and is shared between CDU, the adjacent King Drew Magnet High School of Medicine and Science to the west of the project site, and the multi-family housing complex to the north of the project site. The access road provides fire department access from 120th Street to the multi-family housing complex and provides auxiliary access to the high school, which includes access to the school's mechanical equipment enclosure and a few accessory parking spaces. The project site is landscaped along the easterly and southernly boundary and has one driveway entrance along 120th Street. A signalized pedestrian crosswalk is located to the east of the project site at 120th Street and Healthy Way.

The proposed project involves demolishing the existing two modular buildings, removing the existing landscaping, and the construction of a five-story, 92,618-square-foot Health Professions Education Building (HPEB) on the project site. Approximately three feet of fill material would be replaced on-site. The proposed building would have a maximum height of 75 feet and a floor area ratio (FAR) of 2.15. The existing uses in the two modular buildings would be moved into other buildings on the CDU campus. The proposed building would be "L"-shaped and would have a landscaped student-oriented central courtyard, which would link to the proposed building to the existing CDU campus, specifically the CDU Student Center and Keck Building College of Science and Health. The proposed building would have classrooms, a lecture hall, auditorium/meeting room, a café, facilities support space (e.g., shipping/receiving, janitorial, electrical, and data rooms), study rooms, staff and faculty offices, conference rooms, virtual anatomy and virtual skills rooms, simulation rooms (e.g., hospital and exam room simulation), student lounge, lockers rooms, showers, restrooms/changing rooms, and outdoor terraces. Outdoor terraces are proposed on the 5th floor at the north and east sides of the building. The proposed site plan is shown in **Figure 2**.



Source: TAHA, 2021.



Source: TAHA, 2021.

The proposed building would be designed to achieve Leadership in Energy and Environmental Design (LEED) Gold equivalent level. Sustainable elements may potentially include, but are not limited to, photovoltaic panels on the roof, below-grade filtration tanks to collect and treat stormwater runoff and wastewater, building systems that employ a mix of passive and energy-efficient active strategies, locally sourced structural and finish materials that may include recycled content, and classrooms that take advantage of natural light and daylighting strategies to promote energy-efficiency.

A total of 73 existing and proposed parking spaces would be allocated to the proposed project. The existing surface parking lot at the northeast corner of Compton Avenue and 118th Street, which has 85 spaces, would have 65 spaces allocated to the proposed project. The proposed project does not propose any changes to this parking lot. As part of the proposed project, the parking facility on the 118th Street (between the former Abraham Lincoln Elementary School and the Park Water Company Well 19C property) would be expanded. The existing three-level parking structure at the northern part of this parking facility would extend south over the existing surface parking lot. The proposed parking structure would connect to the existing three-level parking structure. The proposed parking structure would provide an additional 8 parking spaces that would support the additional square footage associated with the proposed building. Access to the existing surface parking lot and parking structure is currently provided on 118th Street. With implementation of the proposed project, a new driveway approach would be provided on 117th Street, and access to this parking facility would be via 117th and 118th Streets.

The existing access road on the west side of the project site would be maintained as part of the proposed project and would provide parking for deliveries, trash pick up, and access to the proposed loading docks of the proposed HPEB.

Construction is expected to begin in 2023 and last 24 months, with occupancy expected in 2025. Construction activities include site clearing/demolition, excavation/grading, building construction, paving, architectural coating, and landscaping. Construction would involve demolishing the existing two modular buildings, removing existing landscaping, and building a five-story, 92,618-square-foot HPEB on the project site. The following elements would be implemented during construction:

- Use of Tier 4 construction equipment with Best Available Control Technology (BACT) devices certified by the CARB and diesel particulate filter, where available.
- Power construction equipment would be equipped with noise shielding and muffling devices (consistent with manufacturers' standards).
- All equipment would be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.
- Temporary noise barriers (e.g., plywood structures or flexible sound control curtains) extending eight feet in height would be erected around the northern and western perimeter of the construction area.
- When possible, on-site electrical sources would be used to power equipment rather than diesel generators.
- Equipment would be turned off when not in use for more than five minutes, except for equipment that requires idling to maintain performance.
- Construction staging areas would be located away from residences and King Drew Magnet High School.
- Construction activities whose specific location on the project site may be flexible (e.g., operation of compressors and generators) would be conducted as far away as possible from residences and King Drew Magnet High School.
- A "noise disturbance coordinator" would be established and would be responsible for responding to local complaints about construction noise. The noise disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to

residences within 500 feet of the construction site and all signs posted at the construction site would list the telephone number for the noise disturbance coordinator.

Surrounding land uses and setting: Land uses surrounding the project site are institutional, commercial, and residential (**Figure 3**). The project site is bounded by CDU buildings and a two-story multi-family housing complex to the north, a two-story APLA Health Clinic to the east, 120th Street to the south, and King Drew Magnet High School of Medicine and Science to the west. The Martin Luther King, Jr. Medical Campus is located across the street on 120th Street to the south. Single-family residential uses are located further south from the project site; commercial and a mix of single- and multi-family residential uses are located further west; Abraham Lincoln Elementary School (closed since 2017), a mix of single- and multi-family residential uses, and Interstate 105 (I-105) are located further north; and health clinics/medical offices, Drew Child Development Corporation, Los Angeles County Fire Station No. 41, and commercial uses are located further east of the project site. The Willowbrook/Rosa Parks Los Angeles Metropolitan Transportation Authority (Metro) Station for the Metro A (Blue) and C (Green) light rail lines is approximately 0.42 miles northeast of the project site.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The County Department of Regional Planning notified the California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project site on June 24, 2021. The Gabrieleno Band of Mission Indians - Kizh Nation responded to the consultation letter, and the County Department of Regional Planning met with the Kizh Nation on October 28, 2021. As part of the tribal consultation, tribal representatives provided information regarding the tribe's ancestral localities in the area surrounding the project site. Given the location of the project site, tribal representatives indicated that the project site is highly sensitive for tribal cultural resources and provided mitigation measures to avoid a significant effect on tribal cultural resources. See Section 18, Tribal Cultural Resources, of this Initial Study for further discussion.

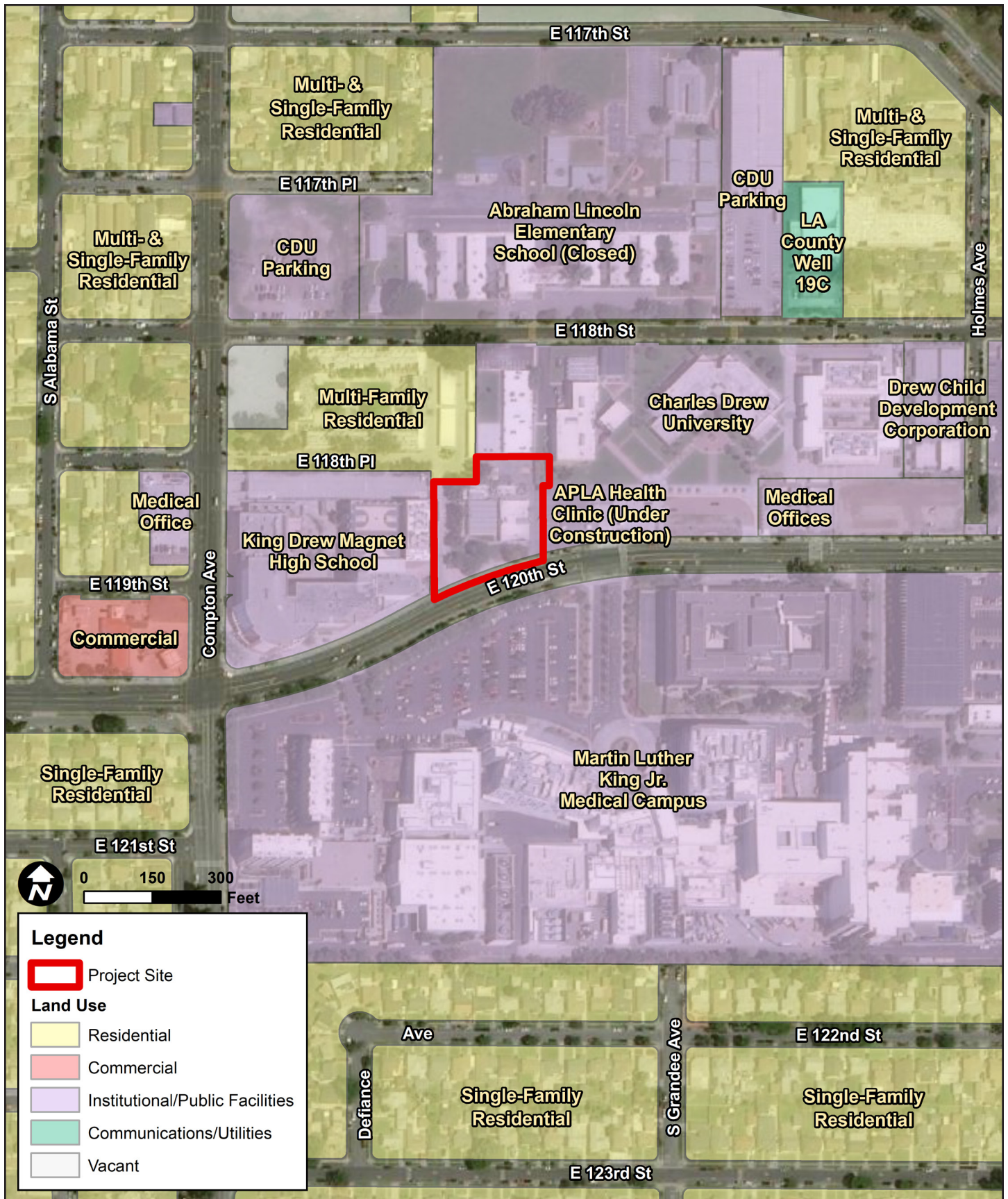
Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

<i>Public Agency</i>	<i>Approval Required</i>
None	

Major projects in the area:

<i>Project/Case No.</i>	<i>Description and Status</i>
None	



Source: TAHA, 2021.

Reviewing Agencies: [See [CEQA Appendix B](#) to help determine which agencies should review your project]

Responsible Agencies

- ☒ None
Regional Water Quality Control
Board:
☐ Los Angeles Region
☐ Lahontan Region
☐ Coastal Commission
☐ Army Corps of Engineers
☐ LAFCO

Special Reviewing Agencies

- ☒ None
☐ Santa Monica Mountains
Conservancy
☐ National Parks
☐ National Forest
☐ Edwards Air Force Base
☐ Resource Conservation
District of Santa Monica
Mountains Area

Regional Significance

- ☒ None
☐ SCAG Criteria
☐ Air Quality
☐ Water Resources
☐ Santa Monica Mtns. Area

Trustee Agencies

- ☒ None
☐ State Dept. of Fish and
Wildlife
☐ State Dept. of Parks and
Recreation
☐ State Lands Commission
☐ University of California
(Natural Land and Water
Reserves System)

County Reviewing Agencies

- ☒ DPW
☐ Fire Department
- Forestry, Environmental
Division
- Planning Division
- Land Development Unit
- Health Hazmat
☒ Sanitation District
☐ Public Health/Environmental
Health Division: Land Use
Program (OWTS), Drinking
Water Program (Private
Wells), Toxics Epidemiology
Program (Noise)
☒ Sheriff Department
☐ Parks and Recreation
☐ Subdivision Committee

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially significant impacts affected by this project.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agriculture/Forestry | <input type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Services |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Department.)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature (Prepared by)

Date

Signature (Approved by)

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the Lead Department cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Department has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. (Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.)
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. (State CEQA Guidelines § 15063(c)(3)(D).) In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question; and mitigation measures identified, if any, to reduce the impact to less than significant. Sources of thresholds include the County General Plan, other County planning documents, and County ordinances. Some thresholds are unique to geographical locations.

1. AESTHETICS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Except as provided in Public Resources Code Section 21099, would the project:				

a) Have a substantial adverse effect on a scenic vista?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The term “scenic vista” refers to views of focal points or panoramic views of broader geographic areas that are of visual interest. Focal points may include notable objects, buildings, or settings. Panoramic views are generally wide and extend into the distance. The value of a scenic vista would be diminished if the bulk or design of a building or development would contrast enough with a visually interesting view such that the quality of the view would be permanently affected. The project site is located within a highly urbanized area in the unincorporated Willowbrook community of Los Angeles County. The proposed project would not obstruct any scenic vistas since no scenic vistas are available on or within the vicinity of the project site. Therefore, no impact would occur.

b) Be visible from or obstruct views from a regional riding, hiking, or multi-use trail?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The project site is located within a highly urbanized area in the unincorporated Willowbrook community. The project site is not located within the vicinity of a regional riding, hiking, or multi-use trail. The proposed structure would have a maximum height of 75 feet, which would be consistent with the existing building heights of the surrounding area. The proposed project would not block or obscure any public views from a regional riding, hiking, or multi-use trail. Therefore, no impact would occur.

c) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. A significant impact would occur if the proposed project would substantially damage scenic resources within a state scenic highway. The project site is not located near any state designated scenic highways, and no scenic resources are located on or adjacent to the project site. The nearest eligible state scenic highway is State Route 1 (SR-1) south of Lakewood Boulevard/Atherton Street. This eligible state scenic highway is approximately 11 miles south of the project site,¹ and the project site is not within the viewshed of this eligible state scenic highway. Additionally, no scenic resources would be affected by the proposed project. Therefore, no impact would occur.

¹ California Department of Transportation, *California State Scenic Highway System Map*, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>, accessed March 2021.

d) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

☐☐☒☐

Less-Than-Significant Impact. The project site is located in an urbanized area, and a significant impact would occur if the proposed project would conflict with applicable zoning and other regulations governing scenic quality. The project site is in the Drew Educational Specific Plan Zone of the Willowbrook TOD Specific Plan area. The Drew Education Specific Plan Zone limits building heights to a maximum of 75 feet and six stories and FAR to 1.5. Buildings are required to have a minimum setback of 10 feet from the street. Additionally, at least 20 percent of the project site is required to be landscaped, and mechanical equipment are required to be screened from view.

The proposed project would comply with applicable setback, building height, and other regulations applicable to the Drew Educational Specific Plan Zone. It would also follow the Willowbrook TOD Specific Plan design guidelines for institutional uses. The proposed building would have a maximum building height of 75 feet, would be five stories tall, and would be setback from East 120th Street by 10 feet. At least 30 percent of the project site would be landscaped. All mechanical equipment would be placed on the roof and screened from public view using elements that would be an integral part of the proposed building, consistent with the development and design standards for the Drew Education Specific Plan Zone.

The proposed building would have an FAR of 2.15, which would exceed the maximum allowable FAR of 1.5 for the Drew Educational Specific Plan Zone. Although the FAR on the project site is limited to 1.5, the Martin Luther King, Jr. Medical Campus south of the project site has a 2.5 FAR. Additionally, the proposed building would be similar in height and massing as the surrounding uses, such as the four-story King Drew Magnet High School of Medicine and Science to the west and the five- and six-story buildings on the Martin Luther King, Jr. Medical Campus. The proposed project would require approval from the Los Angeles County Department of Regional Planning to construct a building with an FAR that is greater than 1.5. Upon approval from the Los Angeles County Department of Regional Planning to increase its FAR from 1.5 to 2.15, the proposed project would not conflict with applicable regulations governing scenic quality. Therefore, with the Los Angeles County Department of Regional Planning approval of the proposed FAR increase, less-than-significant impacts related to visual character and scenic quality are expected.

e) Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?

☐☐☒☐

Less-Than-Significant Impact. Shadow-sensitive uses generally include routinely useable outdoor spaces associated with residential, recreational, or institutional land uses; commercial uses, such as pedestrian-oriented outdoor spaces or restaurants with outdoor seating areas; nurseries; and existing solar collectors/panels. Due to the sun's angle in the northern hemisphere, shadows are cast in a clockwise direction from west/northwest to east/northeast from approximately 7:00 a.m. to 4:00 p.m. or later depending on the time of the year. No shadow-sensitive uses are located adjacent to the proposed HPEB to the west/northwest and east/northeast. A multi-family residential property is situated to the northeast of the parking structure that is being proposed on 118th Street. The closest useable outdoor space associated with this multi-family residential property is approximately 85 feet northeast of the proposed parking structure. The proposed parking structure would be at a similar scale as the existing parking structure located immediately north of the proposed parking structure. The existing parking structure adjoins the multi-family residential property and is

situated closer to the multi-family residential property than the proposed parking facility. As the existing parking structure is located closer to the multi-family residential development and the proposed parking structure would be at a similar height and scale as the existing parking structure, the proposed parking structure would not create a new source of substantial shadow at the multi-family residential development.

Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare is typically a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprised of highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point-source lighting that contrasts with existing low ambient light conditions. Due to the urban setting of the project site, a moderate level of ambient nighttime light already exists on the project site. Existing nighttime light sources include streetlights, vehicle headlights, lighting from surface parking lots, and interior and exterior building illumination. Lighting that would be provided by the proposed project would be consistent with existing lighting on and surrounding the project site. In addition, the proposed project does not include features that would be a major source of glare. Any light and glare produced by the proposed project would commensurate with existing lighting levels and glare on the project site and its vicinity. Additionally, the proposed project would be consistent with the exterior lighting requirements of the Willowbrook TOD Specific Plan design guidelines, such as providing exterior lighting for security and safety of on-site areas; shielding light fixtures to confine light spread; and providing and placing lighting that preclude direct glare onto adjoining property, streets, or skyward. Therefore, the proposed project would not create new sources of substantial light or glare. As the proposed project would not create new sources of substantial shadow, light, or glare, impacts would be less than significant.

2. AGRICULTURE / FOREST

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. A significant impact would occur if the proposed project would convert valued farmland to non-agricultural uses, conflict with existing agricultural zoning, or be located on agricultural parcels under a Williamson Act contract. Due to its urban setting, the project site and its surroundings are not included in the Farmland Mapping and Monitoring Program of the California Department of Conservation. The Department of Conservation categorized the project site as Urban and Built-Up Land.² In addition, the project site is not located within a zone designated for agricultural use or an area that is designated as Williamson Act contract lands. No agricultural uses or related operations are present within the project site or in the surrounding area. Therefore, no impact on farmland would occur.

b) Conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. See Response to Checklist Question 2a.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined in Government Code §51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. A significant impact would occur if the proposed project would conflict with existing zoning for forest land or timberland, cause the rezoning of forest land or timberland, result in the loss of forest land, or convert forest land to non-forest use. The project site is located within an urban area that is not zoned as forest land. There are no forest land or forest resources located on the project site or in the surrounding area. Therefore, no impact would occur.

² California Department of Conservation, *California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed March 2021.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

☐☐☐☒

No Impact. See Response to Checklist Question 2c.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

☐☐☐☒

No Impact. As discussed in Response to Checklist Questions 2a through 2d, no agricultural or forestry operations occur on the project site or its vicinity. The proposed project would not introduce any changes that would result in the conversion of farmland or forest land to non-agricultural or forest use, respectively. Therefore, no impact would occur.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. The project site is located within the South Coast Air Basin (SCAB), and the air quality plan applicable to the project site is the South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan (AQMP). The 2016 AQMP is based on regional growth population and employment projections provided in the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The 2016 AQMP provides policies and control measures that will reduce emissions to attain the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) by their applicable deadlines. Environmental review of individual projects within SCAB must demonstrate that daily construction and operational emissions thresholds, as established by SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations.

The SCAQMD CEQA Air Quality Handbook identifies two key indicators of consistency with the AQMP:

- 1) Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plan; and
- 2) Whether the project would exceed the forecasted growth incorporated into the AQMP.

With regards to the first consistency criterion, SCAQMD has developed regionally specific air quality significance thresholds to assess potential impacts that may result from construction and operation of projects. Daily emissions of volatile organic compounds (VOC), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), respirable particulate matter less than 10 microns in diameter (PM₁₀), and fine particulate matter less than 2.5 microns in diameter (PM_{2.5}) should be quantified and assessed on both regional and localized scales, in accordance with SCAQMD methodology. With regards to the second consistency criterion, the population and employment assumptions used to estimate regional emissions in the AQMP are obtained from SCAG projections for cities and unincorporated areas within the SCAQMD jurisdiction. Projects that are consistent with regional growth projections are generally consistent with the AQMP.

Consistency Criterion 1: Air Quality Emissions

Construction Emissions. Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trucks traveling to and from the project site. Fugitive dust emissions would primarily result from site preparation (e.g., excavation and grading) activities. NO_x emissions would predominantly result from the use of construction equipment and haul truck trips. The assessment of construction air quality impacts considers all of these emissions sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in SCAB to comply with SCAQMD Rule 403 for Fugitive Dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional PM_{2.5} and PM₁₀ emissions associated with construction activities by approximately 61 percent.

Construction is expected to begin in 2023 and last 24 months, with occupancy expected in 2025. Construction activities include site clearing/demolition, excavation/grading, building construction, paving, architectural coating, and landscaping. Construction would involve demolishing the existing two modular buildings, removing the existing landscaping, and the building of a five-story, 92,618-square-foot HPEB on the project site. Site preparation would include the export of approximately 5,200 cubic yards of existing fill. Construction activities would involve the use of a backhoe, grader, crane, lifts, bobcat, and similar equipment. Maximum daily emissions for each construction activity were estimated based on heavy duty equipment use, fugitive dust (on-site), and vehicular travel to and from the project site (off-site). **Table 1** shows the maximum unmitigated daily regional emissions for each construction activity. Maximum daily emissions of all air pollutants would remain below all applicable regional SCAQMD thresholds.

TABLE 1: ESTIMATED REGIONAL CONSTRUCTION EMISSIONS						
Construction Activity	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
DEMOLITION AND SITE CLEARING						
On-Site Emissions	0.6	6.2	5.2	<0.1	0.7	0.3
Off-Site Emissions	0.1	1.3	1.0	<0.1	0.4	0.1
Total	0.7	7.5	6.2	<0.1	1.1	0.4
EXCAVATION AND GRADING						
On-Site Emissions	0.7	7.3	5.6	<0.1	0.5	0.3
Off-Site Emissions	0.2	2.4	1.9	<0.1	0.8	0.2
Total	0.8	9.7	7.5	<0.1	1.3	0.5
BUILDING CONSTRUCTION						
On-Site Emissions	0.7	8.6	10.6	<0.1	0.3	0.3
Off-Site Emissions	1.1	2.0	10.5	<0.1	3.6	1.0
Total	1.8	10.6	21.1	<0.1	3.9	1.3
PAVING						
On-Site Emissions	0.6	5.6	8.6	<0.1	0.3	0.3
Off-Site Emissions	0.1	0.7	1.5	<0.1	0.6	0.1
Total	0.7	6.2	10.1	<0.1	0.8	0.4
ARCHITECTURAL COATING						
On-Site Emissions	10.1	3.0	4.7	<0.1	0.1	0.1
Off-Site Emissions	0.1	0.1	1.2	<0.1	0.5	0.1
Total	10.2	3.1	6.0	<0.1	0.6	0.3
BUILDING CONSTRUCTION + PAVING + ARCHITECTURAL COATING OVERLAP						
On-Site Emissions	11.4	17.1	23.9	<0.1	0.7	0.7
Off-Site Emissions	1.3	2.9	13.2	<0.1	4.6	1.3
Total	12.7	19.9	37.1	0.1	5.3	1.9
REGIONAL ANALYSIS						
Maximum Daily Emissions	12.7	19.9	37.1	0.1	5.3	1.9
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Emissions modeling files can be found in Appendix A. SOURCE: CalEEMod, Version 2020.4.0, TAHA, 2021.						

Operational Emissions. The proposed project would generate regional operational emissions from vehicle trips and energy use. The proposed project would generate approximately 299 daily trips. The CalEEMod program generates emissions estimates from energy use based on the land use type and project size. **Table 2** presents the estimated operation emissions of the proposed project. As shown, future operation of the proposed project would not result in daily emissions that exceed any of the applicable SCAQMD thresholds.

TABLE 2: ESTIMATED DAILY OPERATIONAL EMISSIONS						
Operational Activity	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
EMISSIONS ANALYSIS						
Area Sources	2.2	<0.1	<0.1	<0.1	<0.1	<0.1
Energy Sources	0.1	0.7	0.6	<0.1	<0.1	<0.1
Mobile Sources	0.8	0.8	7.8	<0.1	1.9	0.5
IMPACT ANALYSIS						
Daily Operational Emissions	3.1	1.6	8.5	<0.1	2.0	0.6
Regional Threshold	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Emissions modeling files can be found in Appendix A.						
SOURCE: CalEEMod, Version 2020.4.0, TAHA, 2021.						

Consistency Criterion 2: AQMP Growth Forecasts

The second AQMP consistency criterion requires that the proposed project not exceed the assumptions in the AQMP, which is based on the growth projections from the SCAG 2015-2040 RTP/SCS. The proposed project would accommodate 240 new students and 25 new employees. No student housing is currently located on the CDU campus and the proposed project does not include any housing. CDU is a commuter school where approximately 70 percent of existing CDU students are from Los Angeles County and 15 percent are from the surrounding south Los Angeles area. While many of the future students and employees that may be generated as a result of the proposed project may already live in the surrounding area, some of the additional students and employees that would be generated from the new program may come from outside of the surrounding area or the broader Los Angeles County region. As a result, the proposed project may induce some population growth. Between 2020 and 2030, SCAG forecasts population to increase by approximately 2,870 persons in the unincorporated Willowbrook community.³ If all of the new students and employees are conservatively assumed to move from outside of the community, the increase in 265 people would still be within the SCAG population growth projections for the unincorporated community. The proposed project would not induce population growth beyond those that are already forecasted for the unincorporated Willowbrook community. Therefore, the proposed project would not result in growth that would exceed the projections incorporated into the AQMP. See Response to Checklist Question 14a for further detail regarding the potential population increase associated with the proposed project.

Summary

In summary, the proposed project would not result in daily emissions that exceed the applicable SCAQMD thresholds, which were established to ensure that individual projects would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (Consistency Criterion 1). Additionally, the proposed project would not have the potential to result in population and employment growth that would exceed the growth projections incorporated into the AQMP (Consistency

³ SCAG, 2016-2040 *Regional Transportation Plan/Sustainable Communities Strategy*, April 2016.

Criterion 2). Therefore, the proposed project would be consistency with the AQMP and a less-than-significant impact would occur.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region air basin is non-attainment under an applicable federal or state ambient air quality standard?

☐ ☐ ☒ ☐

Less-Than-Significant Impact. SCAB has ongoing cumulative regional emissions for O₃, PM₁₀, and PM_{2.5} since the region is designated as non-attainment of the CAAQS and NAAQS for these air pollutants. Considering existing environmental conditions, SCAQMD propagated guidance that an individual project can emit allowable quantities of these pollutants on a regional scale without significantly contributing to cumulative emissions of criteria pollutants for which the region is non-attainment. As such, individual projects that do not generate emissions greater than the SCAQMD regional significance thresholds are not expected to result in cumulatively considerable net increase of any criteria pollutant for which SCAB is non-attainment. As discussed in Response to Checklist Question 3a, daily regional emissions associated with construction and operation of the proposed project would be below all applicable regional SCAQMD thresholds. Therefore, the proposed project would not result in a cumulatively considerable net increase of non-attainment pollutants, and a less-than-significant impact would occur.

c) Expose sensitive receptors to substantial pollutant concentrations?

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Less-Than-Significant Impact. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board (CARB) has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

SCAQMD has established 500 meters or 1,640 feet, as the distance for assessing localized air quality impacts. The proposed project is located in a dense urban environment and many of the land uses described above are located within 500 meters of the project site. Sensitive receptors surrounding the project site include medical buildings on the CDU campus and a two-story multi-family housing complex to the north; a two-story APLA Health Clinic to the east; King Drew Magnet High School of Medicine and Science to the west; and the Martin Luther King, Jr. Medical Campus across the street on 120th Street to the south. Single-family residential uses are located further south from the project site; a mix of single- and multi-family residential uses are located further west; a mix of single- and multi-family residential uses; and health clinics/medical offices and the Drew Child Development Corporation, are located further east of the project site. Additionally, a multi-family residential development is located to on the east side of the existing 118th Street parking facility.

Construction

Sensitive receptors surrounding the project site may be exposed to pollutant concentrations emanating from emissions sources involved in construction activities for the proposed project. SCAQMD established a Localized Significance Threshold (LST) methodology to determine the likelihood of substantial criteria pollutant concentrations reaching sensitive receptor locations. Mobile source emissions on the roadway network are spread across long distances and do not directly affect receptors in close proximity to the project site. The LST methodology involves screening values for daily emissions of NO_x, CO, PM₁₀, and PM_{2.5} that are generated exclusively by sources located on project sites. LST values were determined using emissions modeling based on ambient air quality measured throughout SCAB. If maximum daily emissions remain below the LST values during construction activities, it is highly unlikely that air pollutant concentrations in the

ambient air would reach substantial levels sufficient to create public health concerns for sensitive receptors. As shown in **Table 3**, maximum daily emissions of criteria pollutants and ozone precursors would not exceed any of the applicable LST values. Therefore, construction of the proposed project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants.

TABLE 3: PROPOSED PROJECT CONSTRUCTION EMISSIONS – LOCALIZED ANALYSIS				
Phase	On-Site Daily Emissions (lbs./day)			
	NO_x	CO	PM₁₀	PM_{2.5}
Demolition & Site Clearing	6.2	5.2	0.7	0.3
Excavation & Grading	0.7	7.3	0.5	0.3
Building Construction	0.7	8.6	0.3	0.3
Building Construction, Paving, and Architectural Coating Overlap	11.4	17.1	0.7	0.7
LOCALIZED ANALYSIS				
Maximum Localized Daily Emissions	11.4	17.1	0.7	0.7
SRA 12 Localized Significance Threshold /a/	46	231	4	3
Exceed Localized Significance Threshold?	No	No	No	No
/a/ Per the SCAQMD LST methodology, the project site is located in Source Receptor Area (SRA) 12. SOURCE: TAHA, 2021.				

With regards to TAC emissions, carcinogenic risks, and non-carcinogenic hazards, the use of heavy-duty construction equipment and haul trucks during construction activities would release diesel particulate matter (PM) to the atmosphere through exhaust emissions. However, carcinogenic risks are typically assessed over timescales of several decades, as the carcinogenic dose response is cumulative in nature. Construction of the proposed project would last for approximately 24 months, and daily emissions of diesel PM would fluctuate throughout the construction period. Short-term exposures to diesel PM would have to involve extremely high concentrations (such as through intensive, lengthy earthwork activities) in order for health risk impacts to occur on shorter timelines. Over the course of construction activities, average diesel PM emissions from on-site equipment would be approximately 0.4 pounds per day. It is unlikely that diesel PM concentrations would be of any public health concern during the 24-month construction period, and diesel PM emissions would cease upon completion of construction activities. The proposed project diesel exhaust emissions from equipment combined with the length of the construction period would not generate substantial emissions that would cause a health risk to adjacent land uses. In addition, the size and location of the project site indicates that only during a limited portion of construction activities would heavy-duty diesel-powered equipment be operating within 100 feet of sensitive receptors, and all construction equipment would be maintained in accordance with the CARB Portable Engine Air Toxics Control Measure and the Off-Road Diesel Regulation to control emissions to the maximum extent feasible. Therefore, construction of the proposed project would result in a less-than-significant impact related to substantial pollutant concentrations at sensitive receptors during construction activities.

Operation

The proposed project does not include an industrial component that would constitute a new substantial stationary source of operational air pollutant emissions (e.g., emergency diesel generator) and does not include a land use that would generate a substantial number of heavy-duty truck trips within the region. The proposed project would not generate air toxic emissions that would expose sensitive receptors to substantial pollutant concentrations. Therefore, the proposed project would result in a less-than-significant impact related to substantial pollutant concentrations during operational activities.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

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Less-Than-Significant Impact.

Construction

Odors are the only potential construction emissions other than the sources addressed above in Response to Checklist Questions 3a through 3c. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. The proposed project would utilize typical construction techniques, and odors from these sources would be typical of most construction sites, would be localized, would be generally confined to the immediate area surrounding the project site, would be temporary in nature, and would not persist beyond the termination of construction activities. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Therefore, the proposed project would result in a less-than-significant impact related to construction odors.

Operation

Odors are the only potential operational emissions other than the sources addressed above in Response to Checklist Questions 3a through 3c. Land uses and industrial operations that are typically associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding.⁴ The proposed project does not contain any of these land uses or industrial operations associated with odor complaints. The proposed structure would contain a café that would produce some odors and smells associated with the preparation of food. Proposed project operations would comply with SCAQMD Rule 402, which would prohibit any air quality discharge that would be a nuisance or pose any harm to individuals of the public. On-site trash receptacles would have the potential to create adverse odors. The proposed project would mitigate associated trash odors by properly storing and disposing of trash in compliance with the Los Angeles County Municipal Code (Chapter 11.16). Therefore, the proposed project would result in a less-than-significant impact related to odors during operational activities.

⁴ South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.

4. BIOLOGICAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. A significant biological impact would occur if the proposed project would cause the loss or destruction of individuals of a candidate, sensitive, or special status species or through the degradation of sensitive habitat. The project site is located within an urban area and is currently developed with two modular buildings, a surface parking lot, and ornamental landscaping. No native vegetation exists on or adjacent to the project site.

The California Natural Diversity Database (CNDDB), a computerized database that identifies past occurrences of species of special concern (e.g., plants, animals, and communities that are rare, threatened, or endangered), does not identify any candidate, sensitive, or special status species on the project site or within approximately 0.25 mile of the project site.⁵ Additionally, the entire project site has been disturbed and developed (i.e., modular structures, ornamental landscaping, and paved areas). Suitable habitat for special-status wildlife species do not occur within the project site. Since no special-status species were identified or have high likelihood of occurring on the project site, it is unlikely that the proposed project would result in the loss or destruction of individual candidate, sensitive, or special status species or the degradation of sensitive habitat. Therefore, the proposed project would not have an effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. No impact would occur.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. A significant impact would occur if a riparian habitat or natural community would be lost or destroyed as a result of the proposed project. As discussed in Response to Checklist Question 4a, the project site is completely disturbed and is located within an urbanized area surrounded primarily by residential uses. The project site does not contain any riparian habitat or features. No streams or water courses necessary to support riparian habitat are present on the project site. Additionally, CNDDB has not listed any riparian habitat or other sensitive natural communities on or in the vicinity of the project site. Therefore, the proposed project is not expected to result in the loss of or destroy any riparian habitat or other sensitive natural communities, and no impact would occur.

⁵ California Department of Fish and Wildlife, *California Natural Diversity Database (CNDDB)*, <https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data>, accessed March 2021.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

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No Impact. A significant impact would occur if federally protected wetlands would be modified or removed as a result of the proposed project. The project site does not contain any state or federally protected wetlands. No waterbodies are located on or in the vicinity of the project site. Therefore, the proposed project would not have any effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Therefore, no impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would interfere with, or remove access to, a migratory wildlife corridor or impede use of native wildlife nursery sites. The project site and the surrounding area are highly developed with urban uses, and no wildlife corridors are known to exist on or immediately surrounding the project site. The project site does not contain any waterbodies that would contain migratory fish or other wildlife species.

If migratory birds were to traverse the project site, the birds would likely utilize mature vegetation on the project site, some of which may potentially provide nesting sites for migratory birds. Several mature trees are located within the project site and could potentially be removed during construction. Tree removal on the project site would be required to comply with the Migratory Bird Treaty Act (MBTA). Under MBTA, if tree removal activities occur during the nesting season (February 15 through August 15), a biological monitor would need to be present during the removal activities to ensure that no active nests would be adversely affected. Additionally, if clearing/vegetation removal would occur during the nesting season, the County requires a pre-construction nest survey to be conducted one week prior to the clearing/vegetation removal activity. The proposed project is not expected to interfere with wildlife movement or impede the use of native wildlife nursery sites. Therefore, a less-than-significant impact would occur.

e) Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.)?

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No Impact. No oak woodlands or other unique native trees are present on the project site or in the surrounding area. The project site and surrounding area is highly urbanized area and has been previously disturbed. Therefore, no impact would occur.

f) Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3)?

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No Impact. A significant impact would occur if the proposed project were inconsistent with local regulations pertaining to biological resources. As discussed in Response to Checklist Question 4d, several trees on the project site could potentially be removed. Section 22.46.2100 of the Los Angeles County Municipal Code protects all oak trees with a diameter at breast height of eight inches or greater, or 12 inches or greater for multiple trunks (combination of two largest trunks). No oak trees are present on the project site. Additionally, the project site and surrounding area is not in a Wildflower Reserve Area, an SEA, or Coastal Resource Area. The proposed project would comply with local policies and ordinances protecting biological resources. Therefore, no impact would occur.

g) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?

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No Impact. A significant impact would occur if the proposed project were inconsistent with an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. The project site is not located within or adjacent to the boundaries of any HCPs, NCCPs, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

5. CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. A significant impact would occur if the proposed project would remove or substantially alter the significance of a historical resource. CEQA Guidelines Section 15064.5 generally defines historical resource as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period, or method of construction; representing the work of an important creative individual; or possessing high artistic values.

The California Historical Resources Information System (CHRIS) maintains a wide range of documents and materials related to historical resources and archaeological sites. CHRIS operates structurally through the California Office of Historic Preservation, nine Information Centers, and the State Historical Resources Commission. The project site is located within the South Central Coastal Information Center (SCCIC) service area. An SCCIC records search was conducted for the project site. The records search includes a review of all recorded archaeological and built-environment resources, as well as a review of cultural resource reports on file, on the project site and within 0.5 miles of the project site. The records search also included a review of the California Points of Historical Interest, the California Historical Landmarks, the California Register of Historical Resources, the National Register of Historic Places, the California State Built Environment Resources Directory, and the City of Los Angeles Historic-Cultural Monuments (LAHCM) listings for the project site and within 0.25 miles of the project site. The records search results indicate that the project site does not have any built environment resources, California Points of Historical Interest, California Historical Landmarks, California Register of Historical Resources, or National Register of Historic Places on the project site.⁶ In addition to the SCCIC records search results, the two existing one-story modular buildings on the project site are not listed and are not eligible for listing in the Los Angeles County Register of Landmarks and Historic Districts (the County's official list of County-designated landmarks and historic districts in the unincorporated area of the County).⁷ Therefore, no impact related to historical resources would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. A significant impact would occur if a known or unknown archaeological resource would be removed, altered, or destroyed as a result of the proposed project. CEQA Guidelines Section 15064.5 defines significant archaeological resources as resources which meet the criteria for historical resources, as discussed above, or resources that constitute unique archaeological resources associated with a scientifically recognized important prehistoric or historic event or person. The SCCIC records search results indicate that no

⁶ South Central Information Center, *Re: Record Search Results for the Proposed Charles Drew University of Medicine and Science Health Professions Education Building at 1731 East 120th Street, Los Angeles*, August 20, 2021.

⁷ Los Angeles County Historical Landmarks & Records Commission, *Los Angeles County Landmark and Historic District Registration*, <http://hlrc.lacounty.gov/Landmark-Registration/Los-Angeles-County-Landmark-Registration>, accessed March 2021.

archaeological resources are on the project site or within 0.5 miles of the project site.⁸ The project site is located in an urbanized area that has been previously disturbed. Any surficial archaeological resources that may have existed on the project site are likely to have been previously disturbed or removed. Construction of the proposed project would not involve deep levels of excavation. Excavation activities would be limited to a few feet below existing surface and is not expected to disturb native soil and any undiscovered archaeological resources. Therefore, no impact would occur.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

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Less-Than-Significant Impact. A significant impact would occur if previously interred human remains would be disturbed during excavation of the project site. The project site has been previously disturbed, and the proposed project would not involve substantial excavation. While no formal cemeteries, other places of human interment, or burial grounds or sites are known to exist within the project site, there is always a possibility that human remains may be unexpectedly encountered during construction. In the event that human remains are encountered, the proposed project would be required to comply with Section 7050.5 of the California Health and Safety Code. If human remains of Native American origin are discovered during construction, the proposed project would also be required to comply with Public Resources Code Section 5097.98 relating to the handling of Native American human remains. With compliance of the State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, a less-than-significant impact would occur.

⁸ South Central Information Center, Re: *Record Search Results for the Proposed Charles Drew University of Medicine and Science Health Professions Education Building at 1731 East 120th Street, Los Angeles*, August 20, 2021.

6. ENERGY

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. The main forms of available energy supply are electricity, natural gas, and oil. During construction of the proposed project, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control, powering lights, electronic equipment, or other construction activities that require electrical power. Construction activities typically do not involve the consumption of natural gas. Construction activities would consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment, round-trip construction worker travel to the project site, and delivery and haul truck trips. Construction of the proposed project would require the one-time expenditure of 67,227 gallons of diesel fuel (off-road equipment and on-road trucks) and approximately 405,576 gallons of gasoline. Relative to 2018 Los Angeles County consumption, construction fuel use would represent less than 0.0002 percent of annual countywide retail sales of diesel and gasoline fuels. Construction fuels consumption would not place a strain on regional petroleum fuels resource availability or supply.

Construction activities would comply with the CARB's "In-Use Off-Road Diesel Fueled Fleets Regulation," which limits engine idling times to reduce harmful emissions and reduce wasteful consumption of petroleum-based fuel. Additionally, the proposed project would comply with the California Renewable Portfolio Standard and the Clean Energy and Pollution Reduction Act of 2015 (Senate Bill [SB] 350). Compliance with local, state, and federal regulations would reduce short-term energy demand during the proposed project's construction to the extent feasible, and proposed project construction would not result in a wasteful or inefficient use of energy.

During operations of the proposed project, Southern California Edison would provide electricity and Southern California Gas Company would provide natural gas to the project site. The proposed project would use approximately 963 megawatt-hour (MWh) of electricity per year and 2,682 Million British thermal units (MMBTU) of natural gas per year. Energy use associated with operation of the proposed project would be typical of institutional uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning, electronic equipment, machinery, refrigeration, appliances, security systems, and more. The proposed project would comply with provisions of the California Green Building Standard Code (CalGreen Code) and would implement water conservation strategies. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric- or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips. These trips would use approximately 28,370 gallons of gasoline. The proposed project does not involve any characteristics or processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or involve the use of equipment that would not conform to current emissions standards and related fuel efficiencies.

Los Angeles County has adopted a Community Climate Action Plan (CCAP) to mitigate and avoid greenhouse gas (GHG) emissions associated with community activities in unincorporated Los Angeles County. In August

2015, the CCAP was incorporated into the Air Quality Element of the Los Angeles County General Plan 2035. CCAP identifies emissions related to community activities, establishes a GHG reduction target consistent with the Global Warming Solutions Act (Assembly Bill [AB] 32), and provides a roadmap for successfully implementing GHG reduction measures selected by the County. The CCAP proposes several local actions related to energy-efficiency and conservation, including green building standards for new development. The proposed project will be subject to the California Green Building Standards Code, which requires new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies for large buildings, divert construction waste from landfills, and install low pollutant-emitting finish materials.

The proposed building would be designed to achieve LEED Gold equivalent level. Sustainable elements may potentially include, but are not limited to, photovoltaic panels on the roof, below-grade filtration tanks to collect and treat stormwater runoff and wastewater, building systems that employ a mix of passive and energy-efficient active strategies, locally sourced structural and finish materials that may include recycled content, and classrooms that take advantage of natural light and daylighting strategies to promote energy-efficiency. The proposed project does not include any feature (i.e., substantially alter energy demands) that would interfere with implementation of these state and City codes and plans and would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, a less-than-significant impact is expected.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

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Less-Than-Significant Impact. As discussed in Response to Checklist Question 6a, construction activities associated with the proposed project would comply with CARB's "In-Use Off-Road Diesel Fueled Fleets Regulation" and SB 350 to reduce short-term energy demand during the construction of the proposed project. During operations, the proposed project would comply with provisions of the CalGreen Code, which requires energy-efficiencies and conservation. The proposed project does not include any feature (i.e., substantially alter energy demands) that would interfere with implementation of state and local plans and would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, a less-than-significant impact would occur.

7. GEOLOGY AND SOILS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. A significant impact would occur if the proposed project would expose people or structures to the rupture of a known earthquake fault in a manner that would result in personal injury, personal death, or property damage. The Alquist-Priolo Earthquake Fault Zoning Act regulates development near active faults to mitigate the hazard of surface fault rupture. Surface fault rupture occurs when movement on a fault deep within the earth breaks through to the surface. The Act prohibits the location of most structures for human occupancy across the trace of active faults. The Act also establishes Earthquake Fault Zones and requires geologic/seismic studies of all proposed developments within 1,000 feet of the zone. The Earthquake Fault Zones are delineated and defined by the State Geologist and identify areas where potential surface rupture along a fault could occur.

According to the California Geological Survey Earthquake Zones of Required Investigation, the project site is not located within an Alquist-Priolo Earthquake Fault Zone and no trace of any known active or potentially active earthquake fault passes through the project site. The closest known active fault zone is the Newport-Inglewood Earthquake Fault Zone, approximately 1.7 miles west of the project site, and the Newport-Inglewood-Rose Canyon Fault Zone, approximately four miles north of the project site.⁹ According to the Geotechnical Engineering Investigation for project site and the APLU Health Clinic that is currently under construction adjacent to the project site, the potential for ground rupture at and adjacent to the project site is low since no known active or potentially active faults underlie the area and the area is not located within an Alquist-Priolo Earthquake Fault Zone.¹⁰ Additionally, the proposed project does not involve any activities that would potentially exacerbate existing environmental conditions so as to increase the potential to expose people or structures to the rupture of a known earthquake fault. The type of development that would occur on the project site is typical of urban environments and would not involve deep excavation into the Earth or boring of large areas creating unstable seismic conditions or stresses in the Earth's crust that would result in the rupture of a fault. Therefore, no impact would occur.

⁹ California Geological Survey, *Earthquake Zones of Required Investigation*, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed February 2021.

¹⁰ Geotechnologies, Inc., *Geotechnical Engineering Investigation: Proposed CDU and APLA Health Unit*, October 30, 2019.

ii) Strong seismic ground shaking?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would result in personal injury, personal death, or property damage as a result of seismic ground shaking. As with all properties in the seismically active Southern California region, the project site is susceptible to ground shaking during a seismic event. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. The proposed project does not include activities that would increase the potential to expose people or structures to adverse effects involving strong seismic ground shaking. Additionally, the design and construction of any buildings on the project site would be required to conform to the California Building Code seismic standards, as well as all other applicable codes and standards to reduce impacts from strong seismic ground shaking. Therefore, impacts related to strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction and lateral spreading?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would result in personal injury, personal death, or property damage as a result of liquefaction or other ground failure caused by ground shaking. Liquefaction typically occurs when a saturated or partially saturated soil becomes malleable and loses strength and stiffness in response to an applied stress caused by earthquake shaking or other sudden change in stress conditions. Soil liquefaction occurs when loose, saturated, granular soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Liquefaction usually results in horizontal and vertical movements from the lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. Factors that contribute to the potential for liquefaction include a low relative density of granular materials, a shallow groundwater table, and a long duration and high acceleration of seismic shaking. The effects of liquefaction include the loss of the soil's ability to support footings and foundations which may cause buildings and foundations to buckle.

According to the California Geological Survey Earthquake Zones of Required Investigation, the project site is located within a liquefaction zone.¹¹ A site-specific liquefaction analysis that was conducted as part of the Geotechnical Engineering Investigation for the project site and the adjacent APLU Health Center identified a potentially liquefiable layer of six feet in thickness at a depth of 18 feet below the existing grade. The site-specific liquefaction analysis indicates that the underlying soils would be susceptible to liquefaction. However, the potential for surface manifestation of liquefaction affecting the proposed structure is considered low with implementation of the recommendations contained within the Geotechnical Engineering Investigation. The Geotechnical Engineering Investigation also concluded that the potential for lateral spreading is considered remote since the topography of the area is relatively level. The County requires that the applicant and construction contractor implement the recommendations in the Geotechnical Engineering Investigation. The County Building Official would conduct on-site inspections to ensure that the proposed project has implemented the recommendations in the Geotechnical Engineering Investigation.

The design and construction of the proposed project would conform to current California Building Code (CBC) seismic standards, as well as all other applicable codes and standards. Implementation of the recommendations contained in the Geotechnical Engineering Investigation, along with the policies and actions required by the County Department of Public Works, CBC seismic standards, and other applicable codes and standards would ensure that the proposed project would be geotechnically sound and would not result in personal injury, personal death, or property damage as a result of liquefaction or other seismic-related

¹¹ California Geological Survey, *Earthquake Zones of Required Investigation*, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed March 2021.

ground failure. Therefore, impacts related to liquefaction and other seismic-related ground failure would be less than significant.

iv) Landslides?

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No Impact. A significant impact would occur if the project site were located in a hillside area with unstable geological conditions or soil types that would be susceptible to failure when saturated. According to the California Geological Survey Earthquake Zones of Required Investigation, the project site is not located within a landslide area.¹² Additionally, the project site and its surrounding area are relatively flat. Therefore, no impact related to landslides would occur.

b) Result in substantial soil erosion or the loss of topsoil?

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Less-Than-Significant Impact. A significant impact would occur if construction activities or future uses on the project site would result in substantial soil erosion or loss of topsoil. During ground disturbing activities, such as grading and excavation, the project site could potentially be subject to soil erosion or loss of topsoil. However, the proposed project would be required to comply with local, state, and federal regulations and standards related to minimizing potential erosion impacts, including the latest requirements of the County-enforced National Pollution Discharge Elimination System (NPDES). The proposed project would also be required to implement the County's Low Impact Development (LID) standards, which includes requiring post-development peak storm water runoff discharge rate to not exceed the estimated pre-development rate for development where the increased peak storm water discharge rate would result in the potential for downstream erosion. During operation of the proposed project, the project site would have similar amount of impervious and unpaved areas as existing conditions. All unpaved areas would be landscaped. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil. Less-than-significant impacts related to erosion are expected.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

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Less-Than-Significant Impact. A significant impact would occur if the project site has unstable geological conditions that would result in geological failure, including lateral spreading, off-site landslides, liquefaction, or collapse. The proposed project would not involve activities that would affect seismic conditions or alter underlying soil or groundwater characteristics that govern liquefaction potential. As discussed in Response to Checklist Questions 7a.iii and 7a.iv, the project site is in a liquefaction zone but is not in a landslide zone, respectively. The project site and the surrounding area are relatively flat and, thus, are not susceptible to landslides. A Geotechnical Engineering Investigation has been prepared for the proposed project and the adjacent APLU Health Unit. The Geotechnical Engineering Investigation requires review and approval by the County, and the County requires that the applicant and construction contractor implement the recommendations in the Geotechnical Engineering Investigation. The County Building Official would conduct on-site inspections to ensure that the proposed project has implemented the recommendations in the Geotechnical Engineering Investigation. Implementation of the recommendations contained within the Geotechnical Engineering Investigation for the project site, along with the policies and actions required by the County Public Works, CBC seismic standards, and other applicable codes and standards would ensure that the proposed project would be geotechnically sound and would not result in personal injury, personal

¹² California Geological Survey, *Earthquake Zones of Required Investigation*, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed March 2021.

death, or property damage as a result of liquefaction or other seismic-related ground failure. Therefore, impacts related to liquefaction would be reduced to less than significant levels.

Lateral spreading refers to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water. It occurs when sloping ground starts to move downhill, causing cracks to open up. The project site is on relatively flat land and not located in a landslide zone. As a result, lateral spreading is not expected to occur on the project site.

Subsidence and ground collapse generally occur in areas with active groundwater withdrawal or petroleum production. The extraction of groundwater or petroleum from sedimentary source rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The compaction of subsurface sediments by fluid withdrawal will cause subsidence or ground collapse overlying a pumped reservoir. According to the Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR), the project site is not located within an oil field and no oil wells are located within the project site.¹³ Additionally, no tunnels, groundwater wells, covered quarries, or caves are located beneath the project site, and the proposed project does not include groundwater and oil extraction activities, or any other activities that would cause subsidence or ground collapse. Furthermore, the proposed project would be constructed in accordance with CBC, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, impacts related to geological failure, including lateral spreading, off-site landslides, liquefaction, or subsidence would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would be built on expansive soils without proper site preparation or adequate foundations for proposed buildings, thus posing a hazard to life and property. Expansive soils have relatively high clay mineral content and are usually found in areas where underlying formations contain an abundance of clay minerals. Due to high clay content, expansive soils expand with the addition of water and shrink when dried, which can cause damage to overlying structures.

The Geotechnical Engineering Investigation for the project site and the adjacent ACLU Health Center identifies fill materials to a depth of three feet below the existing grade. The fill consists of sandy silt to sandy clay. The fill materials are underlain by native alluvial soils consisting of interlayered mixtures of sand, silt, and clay. The Geotechnical Engineering Investigation found that the soils on the project site have moderate potential to shrink and swell due to changes in the moisture content. The Geotechnical Engineering Investigation includes recommendations that would limit impacts associated with expansive soils. The County requires that the applicant and constructor implement the recommendations within the Geotechnical Engineering Investigation, and the County Building Official would conduct on-site inspections to ensure that the proposed project has implemented the requirements in the Geotechnical Engineering Investigation. Additionally, construction on the project site would be required to comply with all applicable building codes and standards, including the CBC, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Implementation of the recommendations contained in the Geotechnical Engineering Investigation would reduce impacts associated with expansive soils. Therefore, impacts related to expansive soil would be less than significant.

¹³ California Department of Conservation Division of Oil, Gas, and Geothermal Resources, *WellFinder*, <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.24372/33.92480/17>, accessed March 2021.

e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?

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No Impact. A significant impact would occur if adequate wastewater disposal were not available for the proposed project. The project site is located in an urbanized area where wastewater infrastructure is currently in place. The proposed project would connect to the existing sanitary sewer system and would not include septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, Ch.22.104)?

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No Impact. The project site is relatively flat and is not located within a Hillside Management Area (25 percent or greater), according to Figure 9.8, Hillside Management Areas and Ridgeline Management Map, of the Los Angeles County 2035 General Plan. Therefore, no impact would occur.

g) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

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No Impact. A significant impact would occur if excavation or construction activities associated with the proposed project would disturb a unique paleontological resource, paleontological site, or a unique geologic feature. Paleontological resources are fossils (e.g., preserved bones, shells, exoskeletons, and other remains) and other traces of former living things. Paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface. Ground-disturbing activities in fossil-bearing soils and rock formations have the potential to damage or destroy paleontological resources that may be present below the ground surface.

The project site is located within an urban area and on a site that has been previously disturbed. Construction of the proposed project would not involve deep levels of excavation and the likelihood of encountering previously uncovered paleontological resources is extremely low. Any project-related excavation is not expected to disturb any undiscovered paleontological resources. Therefore, no impact would occur.

8. GREENHOUSE GAS EMISSIONS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. GHG emissions refer to a group of emissions that are generally believed to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), keep the average surface temperature of the Earth close to 60°F. Without the natural greenhouse effect, the Earth's surface would be about 61°F cooler.¹⁴ In addition to CO₂, CH₄, and N₂O, GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), black carbon (black carbon is the most strongly light-absorbing component of particulate matter emitted from burning fuels, such as coal, diesel, and biomass), and water vapor.

CO₂ is the most abundant pollutant that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant but have higher global warming potential than CO₂. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent of CO₂, denoted as CO₂e. CO₂e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

The CEQA Guidelines require lead agencies to adopt GHG thresholds of significance. When adopting these thresholds, the amended Guidelines allows lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence, and/or to develop their own significance threshold. Neither the County nor SCAQMD has officially adopted a quantitative threshold value for determining the significance of GHG emissions that will be generated by projects under CEQA.

SCAQMD published the Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold in October 2008.¹⁵ SCAQMD convened a GHG CEQA Significance Threshold Stakeholder Working Group beginning in April of 2008 to examine alternatives for establishing quantitative GHG thresholds within the district's jurisdiction. The Working Group proposed a tiered screening methodology for assessing the potential significance of GHG emissions generated by CEQA projects. The tiered screening methodology was outlined in the minutes of the final Working Group meeting on September 28, 2010.¹⁶ For the purposes of this environmental assessment, the interim Tier III screening threshold value of 3,000 metric

¹⁴ California Environmental Protection Agency Climate Action Team, *Climate Action Report to Governor Schwarzenegger and the California Legislator*, March 2006.

¹⁵ South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

¹⁶ South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15*, September 28, 2010, [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf?sfvrsn=2), accessed June 16, 2021.

tons of CO₂e (MTCO₂e) per year is the most appropriate comparison value for impacts determination based on the commercial elements comprising the proposed project.

GHG emissions that would be generated by the proposed project were estimated using CalEEMod, as recommended by the SCAQMD. CalEEMod quantifies GHG emissions from construction activities and future operation of projects. Sources of GHG emissions during project construction would include heavy-duty off-road diesel equipment and vehicular travel to and from the project site. Sources of GHG emissions during project operation would include vehicular travel, energy demand, water use, and waste generation. In accordance with SCAQMD methodology, the total amount of GHG emissions that would be generated by construction of the proposed project was amortized over a 30-year operational period to represent long-term impacts.

Table 4 presents the estimated GHG emissions that would be released to the atmosphere on an annual basis by the proposed project. Construction of the proposed project would produce approximately 1,260.3 MTCO₂e or 42.0 MTCO₂e annually over a 30-year period. The total annual operating emissions would be approximately 767.2 MTCO₂e per year after accounting for amortized construction emissions. This mass rate is substantially below the most applicable quantitative draft interim threshold of 3,000 MTCO₂e per year recommended by SCAQMD to capture 90 percent of CEQA projects within its jurisdiction. Therefore, impacts would be less than significant.

TABLE 4: PROPOSED PROJECT ANNUAL GREENHOUSE GAS EMISSIONS	
Scenario and Emission Source	Carbon Dioxide Equivalent (Metric Tons per Year)
Construction Emissions Amortized (Direct) /a/	42.0
Area Source Emissions (Direct)	<0.1
Energy Source Emissions (Indirect)	442.9
Mobile Source Emissions (Direct)	255.4
Waste Disposal Emissions (Indirect)	22.0
Water Distribution Emissions (Indirect)	4.9
TOTAL	767.2
SCAQMD Draft Interim Significance Threshold	3,000
Exceed Threshold?	No
/a/ Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span. SOURCE: SCAQMD, CalEEMod version 2020.4.0; TAHA, 2021.	

b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

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Less-Than-Significant Impact. Assembly Bill (AB) 32 requires CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions and directs CARB to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill sets a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. On December 11, 2008, CARB adopted the Scoping Plan, which sets forth the framework for facilitating the state's goal of reducing GHG emissions to 1990 levels by 2020. The First Update of the Scoping Plan was adopted on May 22, 2014. CARB adopted the 2017 Scoping Plan in November 2017, which details strategies to cut back 40 percent of GHGs by 2030. AB 32, the updated first Scoping Plan, and the 2017 Scoping Plan did not establish regulations implementing, for specific projects, the Legislature's statewide goals for reducing GHGs.¹⁷

¹⁷ *Center for Biological Diversity v. California Department of Fish and Game* (2015) 62 Cal.4th 204, 259.

The Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions, including expanding energy efficiency programs, increasing electricity production from renewable resources (at least 33 percent of the statewide electricity mix), and increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program. These measures are designed to be implemented by state agencies. The proposed project would not interfere with implementation of AB 32 and measures contained within the Scoping Plan to reduce GHG emissions.

The California legislature enacted SB 375 in 2008 to set regional targets for the reduction of GHG emissions and to require the preparation of Sustainable Communities Strategies (SCS) by metropolitan planning organizations. The California legislature passed SB 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare an SCS in their regional transportation plans to achieve the per capita GHG reduction targets. For the SCAG region, the SCS is contained in the Connect SoCal Plan. The Connect SoCal Plan focuses the majority of new job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. SB 743 was enacted in 2013 to evolve the assessment of transportation impacts under CEQA, and SB 743 was incorporated into the CEQA Guidelines in 2018 by promulgating the use of vehicle miles traveled (VMT) and VMT reductions as a significance threshold metric. The project site is located within one-half mile of an existing major transit stop and within a Transit Priority Area as it is situated approximately 0.42 miles from the Willowbrook/Rosa Parks Station, which is served by Metro A (Blue) and C (Green) light rail lines and is also directly served by several bus lines via off-street bus loading bays. Since the project site is within one-half mile of an existing major transit stop along an existing high quality transit corridor and is a part of a mixed-use transit-oriented district specific plan, the proposed project would not have the potential to conflict with the regional GHG emissions targets and VMT reduction efforts of SB 375 and SB 743, respectively.

With regards to local climate planning initiatives, the County adopted a 2020 CCAP to reduce the impacts of climate change by reducing GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020. The 2020 CCAP was adopted as part of the Air Quality Element of the Los Angeles County General Plan 2035 on October 6, 2015. The County Board of Supervisors adopted the CCAP Implementation Ordinance 2017 on June 6, 2018, which amended Title 22 of the Los Angeles County Code to allow the Los Angeles County Department of Regional Planning to implement the CCAP.

The proposed project would be consistent with the CCAP GHG reduction strategies by achieving LEED Gold equivalent level, complying with the California Building Code (Title 24), including CalGreen, and complying with the County's Stormwater and Runoff Pollution Control Ordinance. CalGreen lays out minimum requirements for newly constructed buildings in California, which would reduce GHG emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors. By complying with Title 24, the proposed project would also be consistent with the Air Quality Element of the Los Angeles County General Plan 2035. In addition, project-specific sustainable elements may potentially include, but are not limited to, photovoltaic panels on the roof, below-grade filtration tanks to collect and treat stormwater runoff and wastewater, building systems that employ a mix of passive and energy-efficient active strategies, locally sourced structural and finish materials that may include recycled content, and classrooms that take advantage of natural light and daylighting strategies to promote energy-efficiency. The proposed project would not conflict with applicable plans, policies, and regulations associated with the reduction of GHG emissions. Therefore, a less-than-significant impact is expected.

9. HAZARDS AND HAZARDOUS MATERIALS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. The proposed project would involve the limited use and storage of common hazardous substances, such as cleaning supplies, pesticides, and other landscaping supplies. The proposed project does not involve any industrial uses or activities that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through transport, use, or disposal. Any hazardous materials, substances, or wastes that are stored, generated, or used on the project site would be handled or disposed of in compliance with all existing regulations. Hazardous materials that would be used by the proposed project would be disposed of at the appropriate landfills that accept those types of waste. Therefore, the proposed project is not expected to create a significant hazard to the public or environment through the routine transport, storage, production, use, or disposal of hazardous materials. Impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-Than-Significant Impact with Mitigation Incorporated. As discussed above in Response to Checklist Question 9a, operations of the proposed project would involve the limited use and storage of hazardous materials. All hazardous materials within the project site would be handled, used, stored, transported, and disposed of in accordance with all applicable federal, state, and local requirements.

Construction of the proposed project would involve the limited use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. According to the Phase II Subsurface Investigation Report, soil samples collected on the project site had detected total petroleum hydrocarbons (TPH) and VOCs at concentration levels that were below environmental screening levels for these contaminants. With the exception of lead, the collected soil samples detected Title 22 heavy metals that were below 10 times the soluble threshold limit concentration and below 20 times the toxicity characteristic leaching procedure levels. Lead was detected at concentration that range from 8.45 milligrams per kilogram (mg/kg) and 152 mg/kg. Since one sample on the project site has lead concentrations greater than 100 mg/kg, an SCAQMD Rule 1466 permit would be required prior to excavation or soil disturbance activities on the project site. The permit requires SCAQMD notification prior to soil disturbance and that dust levels be monitored at all times during disturbance. The soil samples collected for the Phase II Subsurface Investigation Report detected methane at concentrations that were less than 5,000 parts per million. The source of methane is unknown as the project site is not located near a landfill or an active, abandoned, or idle oil or gas well. As lead concentrations is greater than 100 mg/kg and methane was detected on the project site, the Phase II recommends a Soil Management Plan be completed prior to initiating soil disturbance and removal activities, which would protect worker health and safety during construction.

The Phase II also determined the presence of contaminated materials on the adjacent APLA Health Clinic site. Contaminated soils found at the APLA Health Clinic site include lead to a depth of three feet and VOCs.

During construction, approximately three feet of contaminated fill material would be replaced on-site. As soils on the project site and the adjacent APLA Health Clinic site is contaminated, construction on the project site has the potential to expose construction workers to lead and methane. Therefore, Mitigation Measure **HM-1** would require the preparation of a Soil Management Plan prior to soil disturbance activities. The Soil Management Plan would include measures, such as soil vapor monitoring and methane monitoring, that the County would require the applicant and construction contractor to implement during soil disturbance activities. Therefore, impacts related to the creation of hazards to the public or environment through the release of hazardous materials into the environment would be less than significant with mitigation incorporated.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

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Less-Than-Significant Impact with Mitigation Incorporated. The proposed project would be located on a school property, and two schools (King Drew Magnet High School of Medicine and Science and Abraham Lincoln Elementary School) are within a quarter-mile of the proposed project. As discussed above in Response to Checklist Questions 9a and 9b, the proposed project would use a limited amount of hazardous materials, and any hazardous materials used by the proposed project would be acquired, handled, used, stored, transported, and disposed of in accordance with all applicable federal, state, and local requirements. Lead and methane have the potential to be encountered during construction. With implementation of Mitigation Measure **HM-1**, the potential handling of hazardous materials and/or release of hazardous emissions would not pose a significant risk to nearby schools. Therefore, impacts would be less than significant with mitigation incorporated.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

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Less-Than-Significant Impact. A regulatory agency records search conducted as part of the Phase I Environmental Site Assessment for the CDU campus found that the CDU campus, which includes the project site, is listed in four databases. The listings are identified in **Table 5**. The CDU campus also operates equipment that follows SCAQMD rules. The CDU campus has an active permit with SCAQMD to operate a diesel-fueled electric generator over 500 horsepower. None of the regulatory agency databases identify the presence or likely presence of any hazardous substances or petroleum products on the CDU campus that have been released to the environment, are under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.

TABLE 5: HAZARDOUS MATERIALS DATABASE LISTINGS FOR CDU CAMPUS		
Facility Name and ID	Address	Database Findings
CDU Life Sciences Research & Education Building WDID ID: 419C352115	1748 E. 118 th St.	CA CIWQS Effective Date: 06/02/2008 Termination Date 09/02/2010
Drew Post Graduate School Facility ID: 007826-108284	1674 E. 118 th St. (CDU historic address)	CA Los Angeles County HMS Permit Number: 00008834C Permit Status: Closed
Charles Drew University Facility ID: 032109-051116	1748 E. 118 th St.	CA Los Angeles County HMS Permit Numbers: 000593861, 000593862
LAUSD/King Drew Medical Magnet High School GEPAID: CAD982353518	1601 E. 120 th St. (current address) 1750 E. 118 th St. (historic address)	CA Haznet Disposal of Waste Laboratory Chemicals in 2006 and 2008
Charles R. Drew Postgraduate Medical School Facility ID: 008341-108903	1621 E. 120 th St. (Building F)	Listed as RCRA Large Quantity Generator in 1986 and 1996
Notes: CA CIWQS = California Integrated Water Quality System; CA Los Angeles County HMS = California Los Angeles County Hazardous Materials System; RCRA = Resource Conservation and Recovery Act SOURCE: Clark Seif Clark, Inc., 2018.		

The regulatory agency databases listed 12 facilities within 0.25 mile of the CDU campus, of which seven are within 0.25 mile of the project site (**Table 6**). None of the properties have known contaminant releases to the subsurface of the properties that would result in a determination that the properties have the presence or likely presence of hazardous substances or petroleum products that have been released to the environment, are under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.

TABLE 6: HAZARDOUS MATERIALS DATABASE LISTINGS WITHIN 0.25 MILE OF PROJECT SITE			
Facility Name	Address	Findings	Distance from Project Site
Los Angeles County Fire Station #041	1815 E. 120 th St.	Operates a permitted UST; no known releases	1,010 feet east
Augustus F. Hawkins Mental Health Center	1720 E. 120 th St.	RCRA Large Quantity Generator of hazardous wastes; no reports of any violations during the previous 3 years	225 feet southeast
Fellowship Garden of Love	11754 Holmes Ave.	Lead remediation	1,010 feet northeast
King/Drew Medical Magnet High School	1601 E. 120 th St.	RCRA Large Quantity Generator of hazardous wastes; no reports of any violations during the previous 3 years	20 feet west
Martin Luther King Hospital	12012 Compton Blvd., 12021 S. Wilmington Ave.	RCRA Small Quantity Generator; permitted UST operator; no known releases	490 feet southeast
Martin Luther King Jr. Outpatient Center & Hospital	1670 E. 120 th St., 12021 Wilmington Ave.	Listed in multiple databases; LUST site; case closed 1996	300 feet south
Hooper Texaco Service, Hooper Shell Station, Brooks Texaco, Texaco Downstream, Hooper Texaco Service	11913 S. Compton Blvd.	Outside the area of concern for a release of petroleum hydrocarbons – approximately 700 feet downgradient of site; Active LUST facility – groundwater impacted; current tenant is Shell	580 feet west
Notes: LUST = leaking underground storage tank; RCRA = Resource Conservation and Recovery Act; SLIC = Spills, Leaks, Investigation, and Cleanup; UST = underground storage tank SOURCE: Clark Seif Clark, Inc., 2018; TAHA, 2022.			

The Los Angeles County Public Works Environmental Programs Division online database, which includes records related to industrial waste, underground storage tanks, and stormwater permits for unincorporated areas of Los Angeles County and 77 cities, has records for the following facilities within 0.25 mile of the project site:

- Cobb Building Café – associated with an industrial waste discharge permit for a public restaurant; records did not identify any hazardous materials in the waste stream.
- 1748 East 118th Street – associated with inspections of the stormwater interceptor in the delivery driveway and the sampling box for the laboratories as required under the County’s MS4 permit. A notice of violation was issued due to sludge and solids collected in the interceptor that required removal.
- 1674 E. 118th Street – records on file for a closed permit.

The project site and facilities within 0.25 mile of the project site are not listed in the following databases:

- State Water Resource Control Board’s GeoTracker online database
- California Department of Toxic Substances Control’s EnviroStor online database
- California Department of Conservation, Division of Oil, Gas and Geothermal Resources’ Wellfinder database
- Los Angeles County Public Works Building and Safety Division online database

The records search did not find any known releases of hazardous materials for and within 0.25 mile of the project site.¹⁸ Thus, the proposed project would not create a significant hazard to the public or the environment and a less-than-significant impact is expected.

e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

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No Impact. The project site is not located in an airport land use plan area, or within two miles of any public or public use airports, or private air strips. The closest airport to the project site is the Compton/Woodley Airport, which is approximately 2.3 miles south of the project site. Therefore, the proposed project would not result in an airport- or airstrip-related safety hazard for people residing or working in the area, and no impact would occur.

f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

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No Impact. The project site is not along an emergency route. According to the Los Angeles County General Plan Safety Element, the I-105 freeway is the nearest disaster route and is approximately 0.25 mile north of the project site.¹⁹ No lane or street closures would occur during construction or operation of the proposed project and, thus, the proposed project would not impede public access to emergency/disaster routes and would not interfere with an adopted emergency response plan or emergency evacuation plan. Emergency vehicle access would be maintained at all times during construction and operation of the proposed project in

¹⁸ Clark Seif Clark, Inc., *Phase I Environmental Site Assessment*, July 5, 2018.

¹⁹ Los Angeles County Department of Regional Planning, *Los Angeles County General Plan 2035, Chapter 12 Safety Element Figure 12.6 Disaster Routes Map*, 2015.

compliance with the requirements of Los Angeles County Fire Department (LACFD). Therefore, no impacts related to emergency response or emergency evacuation plans are expected.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

☐☐☐☒

No Impact. The project site is not located in a fire hazard severity zone, as identified by Los Angeles County and the California Department of Forestry and Fire Protection (CalFire), and the proposed project would not require any brush clearing, vegetation management, or fuel modification for this zone.^{20,21} The project site is located in an urbanized area of the County and is not located within or adjacent to a wildland area. The proposed project would not involve activities that would expose people or structures to the risk of loss, injury, or death involving wildland fires. Therefore, no impacts related to the exposure of people or structures to wildland fire would occur.

MITIGATION MEASURES

HM-1 The applicant shall prepare and complete a Soil Management Plan prior to initiating soil disturbance and removal activities. To be protective of worker health and safety and potential public exposures to VOC vapors, the Soil Management Plan shall include soil vapor monitoring, including methane monitoring, during soil disturbance activities. The measures contained within the Soil Management Plan shall be implemented during all activities that involve soil disturbance. The Soil Management Plan shall be submitted to the Los Angeles County Fire Department Health Hazardous Materials Division (HHMD) for review and approval during the building permit application phase. The applicant shall also incorporate any necessary features to meet applicable standards, to the satisfaction of HHMD. HHMD shall oversee the implementation of the Soil Management Plan at the project site.

²⁰ Los Angeles County Department of Regional Planning, *Los Angeles County General Plan 2035, Chapter 12 Safety Element Figure 12.5 Fire Hazard Severity Zone Policy Map*, 2015.

²¹ California Department of Forestry and Fire Protection, *California Fire Hazard Severity Zone Viewer*, <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>, accessed March 2021.

10. HYDROLOGY AND WATER QUALITY

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. A significant impact would occur if discharges associated with the proposed project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or violate regulatory standards as defined in the applicable National Pollutant Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan for the receiving water body.

During construction, surface water quality could potentially be affected by runoff of loose soils and/or a variety of construction wastes and fuels that could be carried off-site by surface runoff or into local storm drains that drain into water resources. However, the proposed project would be required to comply with all federal, state, and local regulations related to water quality standards and wastewater discharge. Construction contractors would be required to comply with all provisions of the NPDES General Construction Activity Permit, which is issued by the State Water Resource Control Board and enforced by the County. The General Construction Activity Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) prior to the beginning of construction for construction activities that disturb one or more acres of soil. The proposed project would be required to prepare an SWPPP and implement Best Management Practices (BMPs) that are required by the Los Angeles County Department of Public Works as part of the County's NPDES permit. Compliance with these requirements would reduce the risk of water degradation from soil erosion and other pollutants related to construction activities. The proposed project would not violate any water quality standards or waste discharge requirements during construction.

The proposed project would be required to incorporate and implement the County's LID standards and the requirements of the County's Municipal Separate Storm Sewer System (MS4) permit to control and minimize potentially polluted runoff. The proposed project is required to comply with these requirements in order to obtain construction permits and certificates of occupancy from the County. Additionally, the proposed project would comply with the requirements of the Willowbrook Transit Oriented District (TOD) Specific Plan. As discussed in Section 3.7 (Hydrology and Water Quality) of the Willowbrook TOD Specific Plan Final Environmental Impact Report (EIR), development projects that are implemented in accordance with the Willowbrook TOD Specific Plan would not violate water quality standards or waste discharge requirements. As such, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Impacts related to water quality standards and waste discharge requirements would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-Than-Significant Impact. The Geotechnical Engineering Investigation for the project site and the adjacent APLU Health Center site identified groundwater at a depth of approximately 19 feet below the

existing grade on the project site.²² During construction, the proposed project would involve some site grading, and excavation would be limited to three feet below the existing surface. Excavation activities would be limited to removing the existing fill material. Excavation activities are not expected to encounter potable aquifer water. Following construction of the proposed project, soil absorption rates would not be significantly altered as the amount of impervious surface area would remain roughly the same as or less than existing conditions. The proposed project would not require the direct addition or withdrawal of groundwater and would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Additionally, as discussed in Section 3.7 (Hydrology and Water Quality) of the Willowbrook TOD Specific Plan Final EIR, water purveyors that serve the Willowbrook TOD Specific Plan area have pumping rights to obtain groundwater from the Central Groundwater Basin. Because groundwater withdrawals from the Central Groundwater Basin are limited based on the adjudication, compliance with the judgement that set pumping rights would eliminate the potential for water agencies that serve the Specific Plan area, including the project site, to substantially impact the groundwater aquifer. As the proposed project would comply with the requirements of the Willowbrook TOD Specific Plan, impacts related to groundwater supplies and recharge would be less than significant.

The project site is not currently used for groundwater recharge activities, would not install any groundwater wells, and would not otherwise directly withdraw any groundwater during construction or operations of the proposed project. As discussed in Section 3.7 (Hydrology and Water Quality) of the Willowbrook TOD Specific Plan Final EIR, the Central Groundwater Basin is recharged mainly by stormwater, imported water, and reclaimed water along the upper reaches of the San Gabriel River and the Rio Hondo via the San Gabriel River Water Conservation System., which is located several miles away from the project site. Therefore, the proposed project would not reduce the groundwater recharge potential of the Central Groundwater Basin, and a less-than-significant impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of a Federal 100-year flood hazard area or County Capital Flood floodplain; the alteration of the course of a stream or river; or through the addition of impervious surfaces, in a manner which would:

(i) Result in substantial erosion or siltation on- or off-site?

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Less-Than-Significant Impact with Mitigation Incorporated. No streams or rivers are located in the vicinity of the project site. Existing surface water drainage from the project site generally flows towards the south. The proposed project would not alter existing drainage patterns in a manner that would result in erosion or flooding or increase stormwater runoff that would likely exceed existing storm drain capacity or increase pollutants in stormwater runoff. During construction, on-site soils would temporarily be exposed to surface water runoff; however, the proposed project would be required to comply with local, state, and federal regulations and standards related to minimizing potential erosion. It would also be required to implement BMPs from the County Department of Public Works. Compliance with construction-related BMPs would limit any potential surface water runoff in order to control and minimize erosion and siltation.

Upon completion of the proposed project, the project site would continue to be covered with a similar amount of impervious surfaces and drainage patterns would continue to be similar to existing conditions. The proposed project would be required to comply with the County's LID standards (County of Los Angeles Code of Ordinance Title 12, Chapter 12.84) to reduce the effects of stormwater runoff from development and to reduce erosion. Mitigation Measure **HW-1** would require the applicant to implement stormwater quality

²² Geotechnologies, Inc., *Geotechnical Engineering Investigation: Proposed CDU and APLA Health Unit*, October 30, 2019.

control measures to ensure that the proposed project complies with the County's LID standards. Mitigation Measure **HW-2** would require the applicant to prepare a hydrology study to show that the proposed development would not increase stormwater runoff from existing conditions. Therefore, the proposed project would not substantially alter the existing drainage pattern of the project site in a manner that would result in substantial soil erosion or siltation. Impacts related to erosion or siltation would be less than significant with implementation of mitigation measures.

(ii) Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite?

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Less-Than-Significant Impact with Mitigation Incorporated. The proposed project does not involve any construction activities that would alter existing drainage patterns on the project site, and drainage patterns on the project site would continue to remain similar to existing conditions during operations of the proposed project. Additionally, the project site would continue to be covered with a similar amount of impervious surfaces as existing conditions.

Runoff from the project site currently discharges to existing storm drains in the surrounding streets. During proposed project operations, stormwater runoff would continue to be directed into existing storm drains that currently receive surface water runoff from the project site. The amount of stormwater runoff from the project site is expected to be similar to the existing conditions. The proposed project would be required to comply with the County's LID standards. Mitigation Measure **HW-1** would require the applicant to implement stormwater quality control measures to ensure that the proposed project complies with the County's LID standards. Mitigation Measure **HW-2** would require the applicant to prepare a hydrology study to show that the proposed development would not increase stormwater runoff from existing conditions. These mitigation measures would ensure that the proposed project would not affect the existing drainage pattern in a manner that would result in on- or off-site flooding. Therefore, impacts would be less than significant with implementation of mitigation measures.

(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

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Less-Than-Significant Impact with Mitigation Incorporated. As discussed in Response to Checklist Questions 10c.i and 10c.ii, the proposed project would not alter existing drainage patterns and would not increase the amount of stormwater runoff compared to existing conditions. The proposed project would, therefore, not increase runoff water so as to exceed the capacity of existing or planned stormwater drainage systems.

With regards to polluted runoff, the proposed project would be required to comply with all federal, state, and local regulations related to water quality standards and wastewater discharge, including construction-related BMPs from the County Department of Public Works to limit the amount of polluted runoff that would enter the stormwater drainage system. Compliance with applicable regulations and policies, including the construction-related BMPs from the County Department of Public Works, would ensure that impacts related to the capacity of the City's existing storm drain system, the generation of polluted runoff, impede or redirection of runoff would be less than significant during construction. Furthermore, operations of the proposed project would not require the alteration of the existing drainage system or installation of a new drainage system. The amount of stormwater runoff that enters the existing stormwater drainage system would be similar to existing conditions, and the proposed project would be required to comply with the County's LID standards. Mitigation Measure **HW-1** would require the applicant to implement stormwater quality control measures to ensure that the proposed project complies with the County's LID standards. Mitigation

Measure **HW-2** would require the applicant to prepare a hydrology study to show that the proposed development would not increase stormwater runoff from existing conditions. These mitigation measures would ensure that the proposed project would not increase stormwater runoff from existing conditions. Therefore, impacts related to exceeding existing storm drain capacities or polluted runoff would be less than significant with implementation of mitigation measures.

(iv) Impede or redirect flood flows which would expose existing housing or other insurable structures in a Federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?

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No Impact. A significant impact would occur if the proposed project would substantially alter the drainage pattern in a manner that would impede or redirect flood flows. The project site is designated as Zone X (Area of Minimal Flood Hazard) by the Federal Management Agency (FEMA) and, thus is not subject to flooding from the 100-year or 500-year flood.²³ It is also not located on a County Capital Flood floodplain (i.e., 50-year flood hazard area).²⁴ With implementation of the proposed project, drainage patterns, the amount of runoff, and the amount of impervious surfaces would remain similar existing conditions. As discussed in Response to Checklist Questions 10a and 10c.i, the proposed project would be required to comply with construction-related BMPs from the County Department of Public Works. Compliance with construction-related BMPs from the County Department of Public Works would control and limit the amount of runoff that would enter the stormwater drainage system during construction activities. The proposed project would not alter the project site's drainage patterns in a manner that would impede or redirect flood flows. Therefore, impacts related to the alteration of drainage patterns that would impede or redirect flood flows would be less than significant.

d) Otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?

☐ ☐ ☐ ☒

No Impact. As discussed in Response to Checklist Question 10c.iv, the project site is not located within 100-year flood hazard or County Capital Flood floodplain areas. Therefore, flood proofing and flood insurance would not be required for the proposed project, and no impact would occur.

e) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84)?

☐ ☒ ☐ ☐

Less Than Significant Impact with Mitigation Incorporated. With implementation of the proposed project, drainage patterns, the amount of runoff, and the amount of impervious surfaces would remain similar to existing conditions. Construction and operation of the proposed project would be required to comply with the County Department of Public Works Construction Site BMPs Manual, which would minimize stormwater runoff, pollutant loadings from impervious surfaces, erosion, and other impacts on drainage systems. In addition, the proposed project would implement the County's LID standards. Mitigation Measure **HW-1** would require the applicant to implement stormwater quality control measures to ensure that the proposed project complies with the County's LID standards. This mitigation measure would ensure that the proposed

²³ Federal Emergency Management Agency, *Flood Hazard Map Service Center*, <https://msc.fema.gov/portal/search?AddressQuery=1731%20e%20120th%20st%2C%20los%20angeles#searchresultsanchor>, accessed March 2021.

²⁴ Los Angeles County Department of Public Works, *Flood Zone Determination Website*, <https://pw.lacounty.gov/floodzone/>, accessed March 2021.

project would not conflict with the County's LID Ordinance. Therefore, impacts would be less than significant with implementation of mitigation measure.

f) Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)?

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No Impact. The proposed project would connect to and utilize existing Los Angeles County wastewater collection and treatment system. Although the proposed project is considering the installation of below-grade filtration tanks to collect and treat stormwater runoff and wastewater, no streams, lakes, or drainage courses are located near the project site. The proposed project is considering the installation of below-grade filtration tanks to collect and treat stormwater runoff and wastewater as a sustainable element to achieve LEED Gold equivalent level. The potential installation of below-grade filtration tanks is not expected to reach close to the groundwater levels below the project site, which has been identified at a depth of approximately 19 feet below the existing grade on the project site.²⁵ Therefore, no impact would occur.

g) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

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No Impact. A tsunami is a sea wave produced by a significant undersea disturbance. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, or lake. The project site is located approximately 10 miles east of the Pacific Ocean and is not within a coastal zone or tsunami inundation area. Additionally, the project site is not located near a body of water that is large enough to create a seiche during a seismic event.

As discussed in Response to Checklist Question 10c.iv, the project site is not subject to flooding from a County Capital, 100-year, or 500-year flood. With implementation of the proposed project, drainage patterns and the amount of impervious surfaces would remain similar to existing conditions. The project site is relatively flat and is not located within a flood hazard zone. Therefore, no impact would occur.

h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would conflict with or obstructs implementation of a water quality control plan or sustainable groundwater management plan, which would occur if the proposed project discharged water that does not meet the quality standards of agencies that regulate surface water quality and water discharge into storm water drainage systems or did not comply with all applicable regulations as governed by the Regional Water Quality Control Board. The project site is located in the Los Angeles River watershed, which is regulated by the Los Angeles Regional Water Quality Control Board (LARWQCB). Water quality standards for the Los Angeles region, including the Los Angeles River watershed, are set forth in the Water Quality Control Plan: Los Angeles Region Basin Plan (Basin Plan), which was last updated in 2014. The Basin Plan establishes water quality objectives to protect the valuable uses of surface waters and groundwater within the Los Angeles region. Under Section 303(d) of the Clean Water Act, the Basin Plan is intended to protect surface waters and groundwater from both point and nonpoint sources of pollution within the Los Angeles region and identifies water quality standards and objectives that protect the beneficial uses of various waters. In order to meet the water quality objectives established in the Basin Plan, LARWQCB established total maximum daily loads, which are implemented

²⁵ Geotechnologies, Inc., *Geotechnical Engineering Investigation: Proposed CDU and APLA Health Unit*, October 30, 2019.

through stormwater permits. As discussed in Response to Checklist Question 10a, the proposed project would be required to comply with applicable regulations associated with water quality, construction-related BMPs that are part of the County's NPDES permit, the County's LID standards, and requirements of the County's MS4 permit. Compliance with these regulations would ensure that the proposed project would be consistent with the Basin Plan.

The project site lies in the Coastal Plain of Los Angeles – Central Groundwater Basin. The Sustainable Groundwater Management Act requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or alternatives GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. The project site is located in a very low-priority basin and, to date, no sustainable groundwater management plan has been developed for this groundwater basin.²⁶ The proposed project would comply with all applicable regulations associated with surface water quality, and the proposed project would not conflict with or obstruct implementation of the Basin Plan. Therefore, impacts related to water quality control plans or sustainable groundwater management plans would be less than significant.

MITIGATION MEASURES

HW-1 The applicant shall implement stormwater quality control measures that are consistent with the County's LID standards (County of Los Angeles Code of Ordinance Title 12, Chapter 12.84) to reduce stormwater runoff. The measures shall be reviewed and approved by the Los Angeles County Public Works Department during the building permit application phase.

HW-2 The applicant shall prepare a hydrology study to show that the proposed development will not increase stormwater runoff from existing conditions. The hydrology study shall be submitted to the Los Angeles County Public Works Department for review and approval during the building permit application phase.

²⁶ California Department of Water Resources, *SGMA Basin Prioritization Dashboard*, <https://gis.water.ca.gov/app/bp-dashboard/final/>, accessed March 2021.

11. LAND USE AND PLANNING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Physically divide an established community? ☐ ☐ ☐ ☒

No Impact. A significant impact would occur if the proposed project were sufficiently large or configured in such a way that would create a physical barrier within an established community. The proposed project would construct a five-story building and a student-oriented central courtyard on the CDU campus. A parking structure would be constructed at the existing CDU parking facility on 118th Street to accommodate the proposed project. A new driveway approach would be constructed on 117th Street to allow for the continued use of the parking facility during construction. Upon completion of construction, the driveway approach on 117th Street would remain, and the parking facility would have entrances on 117th Street and 118th Street. The central courtyard would link the proposed building to the existing CDU campus, and the existing access road on the west side of the project site would be maintained. It would continue to provide access and support to the project site, the multi-family residential complex north of the project site, and King Drew Magnet High School of Medicine and Science west of the project site. The proposed project does not include any features that would physically divide the community. No street closures would result with implementation of the proposed project, and the proposed project would not block access to or through the community. Pedestrian access would be maintained on the sidewalks along the public roads surrounding the project site. Access to all uses would not be disrupted. Therefore, no impact would occur.

b) Cause a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ☐ ☐ ☒ ☐

Less-Than-Significant Impact. A significant impact would occur if the proposed project conflicts with the Willowbrook TOD Specific Plan in a manner that would result in a significant environmental impact. The project site is zoned Specific Plan (SP) and is located within the Drew Educational Specific Plan Zone of the Willowbrook TOD Specific Plan area. The proposed project would be required to comply with the development standards contained within the Drew Educational Specific Plan Zone, including but not limited to height limit, setback, FAR, landscaping, and parking requirements. As discussed in Response to Checklist Question 1c, the proposed project would exceed the maximum allowable FAR of 1.5 for the Drew Educational Specific Plan Zone and would require the Los Angeles County Department of Regional Planning approval to construct a building that would have an FAR of 2.15. Upon approval from the Los Angeles County Department of Regional Planning to increase its FAR from 1.5 to 2.15, the proposed project would not conflict with applicable regulations. The increase in FAR to 2.15 would be consistent with the 2.5 FAR for the Martin Luther King, Jr. Medical Campus south of the project site and, as discussed in this Initial Study, is not expected to result in a significant environmental impact. Therefore, with Los Angeles County Department of Regional Planning approval of the proposed FAR increase, impacts related to plans, policies, and zoning designations would be less than significant.

c) Conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas?

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No Impact. Hillside Management Areas (HMAs) are defined as areas with 25 percent or greater natural slopes. The project site is not located within a Hillside Management Area.²⁷ As discussed in Response to Checklist Question 4f, the project site is not located within an SEA. Therefore, no impact would occur.

²⁷County of Los Angeles Department of Regional Planning, *GIS-Net Public*, https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public, accessed June 2021.

12. MINERAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. A significant impact would occur if the proposed project would result in the loss of availability of known mineral resources of regional value and residents of the state, or result in the loss of a locally important mineral resource recovery site. According to the California Department of Conservation Generalized Mineral Land Classification Map, the project site is located in an area where no significant mineral deposits are present.²⁸ Additionally, the Mineral Resources map from the County's General Plan Conservation and Natural Resources Element does not identify the project site as being located within a Mineral Resource Zone or an area with oil and gas resources.²⁹ The project site is not located near any oil fields, and no oil extraction and/or quarry activities have historically occurred on or are presently conducted on the project site. The proposed project does not involve any mineral, oil, or gas extracting activities. Therefore, the proposed project would not result in the loss of availability of any known regionally valuable or locally important mineral resource, and no impact would occur.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. See Response to Checklist Question 12a.

²⁸ California Department of Conservation, *Generalized Mineral Land Classification of Los Angeles County – South Half*, 1994.

²⁹ Los Angeles County, *Los Angeles County General Plan 2035, Chapter 9 Conservation and Natural Resources Element Figure 9.6 Mineral Resources*, 2015.

13. NOISE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. Sound is technically described in terms of the loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear.

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and a 10-dBA increase is subjectively heard as a doubling in loudness. Noise levels decrease as the distance from the noise source to the receiver increases. Noise levels generated by a stationary noise source, or “point source,” will decrease by approximately 6 dBA over hard surfaces (e.g., pavement) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet over hard surface from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise levels generated by a mobile source will decrease by approximately 3 dBA over hard surfaces for each doubling of the distance.

This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL) and Equivalent Noise Level (Leq). CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. Because CNEL accounts for human sensitivity to sound, the CNEL is always a higher number than the actual 24-hour average. Leq is the average noise level on an energy basis for any specific time period. The Leq for one hour is the average energy noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. Leq can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Summary of Applicable Noise Regulations/Standards

The Noise Ordinance for the County (Chapter 12.08 of the Los Angeles County Municipal Code) establishes noise standards to control unnecessary, excessive, and annoying noise and vibration in the County. Section 12.08.440 of the Noise Ordinance prohibits the operation of any tools or equipment used between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, that creates a noise disturbance across a residential or commercial real-property line. The only exceptions would be emergency work or public safety projects (Section 12.08.0570, part 5, exemption H, Public Health and Safety Activities) or by variance issued by the health officer. Section 12.08.440 of the Noise Ordinance establishes working hours and maximum levels of equipment noise that are allowable from both mobile and stationary equipment at affected uses in the County, as shown in **Table 7**.

TABLE 7: LOS ANGELES COUNTY CONSTRUCTION NOISE LIMITS (in dBA)			
Allowable Work Dates & Hours	Single-Family Residential	Multi-Family Residential	Semi-Residential/Commercial
MOBILE EQUIPMENT (LESS THAN 10 DAYS OF EQUIPMENT OPERATION)			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60	65	70
STATIONARY EQUIPMENT (MORE THAN 10 DAYS OF EQUIPMENT OPERATION)			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50	55	60
SOURCE: Los Angeles County Municipal Code, <i>Section 12.08.440 Construction Noise</i> , 1978.			

Section 12.08.390 of the Los Angeles County Noise Ordinance regulates operational noise with allowable noise limits within designated noise zones. The exterior standards are shown in **Table 8**. The Noise Ordinance also states that should the existing ambient noise level exceed the exterior noise standards, then the measured noise level shall become the new exterior noise standards.

TABLE 8: LOS ANGELES COUNTY EXTERIOR NOISE STANDARDS							
Noise Zone	Land Use	Time	Exceed 30 min/hr	Exceed 15 min/hr	Exceed 5 min/hr	Exceed 1 min/hr	Exceed at any time
I	Noise Sensitive	Anytime	45	50	65	60	65
II	Residential	10:00 p.m. to 7:00 a.m.	45	50	65	60	65
		7:00 a.m. to 10:00 p.m.	50	55	70	65	70
III	Commercial	10:00 p.m. to 7:00 a.m.	55	60	75	70	75
		7:00 a.m. to 10:00 p.m.	60	65	80	75	80
IV	Industrial	Anytime	70	75	90	85	90
SOURCE: Los Angeles County Municipal Code, <i>Section 12.08.390 Exterior Noise Standards</i> , 1978.							

Existing Noise Levels

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. Sensitive receptors within 500 feet of the project site include:

- King Drew Magnet High School located approximately 50 feet to the west of the proposed HPEB;
- Residences located approximately 50 feet to the northeast of the proposed parking structure on 118th Street;
- Residences located approximately 120 feet to the east of the proposed parking structure on 118th Street;
- Residences approximately 120 feet to the northwest of the proposed HPEB;
- Residences approximately 220 feet to the northeast of the proposed parking structure on 118th Street;

- Residences approximately 280 feet to the east of the proposed parking structure on 118th Street;
- Augustus F. Hawkins Mental Health Center approximately 300 feet to the southeast of the proposed HPEB; and
- Martin Luther King, Jr. Community Hospital approximately 400 feet to the south of the proposed HPEB.

To characterize the existing noise environment around the project site, short-term noise measurements were taken using a SoundPro DL Sound Level Meter on Friday, March 26, 2021, between 10:30 a.m. and 12:30 p.m. Short-term noise levels range from 53.7 to 67.4 dBA L_{eq} . Existing noise levels at the noise monitoring locations are shown in **Table 9**.

TABLE 9: EXISTING AMBIENT NOISE LEVELS (SHORT TERM MEASUREMENT)	
Noise Monitoring Location	Sound Level (dBA, L_{eq})
East 120 th St. and Healthy Wy. (Hospital)	63.6
1601 East 120 th St. (King Drew Magnet High School)	58.3
1629 East 118 th Pl. #49 (Residence)	53.7
11815 Compton Ave. (Residence)	67.4
1667 E. 118 th Pl. (School)	58.5
Noise monitoring information can be found in Appendix B. SOURCE: TAHA, 2021.	

Construction Noise Levels

The proposed project would be constructed in a manner typical of urban infill projects and would not require unusually noisy activities, such as pile driving. In addition, the proposed project would not require nighttime construction activities. Consistent with County Municipal Code Section 12.08.440, construction would occur between 7:00 a.m. to 7:00 p.m., which is designed to control noise exposure.

Construction activity would result in temporary increases in ambient noise levels in the area surrounding the project site on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. The most noise-intensive construction activities would occur during the early phases of construction (e.g., demolition, site preparation, and grading) as these construction phases would mostly occur outdoors. The majority of the latter phases of construction would occur within the newly constructed building, which would result in lower noise levels than exterior construction.

Typical noise levels from various types of equipment that may be used during each construction phase are shown in **Table 10**. Construction activities typically require the use of numerous pieces of noise-generating equipment. The noise levels shown in **Table 10** takes into account the likelihood that multiple pieces of construction equipment would be operating simultaneously and the typical overall noise levels that would be expected for each phase of construction. When considered as an entire process with multiple pieces of equipment, demolition activity would generate the loudest noise level (approximately 84.2 dBA L_{eq} at 50 feet).

TABLE 10: CONSTRUCTION EQUIPMENT NOISE LEVEL RANGES	
Construction Equipment	Noise Level at 50 feet (dBA, L_{eq})
DEMOLITION	
Concrete Saw	82.6
Backhoe	73.6
Dozer	77.7
Demolition Combined	84.2
SITE PREPARATION	
Grader	81.0
Backhoe	73.6
Dozer	77.7
Site Preparation Combined	83.2
GRADING	
Grader	81.0
Backhoe	73.6
Dozer	77.7
Grading Combined	83.2
BUILDING CONSTRUCTION	
Crane	72.6
Generator	77.6
Gradall	79.4
Backhoe	73.6
Welder	70.0
Building Construction Combined	82.9
PAVING	
Concrete Mixer	74.8
Paver	74.2
Roller	73.0
Backhoe	73.6
Paving Combined	80.0
ARCHITECTURAL COATING	
Air Compressor	73.7
Architectural Coating Combined	73.7
SOURCE: Federal Highway Administration, <i>Roadway Construction Noise Model, Version 1.1</i> , 2008.	

The proposed project would implement the following elements during construction:

- Power construction equipment would be equipped with noise shielding and muffling devices (consistent with manufacturers' standards).
- All equipment would be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.
- Temporary noise barriers (e.g., plywood structures or flexible sound control curtains) extending eight feet in height would be erected around the northern and western perimeter of the construction area for the proposed HPEB and around the easterly end of the construction area for the proposed parking structure.
- When possible, on-site electrical sources would be used to power equipment rather than diesel generators.

- Equipment would be turned off when not in use for more than five minutes, except for equipment that requires idling to maintain performance.
- Construction staging areas would be located away from residences and King Drew Magnet High School.
- Construction activities whose specific location on the project site may be flexible (e.g., operation of compressors and generators) would be conducted as far away as possible from residences and King Drew Magnet High School.
- A “noise disturbance coordinator” would be established and would be responsible for responding to local complaints about construction noise. The noise disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site would list the telephone number for the noise disturbance coordinator.

These elements would reduce construction noise levels at nearby sensitive receptors. Specifically, the use of noise shielding and muffling devices on power construction equipment would reduce engine noise, causing noise generated by these equipment to be reduced by at least 5 dBA.³⁰ The temporary noise barriers would reduce the noise during construction at nearby residences and at the King Drew Magnet High School by at least 10 decibels.

Table 11 presents the estimated noise levels at the sensitive receptors nearest to the project site with incorporation of the noise reducing elements listed above. As shown, construction noise levels would be below the County construction noise limits. Therefore, the proposed project would result in a less-than-significant impact related to construction noise. with implementation of the above noise-reducing features.

TABLE 11: CONSTRUCTION NOISE LEVELS						
Sensitive Receptors	Distance to Construction (Feet)	Existing Ambient Noise Level (dBA, L_{eq})	Construction Noise Level at 50 ft (dBA, L_{eq})	Construction Noise Level at Sensitive Receptor (dBA, L_{eq})	County Noise Limit	Exceed Limit?
HPEB						
King Drew Magnet High School to the west	50	58.3	69.2	69.2	70	No
Residences to the northwest	120	53.7	69.2	61.6	65	No
Augustus F. Hawkins Mental Health Center to the southeast	300	63.6	79.2	63.6	70	No
Martin Luther King, Jr. Community Hospital to the south	400	63.6	79.2	61.1	70	No
Residences to the west	590	67.4	79.2	48.8	60	No
PROPOSED PARKING STRUCTURE						
Residences to the northeast along E. 117 th St.	50	67.4	64.2	64.2	65	No
Residences to the east along E. 118 th St.	120	60.4	64.2	56.6	65	No
Residences to the northeast along E. 117 th St.	220	67.4	64.2	46.8	60	No
Residences to the east along E. 118 th St.	280	60.4	64.2	44.7	65	No
Noise level calculations can be found in Appendix B. SOURCE: TAHA, 2021.						

³⁰USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, Page 3, PB 206717, 1971

Operation Noise

Table 12 presents existing ambient noise levels for sensitive receptors near HPEB and the proposed parking structure, with County daytime noise standards. Based on Section 12.08.390 of the Noise Ordinance, the applicable noise standards for commercial and residential receptor properties are 60 dBA and 50 dBA, respectively, during the daytime hours of 7:00 a.m. to 10:00 p.m. The use of both HPEB and the proposed parking structure would primarily occur during daytime hours and, therefore, only daytime standards would be applicable. This section of the County Noise Ordinance also states that should the existing ambient noise level exceed their exterior noise standard, then the measured noise level shall become their new exterior noise standard. **Table 12** presents a comparison of measured ambient noise levels to the County Noise Ordinance's exterior noise standards to determine if the ambient noise level should become the new exterior noise standard.

TABLE 12: OPERATIONAL NOISE – LA COUNTY DAYTIME NOISE STANDARDS					
Sensitive Receptors	Distance to Construction (Feet)	Use	Existing Ambient Noise Level (dBA, L_{eq})	County Daytime Noise Standards Based on Use	Use Ambient Noise Level as Exterior Noise Standard?
HPEB					
King Drew Magnet High School to the west	50	Noise Sensitive	58.3	50	Yes
Residences to the northwest	120	Residential	53.7	50	Yes
Augustus F. Hawkins Mental Health Center to the southeast	300	Commercial	63.6	60	Yes
Martin Luther King, Jr. Community Hospital to the south	400	Commercial	63.6	60	Yes
Residences to the west	590	Residential	67.4	50	Yes
PROPOSED PARKING STRUCTURE					
Residences to the northeast along E. 117 th St.	50	Residential	67.4	50	Yes
Residences to the east along E. 118 th St.	120	Residential	60.4	50	Yes
Residences to the northeast along E. 117 th St.	220	Residential	67.4	50	Yes
Residences to the east along E. 118 th St.	280	Residential	60.4	50	Yes
SOURCE: TAHA, 2021.					

Stationary Noise Sources

Heating, Ventilation, and Air Conditioning (HVAC). The proposed HPEB would include several stationary sources of noise typical of commercial developments. Heating, ventilation, and air conditioning (HVAC) systems may generate unwanted noise in the project vicinity. HVAC equipment without muffling or enclosures typically generates a noise level of approximately 60 dBA at 50 feet. HVAC equipment for the proposed project would be located on the fifth floor of the proposed HPEB. The mechanical equipment for the proposed project would be placed on the roof behind parapet walls, which would reduce HVAC noise levels by 10 dBA or more, resulting in a noise level of approximately 50 dBA at 50 feet.

Table 13 presents anticipated HVAC equipment noise levels at each nearby sensitive receptor. Noise levels were assessed using Soundplan Essential Version 4.0, which is a noise modeling software that uses acoustical algorithms to calculate noise levels based on distance from source to receiver, type of source, and other variables. Estimated HVAC equipment noise at the HPEB would not exceed exterior noise standards at any nearby sensitive receptors. At the nearest sensitive receptor (King Drew High School), the estimated HVAC equipment noise level is 14.4 dBA below the existing ambient noise level, and 16.1 dBA below the exterior noise standard for the receptor's use. HVAC noise generated by the proposed project would not change the existing noise

environment and traffic noise would remain the dominant noise source. Therefore, the proposed project would result in a less-than-significant impact related to HVAC equipment noise.

TABLE 13: OPERATIONAL NOISE – HVAC EQUIPMENT NOISE LEVEL				
Sensitive Receptor	Existing Ambient Noise Level (dBA, L_{eq})	HVAC Equipment Noise Level (dBA, L_{eq})	Exterior Noise Standards (dBA)	Exceed Exterior Noise Standard?
King Drew Magnet High School to the west	58.3	43.9	58.3	No
Residences to the northwest	53.7	38.0	53.7	No
Augustus F. Hawkins Mental Health Center to the southeast	63.6	36.4	63.6	No
Martin Luther King, Jr. Community Hospital to the south	63.6	37.3	63.6	No
Residences to the west	67.4	33.4	67.4	No
Residences to the east along E. 118th St.	60.4	31.0	60.4	No
SOURCE: TAHA, 2021.				

Outdoor Gathering Spaces. The proposed HPEB includes ground floor and fifth floor outdoor gathering spaces that may produce stationary operational noise related to human speech. The ground floor includes an outdoor classroom amphitheater and an outdoor café seating area. The fifth floor contains two outdoor rooftop terraces with seating areas for students and faculty to gather. In social situations, people often talk at a distance of approximately 3 to 13 feet. A typical normal voice level of one person speaking at this distance is approximately 57.8 dBA L_{eq}.³¹

Based on the site plans, the ground floor outdoor classroom amphitheater and outdoor café seating area are anticipated to have 10 people speaking at a time for each space. The rooftop main terrace is anticipated to have 15 people speaking at a time. Facility users are anticipated to be dispersed throughout each area and would not present a single concentrated noise source. Furthermore, although approximate allowable occupancy for each area would be higher, it is not expected to be fully occupied at all times and every person in these gathering spaces would not speak at the same time and, thus, would not generate higher levels of conversational noise.

Noise levels generated by the three outdoor gathering spaces were assessed using Soundplan Essential Version 4.0, which is a noise modeling software that uses acoustical algorithms to calculate noise levels based on distance from source to receiver, type of source, and other variables. Predicted outdoor area noise levels are shown in **Table 14** by sensitive receptor. Noise levels generated by the outdoor gathering spaces are not anticipated to be audible above the existing ambient noise levels at each sensitive receptor. The existing ambient noise levels along 120th Street and Compton Avenue are 63.6 dBA and 67.4 dBA, respectively, which are well above the anticipated conversational noise level that would be received at each sensitive receptor (approximately 26.3 dBA or less dependent on the receptor). Conversational noise generated by the proposed project would not change the existing noise environment and traffic noise would remain the dominant noise source. Outdoor gathering space noise would not exceed the exterior noise standards. Therefore, the proposed project would result in a less-than-significant impact related to outdoor gathering space noise.

³¹Soundplan Essential 4.0.

TABLE 14: OPERATIONAL NOISE – OUTDOOR CONVERSATIONAL NOISE LEVEL

Sensitive Receptor	Existing Ambient (dBA, L _{eq})	Outdoor Noise Level (dBA, L _{eq}) /a,b/	Exterior Noise Standards (dBA)	Exceed Exterior Noise Standard?
King Drew Magnet High School to the west	58.3	0.0 /c/	58.3	No
Residences to the northwest	53.7	22.3	53.7	No
Augustus F. Hawkins Mental Health Center to the southeast	63.6	26.3	63.6	No
Martin Luther King, Jr. Community Hospital to the south	63.6	22.9	63.6	No
Residences to the west	67.4	0.0 /c/	67.4	No
Residences to the east along E. 118 th St.	60.4	20.0	60.4	No
/a/ Takes into account expected noise received by the ground floor cafe seating area, ground floor amphitheater, and rooftop terrace. /b/ Noise level calculated using Soundplan. /c/ Soundplan had indicated that outdoor operational noise would not contribute to noise levels at sensitive receptor. SOURCE: TAHA, 2021.				

Parking. Parking activity would also be a source of noise. Currently, the southern half of the existing parking facility on 118th Street, northeast of the proposed HPEB, is an outdoor surface parking lot while the northern half of the parking facility is a three-story parking structure. With implementation of the proposed project, this existing parking facility would extend the existing parking structure on the north side of the parking facility over to the existing surface parking lot on the south side of the parking facility to accommodate additional parking needs. The proposed parking structure would allocate 8 parking spaces for the proposed HPEB. Additionally, new entrance to the parking lot would be built along East 117th Street and would remain open throughout regular operations.

To the east of the proposed parking structure are primarily multi-family residences. In accordance with Section 12.08.390 of the County Noise Ordinance, the existing ambient noise levels of 67.4 dBA L_{eq} and 60.4 dBA L_{eq} at the residences on 117th Street³² and 118th Street, respectively, are used as their respective operational noise thresholds.

Sources of noise from the proposed parking structure would include engines accelerating, doors slamming, car alarms, and people talking. It is anticipated that vehicle speeds at the proposed parking structure would not exceed 10 miles per hour. Parking activity noise was calculated based upon a reference noise level of 56.4 dBA L_{eq} at 50 feet for a 1,000-parking space parking garage.³³ The noise level was adjusted using guidance provided by the Federal Transit Administration Transit Noise and Vibration Impact Assessment guidance and a maximum peak hour volume of 29 trips per hour, as estimated for the proposed project. The resultant noise level at 50 feet would be approximately 41.0 dBA L_{eq}. **Table 15** presents anticipated parking activity noise levels. Parking activity noise levels received at each sensitive receptor would be less than the existing noise levels of 60.4 dBA and 67.4 dBA found at 118th Street, and 117th Street, respectively, and would not exceed the exterior noise thresholds. Furthermore, noise levels from the proposed parking structure would be similar to the noise levels generated by the existing parking facility. Therefore, the proposed project would result in a less-than-significant impact related to parking noise.

³² A noise measurement was not taken on East 117th Street, but the measurement on Compton Avenue (67.4 dBA L_{eq}) would be similar to the existing noise level along East 117th Street due to proximity of the freeway.

³³Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

TABLE 15: OPERATIONAL NOISE – PARKING ACTIVITY

Sensitive Receptor	Distance (Feet)	Existing Ambient Noise Level (dBA, L _{eq})	Parking Activity Noise Level (dBA, L _{eq})	Exterior Noise Standards (dBA)	Exceed Exterior Noise Standard? (dBA, L _{eq})
Residences to the northeast along E. 117 th St.	50	67.4	41.0	67.4	No
Residences to the east along E. 118 th St.	120	60.4	33.4	60.4	No
Residences to the northeast along E. 117 th St.	220	67.4	23.6	67.4	No
Residences to the east along E. 118 th St.	280	60.4	21.5	60.4	No
SOURCE: TAHA, 2021.					

Combined Stationary Source Noise Analysis. During operation of the proposed project, the various stationary noise sources (HVAC noise, outdoor area noise, and parking activity noise) may combine to result in a higher noise level than produced alone. The use of both the HPEB and the proposed parking structure would primarily occur during the daytime and, therefore, only daytime standards would be applicable. Combined stationary source noise levels are shown in **Table 16**. As shown in the table, the daytime exterior noise standards at each sensitive receptor would not be exceeded by combined stationary source noises. Therefore, the proposed project would result in a less-than-significant impact related to combined stationary source noise.

TABLE 16: COMBINED STATIONARY SOURCE NOISE LEVELS

Sensitive Receptor	HVAC Equipment Noise Level (dBA, Leq) /a/	Outdoor Area Noise Level (dBA, Leq) /a/	Parking Activity Noise Level (dBA, Leq) /a/	Combined Noise Level (dBA, Leq)	County Standard		Exceed Standard?	
					Day	Night /b/	Day	Night /b/
HPEB								
King Drew Magnet High School to the west	43.9	0.0	0.0	43.9	60.0	N/A	No	N/A
Residences to the northwest	38.0	22.3	0.0	38.1	53.7	N/A	No	N/A
Augustus F. Hawkins Mental Health Center to the southeast	36.4	26.3	0.0	36.9	63.6	N/A	No	N/A
Martin Luther King Jr. Community Hospital to the south	37.3	22.9	0.0	37.5	63.6	N/A	No	N/A
Residences to the West	33.4	0.0	0.0	33.4	67.4	N/A	No	N/A
PROPOSED PARKING STRUCTURE								
Residences to the northeast along E. 117 th St.	0.0	0.0	41.0	41.0	67.4	N/A	No	N/A
Residences to the east along E. 118 th St. closest to the proposed project	31.0	0.0	33.4	35.4	60.4	N/A	No	N/A
Residences to the northeast along E. 117 th St.	0.0	0.0	23.6	23.7	67.4	N/A	No	N/A
Residences to the east along E. 118 th St.	0.0	0.0	21.5	21.6	60.4	N/A	No	N/A
/a/ The reference distance for each noise source is different depending on the distance between the noise source and the noise receptor. /b/ The proposed project would be operated during daytime hours and therefore only daytime standards would be applicable. N/A = Not applicable Noise level calculations can be found in Appendix B. SOURCE: TAHA, 2021.								

Vehicle Noise Sources on Roadways

The proposed project is anticipated to add 299 net daily trips to the local street system during weekdays, with 28 AM peak hour trips and 29 PM peak hour trips. Mobile noise was calculated using TNM 2.5 for existing conditions and existing plus project conditions. The proposed project's AM peak hour trips were added to the existing AM peak hour trips and the difference was calculated. **Table 17** shows modeled noise levels for existing conditions and existing conditions plus proposed project roadway noise levels for local roadways. **Table 18** shows modeled noise levels for the proposed project's opening year with and without the proposed project measured in dBA CNEL. The addition of project-related trips would result in a 0.1 to 0.3 dBA CNEL increase over existing conditions. During the opening year a maximum increase of 0.3 dBA CNEL would occur at 118th Street. Roadway noise increase attributed to the proposed project would be less than 3 dBA on the local roadway network and is not anticipated to result in a perceptible change in sound level for a person with normal hearing sensitivity or result in a 5 dBA CNEL or more increase. Therefore, the proposed project would result in a less-than-significant impact related to vehicle noise on roadways.

TABLE 17: ESTIMATED MOBILE SOURCE NOISE LEVELS (EXISTING CONDITIONS)

Roadway Segment	Estimated Noise Levels (dBA, CNEL)		
	Existing Conditions	Existing Conditions plus Project	Change
Compton Ave. north of 118 th St.	59.2	59.2	0.0
Compton Ave. between 118 th St. and 120 th St.	59.2	59.2	0.0
Wilmington Ave. north of 118 th St.	61.2	61.2	0.0
Wilmington Ave. between 118 th St. and 120 th St.	61.0	61.0	0.0
118 th St. east of Compton Ave.	49.7	50.0	0.3
118 th St. west of Wilmington Ave.	51.5	51.6	0.1
120 th St. east of Compton Ave.	60.4	60.4	0.0
120 th St. west of Wilmington Ave.	59.2	59.2	0.0
Noise level calculations can be found in Appendix B.			
SOURCE: TAHA, 2021.			

TABLE 18: ESTIMATED MOBILE SOURCE NOISE LEVELS (OPENING YEAR 2023)

Roadway Segment	Estimated Noise Levels (dBA, CNEL)		
	Opening Year No Project (2023)	Opening Year with Project (2023)	Change
Compton Ave. north of 118 th St.	59.2	59.2	0.0
Compton Ave. between 118 th St. and 120 th St.	59.2	59.3	0.1
Wilmington Ave. north of 118 th St.	61.2	61.2	0.0
Wilmington Ave. between 118 th St. and 120 th St.	61.0	61.0	0.0
118 th St. east of Compton Ave.	49.8	50.1	0.3
118 th St. west of Wilmington Ave.	51.6	51.7	0.1
120 th St. east of Compton Ave.	60.4	60.4	0.0
120 th St. west of Wilmington Ave.	59.2	59.2	0.0
Noise level calculations can be found in Appendix B.			
SOURCE: TAHA, 2021.			

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

☐☐☐☒

No Impact. As discussed in Response to Checklist Question 9e, the project site is not located within an airport land use plan and is approximately 2.3 miles away from the Compton/Woodley Airport, and the proposed project would not expose people residing or working in the area to excessive aircraft noise. No impact related to excessive airport noise would occur.

14. POPULATION AND HOUSING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. A potentially significant impact would occur if the proposed project would induce substantial population growth that would not have otherwise occurred as rapidly or in as great a magnitude. The proposed project does not include new housing and does not involve the extension of roads or other infrastructure. The proposed project would develop a five-story HPEB that would accommodate an additional 240 students and 25 new employees. No student housing is currently located on the CDU campus and the proposed project does not include any housing. CDU is a commuter school where approximately 70 percent of existing CDU students are from Los Angeles County and 15 percent are from the surrounding south Los Angeles area. While many of the future students and employees that may be generated as a result of the proposed project may already live in the surrounding area, some of the additional students and employees that would be generated from the new program may come from outside of the surrounding area or the broader Los Angeles County region. Some of the increase in student population may be temporary (i.e., students move to the area to attend school and would leave the area after finishing school), while other students may decide to stay in the area after completing their education program at CDU. With regards to the additional jobs generated by the proposed project, it is likely that the jobs would be filled to some extent by employees already residing in the vicinity of the project site or within Los Angeles County. However, it is possible that some of these jobs (e.g., faculty) would be filled by persons moving into the surrounding area or the broader Los Angeles County. As a result, the proposed project may induce some population growth from the increase in staff and students.

Between 2020 and 2030, SCAG forecasts population to increase by approximately 2,870 persons in the unincorporated Willowbrook community.³⁴ If all of the new students and employees are conservatively assumed to move from outside of the community, the increase in 265 people would still be within the SCAG population growth projections. The proposed project would be generally consistent with the nature of CDU and would not induce population growth beyond those that are already forecasted for the unincorporated Willowbrook community. As such, it is unlikely that the proposed project would induce substantial unplanned growth in the surrounding area.

If the additional students and employees generated by the proposed project were to move into the surrounding area, housing demand associated with the proposed project could increase. Nevertheless, it is anticipated that some of the demand would be filled by existing vacancies in the housing market and some from other new units in nearby developments. Therefore, given that the proposed project would not directly contribute to population growth in the area, the proposed project would not result in a notable increase in demand for new housing. Furthermore, as the project site is in a highly developed area with an established network of roads and the urban infrastructure, it would not require the extension of such infrastructure in a manner that would

³⁴ Southern California Association of Governments, 2016-2040 *Regional Transportation Plan/Sustainable Communities Strategy*, April 2016.

indirectly induce substantial population growth. Therefore, the proposed project would not induce substantial population or housing growth, and impacts related to population growth would be less than significant.

While construction of the proposed project would create temporary construction-related jobs, the work requirements of most construction projects are highly specialized so that construction workers remain at a job site only for the time in which their specific skills are needed to complete a particular phase of the construction process. Accordingly, construction workers associated with the proposed project would not be anticipated to relocate their household's place of residence as a consequence of working on the proposed project and, therefore, no new permanent residents are anticipated as a result of proposed project construction.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

☐☐☐☒

No Impact. The project site is currently developed with two modular buildings that are used for offices, maintenance, facilities support, security, and other administration support for CDU. No housing is currently located on the project site and implementation of the proposed project would not result in the displacement of people or housing. Therefore, no impact on displacement would occur.

15. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

☐
☐
☒
☐

Less-Than-Significant Impact. A significant impact would occur if the proposed project would result in the provision of or need for new or physically altered fire protection services, the construction and/or operation of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. Fire protection and emergency services for the project site are provided by the Los Angeles County Fire Department (LACFD) Station 41, located at 1815 East 120th Street, approximately 0.2 mile east of the project site.

Construction of the proposed project may generate traffic associated with the movement of construction equipment, removal of demolition materials and excavated soils, and construction worker trips. Although slow-moving construction-related vehicles, such as haul trucks, may be present along streets, such as 120th Street, emergency vehicles would be able to circumvent these slow-moving construction-related vehicles using sirens during emergencies. Previous construction activities on the CDU campus involved closing the north lane of 120th Street and utilizing the two-way left turn lane as a travel lane. Prior to construction, the County requires that the applicant prepare and submit a construction traffic management plan that addresses construction-related traffic and emergency access issues. Flag persons and/or detours would be provided as needed, and construction signs would be posted to advise motorists of reduced construction zone speed limits. The construction traffic management plan would provide measures to ensure that emergency vehicle access along 118th and 120th Streets are maintained and that access to LSCFD Station 41 and the Martin Luther King, Jr. Medical Campus is not restricted. The construction traffic management plan would be reviewed by the County to ensure that construction activities would not impede traffic and emergency access. The construction traffic management plan would ensure that any potential lane closures would not affect fire protection services. Therefore, emergency access would remain available along all surrounding streets.

Although the proposed project does not have a residential component, the proposed project would increase daytime population (through employees and students), which could increase demand on fire protection services. However, given that the proposed project serves an existing urban area with institutional, commercial, and residential uses, and given the project site's proximity to Fire Station 41, fire protection services to the project site is not expected to result in the need for new or physically expanded fire services in order to maintain acceptable response times, or other performance objectives.

Prior to construction of the proposed project, a plot plan and emergency evacuation plan would be submitted to LACFD for review. The proposed project would be required to implement all LACFD requirements and adhere to all relevant local and state requirements regarding fire safety. The project applicant would also be required to submit a fire safety plan, which verifies that LACFD requirements relative to access, fire flow, sprinklers, and evacuation plans have been satisfied. Compliance with LACFD requirements, as well as all

relevant local and state requirements, would ensure that the proposed project would not increase demand on fire protection services in a manner that would adversely affect LACFD service ratios, response times, or other performance objectives. Therefore, the proposed project would not result in a need for new or expanded fire protection facilities in order to provide adequate fire protection services. Impacts associated with fire protection services would be less than significant.

Sheriff protection?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would result in the provision of or need for new or physically altered sheriff protection services, the construction and/or operation of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. Sheriff protection services to the project site are provided by the Los Angeles County Sheriff Department Century Station, located at 11703 South Alameda Street in the City of Lynwood, approximately 0.9 mile east of the project site. In addition to the Century Station, CDU has a campus security program that provides security and campus safety officers on the campus.

As with fire protection services, slow-moving construction-related vehicles, such as haul trucks, may be present along streets, such as 120th Street. Sheriff vehicles would be able to circumvent these slow-moving construction-related vehicles using police sirens during emergencies. Additionally, the perimeter of the construction area would be fenced during construction. The County would require the applicant to prepare and submit a construction traffic management plan that addresses construction-related traffic and emergency access issues. The construction traffic management plan would be reviewed by the County to ensure that any potential lane closures during construction would not affect sheriff protection services. Emergency access would remain available along all surrounding streets.

Once constructed, sheriff protection services from the County Sheriff Department Century Station would be supplemented by the CDU campus security program, similar to existing conditions. The CDU campus security program includes full-time security officers, campus safety officers, marked emergency evacuation routes, emergency call boxes, and security cameras. CDU campus security would reduce demand for sheriff services, the need to deploy additional officers, and/or increased patrols within the vicinity of the project site. As a result, the proposed project is not anticipated to increase sheriff protection services in a manner that would cause the County Sheriff Department to construct a new sheriff station or expand the existing Century Station to maintain its level of service. Any potential increase in sheriff protection services would be met by the campus security and safety officers, along with deployment of additional officers from Century Station and/or increased patrols within the project site vicinity. The proposed project would not result in a need for new or expanded law enforcement facilities in order to provide adequate sheriff protection services. Therefore, impacts associated with sheriff protection services would be less than significant.

Schools?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would induce substantial employment or population growth, which could increase demand for school facilities that would exceed the capacity of the school, necessitating a new school or physical alteration of an existing school, the construction of which would cause a significant environmental impact. The project site is located within the Compton Unified School District (CUSD) boundaries. The proposed project does not include any residential uses and would not result in direct generation of school-age students. While some future CDU students and employees may have school-aged children who attend CSUD or other nearby school districts (such as Los Angeles Unified School District), the number is expected to be negligible. Thus, the proposed project would not induce substantial population growth in a manner that would potentially increase student population at schools within the surrounding community. Nonetheless, pursuant to Section 65995 of the Government Code, the applicant for the proposed project would be charged impact fees to construct or reconstruct school facilities. Section 65995(h) of the California Government Code states that the payment of statutory fees "...is

deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization.” Therefore, impacts associated with school facilities would be less than significant.

Parks?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would induce substantial population growth resulting in the need for and/or the provision of new or physically altered parks, the construction of which would cause significant environmental impacts. The proposed project would construct a new HPEB on the existing CDU campus and a student-oriented central courtyard. It does not propose any residential uses. The proposed courtyard would provide students with an on-site open space area that serve the CDU student population. As discussed in Response to Question 14a, the proposed project would not induce substantial population growth and, consequently, would not contribute to a noticeable increase in demand on park and recreational facility. The proposed project would not accelerate the deterioration of existing parks and would not require the construction of additional or the expansion of existing recreational facilities. Therefore, impacts related to parks would be less than significant.

Libraries?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would result in substantial population growth resulting in the need for and/or the provision of new or physically altered libraries, the construction of which would cause significant environmental impacts. The proposed project would be located on the existing CDU campus, which is served by the on-campus CDU library. As discussed in Response to Checklist Question 14a, no residential uses are proposed, and the proposed project is not expected to cause an influx of people to move to the area. As the proposed project would be served by the CDU library and would not induce substantial population growth, the proposed project would not contribute to a noticeable increase in demand for existing public library facilities and would not require the construction of a new or expansion of an existing public library facility. Therefore, impacts to libraries would be less than significant.

Other public facilities?

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would result in substantial employment or population growth that could generate a demand for other public facilities, including public roads, transit, and utilities, that would exceed the capacity available to serve the project site, necessitating new or physically altered public facilities, the construction of which would cause significant environmental impacts. See Response to Checklist Questions 17a and 17b for a discussion of project-related demand on roads and transit. See Response to Checklist Question 19a for a discussion of project-related demand on utilities. As discussed, the proposed project would not require the construction of new or physically altered roads, transit services, and utilities. Therefore, impacts to other public facilities would be less than significant.

16. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. As discussed in Response to Checklist Question 3.15a (Parks), the proposed project would construct a new HPEB, a student-oriented central courtyard, and a parking structure. It does not propose any residential uses. The proposed courtyard would provide students with an on-site open space area that serve the CDU student population. As discussed in Response to Checklist Question 14a, the proposed project would not induce substantial population or employment growth and, consequently, would not accelerate the deterioration of existing parks and would not require the construction of additional or the expansion of existing recreational facilities. Therefore, a less-than-significant impact is anticipated.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-Than-Significant Impact. The proposed project would construct a student-oriented central courtyard. The environmental effects associated with the proposed courtyard are evaluated as part of the proposed project in this Initial Study and is not expected to result in an adverse physical effect on the environment. As discussed in Response to Checklist Questions 15a (Parks) and 16a, the proposed project would not induce substantial population or employment growth and, consequently, would not accelerate the deterioration of existing parks and would not require the construction of additional or the expansion of existing recreational facilities. Therefore, impacts on recreational facilities would be less than significant.

c) Would the project interfere with regional trail connectivity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. Due to the location of the proposed project within an urbanized area and that no regional trails are located within the vicinity of the project site, the proposed project would not interfere with regional trail connectivity. Therefore, no impact would occur.

17. TRANSPORTATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. A significant impact would occur if the proposed project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The project site is governed by the Willowbrook TOD Specific Plan and the Los Angeles County Bicycle Master Plan.

Willowbrook TOD Specific Plan

The Willowbrook TOD Specific Plan is intended to facilitate the transformation of the area around the Metro Willowbrook/Rosa Parks Station into a vibrant TOD, while strengthening its connections to the adjacent residential neighborhoods and the rest of the Willowbrook community. The Specific Plan aims to improve access to all modes of transportation, including transit, walking, and bicycling. The Specific Plan establishes zoning for parcels within the Specific Plan boundary, two of which are mixed-use zones to facilitate integrated commercial and residential development through optimal site planning and efficient use of land and to promote walking, bicycling, recreation, transit use, and community reinvestment. These mixed-use zones are situated north of 118th Street and east of Wilmington Avenue. The parking facility that would be expanded as part of the proposed project is located in one of the mixed-use zones, while the proposed HPEB would be located in the Drew Educational Specific Plan Zone.

The Specific Plan includes mobility strategies for the roadway network in the Specific Plan area, as well as for improving pedestrian, bicycle, and transit circulation. The overall goal for the Specific Plan area is to enhance connectivity and the ease of movements for non-automobile transportation modes, particularly pedestrians and bicyclists. One of the street enhancements identified in the Specific Plan, which has already been implemented, is to reduce the number of lanes on 120th Street between Compton Avenue and Wilmington Avenue from four to three lanes in each direction and to have no on-street parking. The Specific Plan also identifies 120th Street throughout the Specific Plan Area and 118th Street between Compton Avenue and Wilmington Avenue as key pedestrian routes. The Compton Avenue/118th Street and Compton Avenue/120th Street intersects are the nearest intersections to the project site where the Specific Plan proposes pedestrian-oriented intersection improvements, such as providing high visibility crosswalks, passive pedestrian detection and pedestrian push buttons for crosswalks, pedestrian countdown and audio signals, and advance stop lines to signalized intersection approaches. The proposed project does not include any components that would conflict with the circulation policies and actions contained within the Willowbrook TOD Specific Plan. The proposed project would not alter or change the lane configurations or roadway designations of any roadways. Additionally, the Class II bike lane along 120th Street and the sidewalks along 120th Street and 118th Street would continue to serve the project site and its surrounding area. The proposed project would not conflict with or preclude the transportation improvements identified in the Specific Plan.

The Specific Plan Programmatic Environmental Impact Report (EIR) included CDU with 49 multi-family housing units and 625 total students with 477,842 square feet of building space in the existing conditions, and 119 multi-family housing units and 1,450 students in 772,990 square feet of building space under future conditions, which would result in a net change of 70 multi-family dwelling units, 825 students, and 295,148

square feet of building space. Using the factors from the ITE Trip Generation 9th Edition, trip generation estimates were developed for the CDU Master Plan with adjustment factors appropriate for the CDU campus and a TOD area. The CDU portion of the Specific Plan was forecasted to generate 125 a.m. peak hour trips (4 percent of total Specific Plan a.m. peak hour trips) and 126 p.m. peak hour trips (3 percent of total Specific Plan p.m. peak hour trips). The Transportation Impact Analysis prepared for the proposed project, which is provided in Appendix C of this Initial Study, estimates that the proposed project would generate 28 net new a.m. peak hour trips and, 29 net new p.m. peak hour trips. The estimated peak hour trips for the proposed project would be well below the peak hour trips estimated for the CDU campus in the Specific Plan Programmatic EIR.

Section 3.12 (Transportation and Traffic) of the Specific Plan Programmatic EIR evaluated potential Specific Plan-related impacts at 66 study intersections, ten freeway segments, and ten freeway off-ramps that provide local and regional access to the traffic study area and define the extent of the boundaries for this traffic impact analysis. Investigations at these key locations were used to evaluate potential traffic-related impacts associated with build out of the proposed Specific Plan. The section also provided mitigation measures, where feasible, that would reduce potential impacts from build out of the proposed Specific Plan to be implemented by site specific development applications within the Specific Plan area prior to issuance of a grading permit. Agencies that would monitor the implementation of these mitigation measures include the Los Angeles County Department of Regional Planning, City of Compton, City of Los Angeles, and Caltrans. The proposed project does not include components that would interfere with the implementation of the mitigation measures contained in the Specific Plan Programmatic EIR.

Los Angeles County Bicycle Master Plan

The Los Angeles County Bicycle Master Plan designates a countywide network of bicycle paths, bicycle lanes, and bicycle routes in the vicinity of the Specific Plan area. Within the vicinity of the project site, the Bicycle Master Plan proposes a Class II bike route on 120th Street between Central Avenue and Wilmington Avenue and a Class III bike route on 119th Street between Wilmington Avenue and Mona Boulevard. The Bicycle Master Plan also identifies 120th Street between Central Avenue and Wilmington Avenue as a bicycle boulevard. Class II bike lanes are currently present along this segment of 120th Street, and the proposed project would not interfere with the operations of the bicycle lanes in the vicinity of the project site.

Summary

In summary, the proposed project would not conflict with policies and plans addressing the circulation system, including those that involve alternative transportation modes. The existing sidewalks along 120th Street and 118th Street; bus stops in proximity to the project site along Compton Avenue, Wilmington Avenue, and 120th Street; and Class II bike lane along 120th Street currently serve the project site and would continue to serve the project site with implementation of the proposed project. The proposed project does not include components that would alter or limit access to these transportation facilities. Therefore, a less-than-significant impact would occur.

**b) Conflict or be inconsistent with CEQA Guidelines
Section 15064.3, subdivision (b)?**

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Less-than-Significant Impact. A significant impact would occur if the proposed project would result in VMT that exceeds an applicable threshold of significance. As stated in CEQA Guidelines Section 15064.3(b)(1), land use projects that are within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor are generally presumed to cause a less-than-significant transportation impact. A major transit stop is defined by Public Resource Code Section 21064.3 as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. Additionally, the Southern California Association of

Governments defines a Transit Priority Area (TPA) as an area within one-half mile of a major transit stop that is existing or planned, including an existing rail transit station or bus rapid transit station or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during AM and PM peak commute periods.

The project site is located within one-half mile of an existing major transit stop and within a TPA as it is situated approximately 0.42 miles from the Willowbrook-Rosa Parks Station, which is served by Metro A (Blue) and C (Green) light rail lines and is also directly served by several bus lines via off-street bus loading bays. Section 3.1.2.3 (Proximity to Transit Based Screening Criteria) of the Los Angeles County Public Works Transportation Impact Analysis Guidelines states that if a project is located near a major transit stop or high-quality transit corridor, no further analysis is required and a less-than-significant determination can be made if the answers to the following questions is no:

- Does the proposed project have an FAR less than 0.75?
- Does the proposed project provide more parking than required by the County Code?
- Is the proposed project inconsistent with the SCAG RTP/SCS?
- Does the proposed project replace residential units set aside for lower income households with a smaller number of market-rate residential units?

The proposed project would have an FAR of 2.15. A total of 73 parking spaces would be allocated to the proposed project from the existing surface parking lot at the northeast corner of Compton Avenue and from the parking facility on 118th Street (between the former Abraham Lincoln Elementary School and the Park Water Company Well 19C property). The Willowbrook TOD Specific Plan and TOD Parking Reduction Overlay Zone set the parking requirements contained in Chapter 22.112 of the County of Los Angeles Code of Ordinances as the maximum parking standards for non-residential uses. The minimum parking standard for non-residential uses in the Willowbrook TOD Specific Plan and TOD Parking Reduction Overlay Zone is 40 percent of the maximum requirement. The maximum parking requirement for the proposed project, as required by Chapter 22.112 of the County of Los Angeles Code of Ordinances, is 181 spaces.³⁵ At 40 percent of the maximum parking requirement, the minimum parking requirement for the proposed project would be 73 parking spaces. The parking facilities are on the CDU campus and are less than 600 feet from the project site. The parking spaces that would be allocated to the proposed project would not be more than the amount required by the Willowbrook TOD Specific Plan and the TOD Parking Reduction Overlay Zone. Additionally, the proposed project does not involve any components that would be inconsistent with the SCAG RTP/SCS. The proposed project is consistent with the growth projections that were used for the SCAG RTP/SCS. No residential units are located on the project site and the proposed project would not remove any residential units. The answers to the above question is no and, thus, the proposed project meets the Los Angeles County Public Works Proximity to Transit Based Screening Criteria. No further analysis is required, and, the proposed project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

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No Impact. A significant impact would occur if the proposed project would introduce design features or incompatible uses that would increase hazards. The proposed project would construct a new five-story HPEB

³⁵ Los Angeles County Code of Ordinances Section 22.112.070 requires schools grade 7 and up to provide one space per classroom and one space per five persons. Additionally, offices are required to provide one space per 400 square feet. As the proposed project would provide 3500 instructional seats in lecture halls, classrooms, and simulation rooms; 12 classrooms; 30 simulation rooms; and 27,550 square feet of offices and space for student-related uses (such as study rooms and student lounge areas), the proposed project would be required to provide 181 parking spaces. .

with a student-oriented central courtyard that would connect to the existing CDU campus. The design of the proposed building and courtyard would be consistent with the existing structures and open space areas on the CDU campus and its surrounding area.

The proposed project would not introduce incompatible uses or include the construction of any new roads or the modification of any existing roads or pedestrian pathways that would result in an increase in hazards. The existing surface parking lot at the northeast corner of Compton Avenue and 118th Street would allocate 65 parking spaces to the proposed project. In addition, the parking facility on 118th Street (between the former Abraham Lincoln Elementary School and the Park Water Company Well 19C property) would be expanded. This expansion would include structured parking over the existing surface parking lot and would connect to the existing three-level parking structure on the north side of the parking facility. While the proposed HPEB would be located along 120th Street, it is anticipated that students and employees accessing the proposed building would use the current and future CDU parking facilities along 118th Street. Driveway access would be designed to ensure no hazardous design features related to vehicle and pedestrian mobility (e.g., sharp curves and line-of-sight obstructions) are included. The proposed project does not include components that would not increase hazards. Therefore, no impact related to hazards associated with design features or incompatible uses would occur.

d) Result in inadequate emergency access?

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Less-than-Significant Impact. A significant impact would occur if the proposed project would result in inadequate emergency access. The proposed project is not located along a disaster route. LAFD Station 41 is located within the same block as the project site, approximately 0.2 mile east of the project site. Additionally, the Martin Luther King, Jr. Medical Campus is located on the south side of 120th Street, directly south of the project site. Access to the Martin Luther King, Jr. Community Hospital emergency department is located along 120th Street.

Vehicular access to the proposed HPEB is via 120th Street, and a new driveway approach to the parking facility on 118th Street would be created on 117th Street. The new driveway approach on 117th Street would allow access to the existing parking structure during construction and would remain operational after construction activities on the parking facility site are completed. The new driveway approach would be designed in compliance with Los Angeles County requirements. Students and employees of the proposed project would use 117th Street and 118th Street to access the CDU parking facilities. The proposed project would not alter 118th Street or 120th Street. Additionally, the proposed project would not alter the existing shared access road on the project site. Adequate emergency access would be provided to the project site, and emergency access to the surrounding uses would be maintained.

Although previous construction activities on the CDU campus involved closing the north lane of 120th Street and utilizing the two-way left turn lane as a travel lane, any temporary lane closures that may result from proposed project construction would be addressed with a construction traffic management plan to ensure that access is not restricted. Additionally, the proposed project plans would be reviewed by the LACFD and would be required to comply with the emergency access requirements of the LACFD. Therefore, impacts related to emergency access would be less than significant.

18. TRIBAL CULTURAL RESOURCES

	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<i>Potentially Significant Impact</i>			

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or

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Less-Than-Significant Impact. A significant impact would occur if the proposed project would cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources. The project site was previously disturbed and developed, and the proposed project would not include substantial excavation, so native soils would not be disturbed. To date, no significant tribal cultural resources have been identified on the project site. A Sacred Lands File records search was conducted through the Native American Heritage Commission to identify whether the agency has any records of tribal cultural resources on the project site. Results of the records search was negative, indicating that the agency does not have any records that tribal cultural resources exist on the project site.³⁶ Additionally, as discussed in Response to Checklist Question 5a, the SCCIC records search results indicate that the project site does not have any built environment resources, California Points of Historical Interest, California Historical Landmarks, California Register of Historical Resources, and National Register of Historic Places.³⁷ Additionally, the project site is not listed or eligible for listing in the Los Angeles County Register of Landmarks and Historic Districts. Nevertheless, the project site is located in an area that has a history of Native American occupation, and tribal resources could be present.

In accordance with AB 52 requirements, the County Department of Regional Planning notified the California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project site on June 24, 2021. The Gabrieleno Band of Mission Indians - Kizh Nation (Tribe) responded to the consultation letter, and the County Department of Regional Planning met with the Tribe on October 28, 2021. As part of the tribal consultation, tribal representatives provided information regarding the Tribe's ancestral localities in the area surrounding the project site. Tribal representatives indicated that the project site is located in an area that is highly sensitive for tribal cultural resources due to its location near several trade routes, historical waterways, and tribal communities. Mitigation measures were provided by tribal representatives to avoid potentially significant effects on tribal cultural resources during grading/excavation activities. However, the mitigation measures were not included in this Initial Study because the project site is in an urbanized area, and the project site and its surrounding area have been disturbed by previous development. Historical aerial photographs reviewed as part of the Phase

³⁶ Native American Heritage Commission, Re: *Native American Tribal Consultation, Pursuant to the AB 52, Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Section 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Charles Drew University Health Professions Education Building Project, Los Angeles County*, December 21, 2021.

³⁷ South Central Information Center, Re: *Record Search Results for the Proposed Charles Drew University of Medicine and Science Health Professions Education Building at 1731 East 120th Street, Los Angeles*, August 20, 2021.

II Subsurface Investigation Report indicate that the project site and the surrounding area have been disturbed since the 1920s. In the 1920s, the project site and the surrounding area were developed with structures and agricultural operations that consists of fields and livestock. In the 1930s and 1940s, the project site and its surrounding area were developed with residential structures. Since the 1970s, the residential structures were demolished and structures associated with the CDU campus were constructed.

Construction of the proposed project would involve the removal of approximately three feet of fill material that was previously imported onto the project site. As discussed in Response to Checklist Question 9b, the fill material on the project site is contaminated and would be removed. Construction of the proposed project would not involve deep levels of excavation. Therefore, grading and excavation activities are not expected to disturb native soil and any undiscovered tribal cultural resources. A less-than-significant impact on tribal cultural resources would occur.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

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Less-Than-Significant Impact. See Response to Checklist Question 18a.

19. UTILITIES AND SERVICE SYSTEMS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. A significant impact would occur if the proposed project would require or result in the relocation or construction of new or expanded utility infrastructure, the construction or relocation of which could cause significant environmental effects. As discussed below, the proposed project would not require the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunications facilities. Therefore, less-than-significant impacts are expected.

Water

The County Department of Public Works operates and maintains the water system on the project site, and Liberty Utilities provides water service to the project site. The project site is in the Central Basin Municipal Water District (Central Basin) service area. According to the 2015 Urban Water Management Plan for the Central Basin, the Central Basin is projected to have a water surplus of 5,643 acre-feet (af) in 2025 and 6,498 in 2030 for an average year. For a single dry year, the Central Basin is projected to have a water surplus of 5,030 af in 2025 and 5,880 af in 2030. For multi-dry year, the Central Basin is projected to have a water surplus of 3,803 af in 2025 and 4,644 in 2030. The Central Basin would have sufficient water supply to meet its service area demands for normal, single-dry, and multiple-dry year conditions.³⁸

The proposed project would result in an increased water demand of approximately 8.6 af per year, which represents approximately 0.2 percent of the Central Basin's water supply surplus.³⁹ Water consumption would likely be lower because the proposed project would be required to implement water conservation measures to comply with Los Angeles County Green Building Standards and Water Efficient Landscape Ordinance, such as the incorporation of low-flow fixtures and use of water efficient landscaping. In addition, the project applicant is required by the County Department of Public Works to provide a "will service" letter to ensure that sufficient water capacity is available to serve the proposed project's projected water demands. As a result, the proposed project is not expected to significantly increase water demand in a manner that would require or result in the relocation or construction of new or expanded water facilities.

³⁸ Central Basin Municipal Water District, *2015 Urban Water Management Plan*, June 2016, available at https://wuedata.water.ca.gov/public/uwmp_attachments/7950879752/FINAL%20CBMWD%20UWMP%20June%202016.pdf, accessed March 2021.

³⁹ Based on the Los Angeles County Sanitation District wastewater generation rate of 20 gallons per day per students for a college/university. This generation rate is applied to the projected increase in students, faculty, and other employees as a result of the proposed project. Estimated water demand is assumed to be 120 percent of wastewater flows.

Wastewater

Wastewater generated by the proposed project would be treated at the Joint Water Pollution Control Plant (JWPCP). JWPCP treats an average of 260 million gallons of wastewater per day (mgd). It has a total permitted capacity of 400 million gallons of wastewater per day (mgd).⁴⁰ When the Los Angeles County Sanitation District (LACSD) wastewater generation rate of 20 gallons per day (gpd) per student for a college/university is applied to the projected increase in students, faculty, and other employees, implementation of the proposed project would result in the generation of approximately 5,300 gpd of wastewater, which represents less than 0.1 percent of the JWPCP remaining available treatment capacity.⁴¹ Wastewater generation by the proposed project would likely be lower since the proposed project would be required to implement water conservation measures from the County Green Building Standards. JWPCP would have adequate remaining available treatment capacity to accommodate the proposed project.

Sewer lines serving the project site are owned and maintained by Los Angeles County and LACSD. The Willowbrook TOD Specific Plan does not identify any deficiencies in the existing sewer systems serving the project site and indicates that the sewers serving the project site are expected to remain below the sewage capacity even when additional development are constructed in the area. Thus, new or expanded wastewater treatment facilities would not be required, and impacts would be less than significant.

Stormwater Drainage

Existing stormwater runoff infrastructure on the project site conveys stormwater from the project site to the County storm drains and channels via curb and gutters. The amount of stormwater that flows into the existing storm drains are expected to be less than existing conditions since the proposed project would be designed to allow stormwater runoff to be collected and treated on-site. Any runoff that is not captured on-site would continue to be conveyed to the existing storm drains. Implementation of the proposed project would not result in a substantial increase in impervious surfaces. Grading and other construction activities are not expected to alter the drainage pattern of the project site and, thus, drainage patterns would continue to flow in a southerly direction, similar to existing conditions. Additionally, the proposed project would be required to comply with the County's LID Ordinance. LID uses site design and stormwater management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's pre-development hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. Accordingly, the proposed project would not cause a substantial increase in the peak flow rates or volumes that would exceed the drainage capacity of existing stormwater drainage facilities. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, and impacts would be less than significant.

Electrical

Southern California Edison (SCE) provides electricity for the project site. Electricity use associated with the proposed project includes interior and exterior lighting, HVAC systems, electronic equipment, machinery, refrigeration, appliances, and security systems. While energy use would increase with implementation of the proposed project, the proposed project would not be large enough to create an electricity system capacity problem and would not require the construction of new electrical facilities or the expansion of existing facilities. The proposed project would be subject to the County Green Building Standards to provide energy conservation measures, such as the use of high efficiency LED light fixtures. Additionally, the proposed building would be designed to achieve the LEED Gold equivalent level and implement energy conservation measures that includes rooftop photovoltaic panels and designing the proposed building to take advantage of natural light and daylighting strategies. Therefore, the proposed project is not expected to require or result in the relocation or construction of new or expanded electricity generation facilities, and impacts would be less than significant.

Natural Gas

Natural gas for the project site is supplied by the Southern California Gas Company. While natural gas consumption on the project site would increase with implementation of the proposed project, the proposed 92,618-square foot HPEB would not be large enough to create a capacity problem that would require the construction of new natural gas facilities or the expansion of existing facilities. Additionally, the proposed project would apply energy conservation measures to comply with the County Green Building Standards and to achieve the LEED Gold equivalent level. Therefore, impacts to natural gas facilities would be less than significant.

Telecommunications

General telephone and electronic lines provide telecommunication services to the project site. The proposed project would potentially require additions of new on-site telecommunications infrastructure to serve the new building. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. No upgrades to off-site telecommunications systems are anticipated to occur as a result of the proposed project. Any work that may affect services to the existing telecommunications lines would be coordinated with service providers and are not expected to cause significant environmental effects. Therefore, the proposed project is not expected to require or result in the relocation or construction of new or expanded telecommunications facilities, and impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

☐☐☒☐

Less-Than-Significant Impact. As discussed in Response to Checklist Question 19a, the proposed project would result in a water demand of approximately 2,800 gpd, or 1.8 million gallon per year. Water consumption would likely be lower because the proposed project would be required to incorporate numerous water saving strategies to reduce demand on the water supply system, including low-flow fixtures and water efficient landscaping. Sufficient water supplies would be available to serve the proposed project during normal, single dry, and multiple dry years. Additionally, as part of the application for development, the project applicant is required to provide proof of availability of adequate water facilities prior to building the proposed addition. Therefore, impacts related to water supplies would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

☐☐☒☐

Less-Than-Significant Impact. A significant impact would occur if the proposed project would increase wastewater generated that would exceed the capacity of the wastewater treatment provider's capacity to serve the project. As discussed in Response to Checklist Question 19a, wastewater generated by the proposed project is not expected to result in a wastewater system capacity problem as the proposed project would represent less-than-0.1 percent of the JWPCP remaining available treatment capacity. The proposed project does not contain any uses that would generate excessive demands on the sewer system or require the construction of additional wastewater treatment facilities. It is anticipated that the proposed project's wastewater demand would be met,

⁴⁰ Los Angeles County Sanitation Districts, *Wastewater Treatment Process at the JWPCP*, <https://www.lacsd.org/services/wastewater/wwfacilities/wwtreatmentplant/jwpcp/wwtreatmentprocessjwpcp.asp>, accessed February 2021.

⁴¹ Los Angeles County Sanitation Districts, *Table 1, Loadings for Each Class of Land Use*, <http://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3531>, accessed February 2021.

and no new entitlements or resources would be required to meet the proposed project's expected wastewater needs. Therefore, impacts related to wastewater would be less than significant.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

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Less-Than-Significant Impact. It is anticipated that solid waste from the proposed project would be hauled to Sunshine Canyon, as it is the closest Class III landfill that serves the unincorporated Los Angeles County. In 2017, the landfill received an average of 6,469 tons per day of waste. It has a maximum permitted daily capacity of 12,100 tons and a remaining permitted capacity of 68,036,429 tons.⁴² Assuming a solid waste generation factor of 3.67 tons per 100 students per year, the proposed project would generate approximately 8.8 tons per year, or 3,212 tons per day, of solid waste.⁴³ Solid waste generated by the proposed project would be within Sunshine Canyon's remaining daily permitted intake capacity. The Integrated Waste Management Act of 1989 (AB 939) requires jurisdictions to comply with waste reduction goals. The proposed project would be required to be in compliance with the California Integrated Waste Management Act of 1989 (AB 939), which requires 50 percent of solid waste generated by jurisdictions to be diverted away from landfills. The proposed project would not generate excess solid waste that would impair the County's attainment of solid waste diversion per AB 939. The proposed project would be adequately served by the County's solid waste provider and would comply with applicable regulations related to solid waste. Therefore, impacts related to solid waste would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

☐☐☒☐

Less-Than-Significant Impact. See Response to Checklist Question 19d.

⁴² Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan 2017 Annual Report*, April 2019, available at <https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=11230&hp=yes&type=PDF>, accessed March 2021.

⁴³ CalRecycle, *2014 Generator-Based Characterization of Commercial Sector Disposal and Diversion in California*, November 10, 2015.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The project site is not located in or near a state responsibility area or in a very high fire hazard severity zone (VHFHSZ), as identified by CalFire. The nearest fire hazard severity zone (including VHFHSZ) is located approximately 7.8 miles northwest of the project site. Additionally, as discussed in Response to Checklist Question 9f, the proposed project would have no impact related to emergency response plan or emergency evacuation plan.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. As discussed in Response to Checklist Question 20a, the project site is not located in or near a state responsibility area or in a VHFHSZ, and proposed project would not require any brush clearing, vegetation management, or fuel modification for these areas. Additionally, the project site and its surrounding area is relatively flat, and no slopes or hills are located in the vicinity of the project site. The proposed project would not exacerbate wildfire risks and, therefore, would not expose people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impacts would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. As discussed in Response to Checklist Question 20a, the project site is not located in or near a state responsibility area or in a VHFHSZ. The proposed project would adhere to relevant building design codes, including the state and County fire codes and would not require installation or maintenance of associated structures that may exacerbate fire risk or that may require in temporary or ongoing impacts to the environment. Therefore, no impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. As discussed in Response to Checklist Question 20a, the project site is not located in or near a state responsibility area or in a VHFHSZ. The project site and its surrounding area is relatively flat, and no slopes or hills are located in the vicinity of the project site. As a result, people or structures would not be exposed to significant post-wildfire risks. Therefore, no impact would occur.

e) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

☐☐☐☒

No Impact. As discussed in Response to Checklist Question 20a, the project site is not located in or near a state responsibility area or in a VHFHSZ. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-Than-Significant Impact. The project site is located within an urban area and has been previously disturbed. As discussed throughout this Initial Study, the proposed project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The project site does not contain any cultural resources and would not eliminate important examples of the major periods of California history or prehistory. Therefore, impacts are expected to be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	-------------------------------------	--------------------------	--------------------------

Less-Than-Significant Impact with Mitigation Incorporated. As discussed throughout this Initial Study, the proposed project would have less-than-significant impacts (with and without incorporation of mitigation measures) or no impacts. The environmental topic areas that were found to have no impact are not expected to cause the proposed project to make any contributions to potential cumulative impacts because a no impact conclusion means that the proposed project would have no contribution to that particular environmental topic area. Similarly, the environmental topic areas that were found to have a less-than-significant impact are not expected to cause the proposed project to significantly contribute to cumulative impacts since the proposed project's contribution to that particular environmental topic area is not large enough to contribute to significant cumulative impacts.

As discussed in Response to Checklist Question 9b, soils on the project site are contaminated. Implementation of Mitigation Measure **HM-1** would ensure that impacts related to the creation of hazards to the public or environment through the release of hazardous materials into the environment would be less than significant. The proposed project's effect on hazards would be reduced to a level that would not be cumulatively considerable.

As discussed in Response to Checklist Question 10c(i), 10c(ii), 10c(iii), and 10e, Mitigation Measures **HW-1** and **HW-2** would be implemented to ensure that the proposed project would not alter existing drainage patterns in a manner that would result in erosion, siltation, or flooding, and would not increase stormwater

runoff. Implementation of Mitigation Measures **HW-1** and **HW-2** would ensure that impacts related to hydrology and water quality would be less than significant. The proposed project's effect on hydrology and water quality would be reduced to a level that would not be cumulatively considerable.

Although related projects may be constructed in the surrounding area, the proposed project would not significantly contribute to cumulative impacts. The proposed project is not expected to have cumulative considerable effects on the environment and, therefore, the proposed project would not have impacts that are individually limited but cumulatively considerable. Impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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Less-Than-Significant Impact. As discussed throughout this Initial Study, the proposed project would have less-than-significant impacts (with and without incorporation of mitigation measures) or no impacts on the environment. As a result, the proposed project would not have the potential to result in substantial adverse direct and indirect effects on human beings. Impacts would be less than significant.

Appendix A

Air Quality, Energy, and Greenhouse Gas Calculations

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Charles Drew University Health Professionals Education Building**

Los Angeles-South Coast County, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4yr)	240.00	Student	1.08	100,000.00	0
Unenclosed Parking with Elevator	111.00	Space	0.89	44,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Uses

Construction Phase - Project Schedule

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Trips and VMT - Project Trips:

~ Demo = 4 loads/day

~ Grading = 8 loads/day

Demolition - Remove existing buildings (9,730 sq ft = 450 tons debris) & surface parking lot (38,700 sq ft = 860 tons debris).

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Excavate approximately 3 feet x 46,650 sq. ft.

Architectural Coating - SCAQMD Rule 1113 = 50 g/L building envelope

Vehicle Trips - 299 Daily Trips after 20% trip reduction credit for transit.

Area Coating - SCAQMD Rule 1113 = 50 g/L building envelope

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 Compliance

Area Mitigation - SCAQMD Rule 1113 Compliance is Standard (Not Mitigation)

Energy Mitigation - Project Description states solar panels will be installed on parking structure to provide 10% of total energy requirements.

Water Mitigation - LAGBC Compliance

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	200.00	415.00
tblConstructionPhase	NumDays	10.00	85.00
tblConstructionPhase	NumDays	10.00	85.00
tblConstructionPhase	PhaseEndDate	3/31/2023	4/7/2023
tblConstructionPhase	PhaseEndDate	4/6/2023	8/25/2023
tblConstructionPhase	PhaseEndDate	1/11/2024	3/28/2025
tblConstructionPhase	PhaseEndDate	1/25/2024	3/28/2025
tblConstructionPhase	PhaseEndDate	2/8/2024	3/28/2025
tblConstructionPhase	PhaseStartDate	4/1/2023	4/10/2023
tblConstructionPhase	PhaseStartDate	4/7/2023	8/28/2023
tblConstructionPhase	PhaseStartDate	1/12/2024	12/2/2024
tblConstructionPhase	PhaseStartDate	1/26/2024	12/2/2024

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblGrading	MaterialExported	0.00	5,200.00
tblLandUse	LandUseSquareFeet	44,111.39	100,000.00
tblLandUse	LotAcreage	1.01	1.08
tblLandUse	LotAcreage	1.00	0.89
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	PhaseName		Architectural Coating
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	HaulingTripNumber	130.00	200.00
tblTripsAndVMT	HaulingTripNumber	650.00	1,600.00
tblTripsAndVMT	VendorTripLength	6.90	12.00
tblTripsAndVMT	VendorTripLength	6.90	12.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	24.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	40.00
tblTripsAndVMT	WorkerTripNumber	61.00	300.00
tblTripsAndVMT	WorkerTripNumber	10.00	40.00
tblTripsAndVMT	WorkerTripNumber	12.00	40.00
tblVehicleTrips	ST_TR	1.30	1.25
tblVehicleTrips	WD_TR	1.56	1.25

2.0 Emissions Summary

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2023	1.8040	10.5731	21.1198	0.0521	3.5583	0.3545	3.9127	0.9483	0.3263	1.2747	0.0000	5,259.885 1	5,259.885 1	0.6609	0.1830	5,325.978 5
2024	12.6364	19.3994	36.4157	0.0820	4.5550	0.7322	5.2871	1.2150	0.6837	1.8987	0.0000	8,243.732 3	8,243.732 3	1.1745	0.2237	8,339.767 1
2025	12.4520	18.0705	35.5283	0.0807	4.5550	0.6413	5.1963	1.2150	0.5986	1.8136	0.0000	8,140.098 5	8,140.098 5	1.1653	0.2156	8,233.478 2
Maximum	12.6364	19.3994	36.4157	0.0820	4.5550	0.7322	5.2871	1.2150	0.6837	1.8987	0.0000	8,243.732 3	8,243.732 3	1.1745	0.2237	8,339.767 1

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					
2023	1.8040	10.5731	21.1198	0.0521	3.5583	0.3545	3.9127	0.9483	0.3263	1.2747	0.0000	5,259.885 1	5,259.885 1	0.6609	0.1830	5,325.978 5
2024	12.6364	19.3994	36.4157	0.0820	4.5550	0.7322	5.2871	1.2150	0.6837	1.8987	0.0000	8,243.732 3	8,243.732 3	1.1745	0.2237	8,339.767 1
2025	12.4520	18.0705	35.5283	0.0807	4.5550	0.6413	5.1963	1.2150	0.5986	1.8136	0.0000	8,140.098 5	8,140.098 5	1.1653	0.2156	8,233.478 2
Maximum	12.6364	19.3994	36.4157	0.0820	4.5550	0.7322	5.2871	1.2150	0.6837	1.8987	0.0000	8,243.732 3	8,243.732 3	1.1745	0.2237	8,339.767 1

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

[illegible]

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	2.2246	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818
Energy	0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012
Mobile	0.8020	0.8491	7.8251	0.0168	1.8914	0.0126	1.9039	0.5038	0.0117	0.5155		1,760.0614	1,760.0614	0.1233	0.0764	1,785.8999
Total	3.1058	1.5698	8.4660	0.0212	1.8914	0.0675	1.9588	0.5038	0.0666	0.5704		2,624.6023	2,624.6023	0.1401	0.0922	2,655.5829

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	2.2246	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818
Energy	0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012
Mobile	0.8020	0.8491	7.8251	0.0168	1.8914	0.0126	1.9039	0.5038	0.0117	0.5155		1,760.0614	1,760.0614	0.1233	0.0764	1,785.8999
Total	3.1058	1.5698	8.4660	0.0212	1.8914	0.0675	1.9588	0.5038	0.0666	0.5704		2,624.6023	2,624.6023	0.1401	0.0922	2,655.5829

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	3/6/2023	4/7/2023	5	25	
2	Grading	Grading	4/10/2023	8/25/2023	5	100	
3	Building Construction	Building Construction	8/28/2023	3/28/2025	5	415	
4	Paving	Paving	12/2/2024	3/28/2025	5	85	
5	Architectural Coating	Architectural Coating	12/2/2024	3/28/2025	5	85	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 50****Acres of Paving: 0.89****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 2,664 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Graders	1	6.00	187	0.41
Demolition	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Aerial Lifts	2	7.00	63	0.31
Building Construction	Cranes	1	6.00	231	0.29

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Rough Terrain Forklifts	2	7.00	100	0.40
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48
Architectural Coating	Aerial Lifts	2	4.00	63	0.31

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	3	20.00	2.00	200.00	14.70	12.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	40.00	2.00	1,600.00	14.70	12.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	300.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	40.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1213	0.0000	1.1213	0.1698	0.0000	0.1698			0.0000			0.0000
Off-Road	0.5525	6.1772	5.1743	0.0104		0.2457	0.2457		0.2261	0.2261		1,008.400 2	1,008.400 2	0.3261		1,016.553 7
Total	0.5525	6.1772	5.1743	0.0104	1.1213	0.2457	1.3671	0.1698	0.2261	0.3959		1,008.400 2	1,008.400 2	0.3261		1,016.553 7

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	0.0162	1.0899	0.2825	4.6800e-003	0.1400	6.6000e-003	0.1466	0.0384	6.3200e-003	0.0447		514.6700	514.6700	0.0283	0.0817	539.7327
Vendor	2.9800e-003	0.1221	0.0389	6.3000e-004	0.0222	6.6000e-004	0.0229	6.4000e-003	6.4000e-004	7.0400e-003		67.3749	67.3749	2.2400e-003	9.6600e-003	70.3091
Worker	0.0688	0.0493	0.6662	1.8700e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2400e-003	0.0605		191.8453	191.8453	5.1100e-003	4.9300e-003	193.4424
Total	0.0880	1.2614	0.9875	7.1800e-003	0.3858	8.6100e-003	0.3945	0.1041	8.2000e-003	0.1123		773.8902	773.8902	0.0356	0.0963	803.4842

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****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					0.4373	0.0000	0.4373	0.0662	0.0000	0.0662			0.0000			0.0000
Off-Road	0.5525	6.1772	5.1743	0.0104		0.2457	0.2457		0.2261	0.2261	0.0000	1,008.400 2	1,008.400 2	0.3261		1,016.553 7
Total	0.5525	6.1772	5.1743	0.0104	0.4373	0.2457	0.6831	0.0662	0.2261	0.2923	0.0000	1,008.400 2	1,008.400 2	0.3261		1,016.553 7

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	0.0162	1.0899	0.2825	4.6800e-003	0.1400	6.6000e-003	0.1466	0.0384	6.3200e-003	0.0447		514.6700	514.6700	0.0283	0.0817	539.7327
Vendor	2.9800e-003	0.1221	0.0389	6.3000e-004	0.0222	6.6000e-004	0.0229	6.4000e-003	6.4000e-004	7.0400e-003		67.3749	67.3749	2.2400e-003	9.6600e-003	70.3091
Worker	0.0688	0.0493	0.6662	1.8700e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2400e-003	0.0605		191.8453	191.8453	5.1100e-003	4.9300e-003	193.4424
Total	0.0880	1.2614	0.9875	7.1800e-003	0.3858	8.6100e-003	0.3945	0.1041	8.2000e-003	0.1123		773.8902	773.8902	0.0356	0.0963	803.4842

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5361	0.0000	0.5361	0.0582	0.0000	0.0582			0.0000			0.0000
Off-Road	0.6483	7.3405	5.5974	0.0121		0.2834	0.2834		0.2608	0.2608		1,168.614 0	1,168.614 0	0.3780		1,178.062 9
Total	0.6483	7.3405	5.5974	0.0121	0.5361	0.2834	0.8196	0.0582	0.2608	0.3189		1,168.614 0	1,168.614 0	0.3780		1,178.062 9

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	0.0325	2.1799	0.5649	9.3700e-003	0.2801	0.0132	0.2933	0.0768	0.0126	0.0894		1,029.340 0	1,029.340 0	0.0566	0.1635	1,079.465 4
Vendor	2.9800e-003	0.1221	0.0389	6.3000e-004	0.0222	6.6000e-004	0.0229	6.4000e-003	6.4000e-004	7.0400e-003		67.3749	67.3749	2.2400e-003	9.6600e-003	70.3091
Worker	0.1376	0.0986	1.3323	3.7500e-003	0.4471	2.7000e-003	0.4498	0.1186	2.4800e-003	0.1211		383.6907	383.6907	0.0102	9.8600e-003	386.8849
Total	0.1731	2.4006	1.9361	0.0138	0.7494	0.0166	0.7660	0.2018	0.0158	0.2175		1,480.405 5	1,480.405 5	0.0690	0.1830	1,536.659 3

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****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					0.2091	0.0000	0.2091	0.0227	0.0000	0.0227			0.0000			0.0000
Off-Road	0.6483	7.3405	5.5974	0.0121		0.2834	0.2834		0.2608	0.2608	0.0000	1,168.614 0	1,168.614 0	0.3780		1,178.062 9
Total	0.6483	7.3405	5.5974	0.0121	0.2091	0.2834	0.4925	0.0227	0.2608	0.2834	0.0000	1,168.614 0	1,168.614 0	0.3780		1,178.062 9

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	0.0325	2.1799	0.5649	9.3700e-003	0.2801	0.0132	0.2933	0.0768	0.0126	0.0894		1,029.340 0	1,029.340 0	0.0566	0.1635	1,079.465 4
Vendor	2.9800e-003	0.1221	0.0389	6.3000e-004	0.0222	6.6000e-004	0.0229	6.4000e-003	6.4000e-004	7.0400e-003		67.3749	67.3749	2.2400e-003	9.6600e-003	70.3091
Worker	0.1376	0.0986	1.3323	3.7500e-003	0.4471	2.7000e-003	0.4498	0.1186	2.4800e-003	0.1211		383.6907	383.6907	0.0102	9.8600e-003	386.8849
Total	0.1731	2.4006	1.9361	0.0138	0.7494	0.0166	0.7660	0.2018	0.0158	0.2175		1,480.405 5	1,480.405 5	0.0690	0.1830	1,536.659 3

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7363	8.5473	10.6366	0.0180		0.3280	0.3280		0.3018	0.3018		1,740.2200	1,740.2200	0.5628		1,754.2905
Total	0.7363	8.5473	10.6366	0.0180		0.3280	0.3280		0.3018	0.3018		1,740.2200	1,740.2200	0.5628		1,754.2905

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	0.0000
Vendor	0.0356	1.2860	0.4908	5.9700e-003	0.2050	6.2100e-003	0.2112	0.0590	5.9400e-003	0.0650		641.9850	641.9850	0.0214	0.0924	670.0515
Worker	1.0322	0.7398	9.9924	0.0281	3.3533	0.0202	3.3735	0.8893	0.0186	0.9079		2,877.6801	2,877.6801	0.0767	0.0740	2,901.6364
Total	1.0677	2.0258	10.4832	0.0341	3.5583	0.0264	3.5847	0.9483	0.0246	0.9729		3,519.6651	3,519.6651	0.0981	0.1664	3,571.6880

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7363	8.5473	10.6366	0.0180		0.3280	0.3280		0.3018	0.3018	0.0000	1,740.2200	1,740.2200	0.5628		1,754.2905
Total	0.7363	8.5473	10.6366	0.0180		0.3280	0.3280		0.3018	0.3018	0.0000	1,740.2200	1,740.2200	0.5628		1,754.2905

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	0.0000
Vendor	0.0356	1.2860	0.4908	5.9700e-003	0.2050	6.2100e-003	0.2112	0.0590	5.9400e-003	0.0650		641.9850	641.9850	0.0214	0.0924	670.0515
Worker	1.0322	0.7398	9.9924	0.0281	3.3533	0.0202	3.3735	0.8893	0.0186	0.9079		2,877.6801	2,877.6801	0.0767	0.0740	2,901.6364
Total	1.0677	2.0258	10.4832	0.0341	3.5583	0.0264	3.5847	0.9483	0.0246	0.9729		3,519.6651	3,519.6651	0.0981	0.1664	3,571.6880

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7045	8.0845	10.6027	0.0180		0.2970	0.2970		0.2732	0.2732		1,740.378 7	1,740.378 7	0.5629		1,754.450 6
Total	0.7045	8.0845	10.6027	0.0180		0.2970	0.2970		0.2732	0.2732		1,740.378 7	1,740.378 7	0.5629		1,754.450 6

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	0.0000
Vendor	0.0344	1.2886	0.4805	5.8700e-003	0.2050	6.2500e-003	0.2112	0.0590	5.9800e-003	0.0650		632.3659	632.3659	0.0215	0.0911	660.0488
Worker	0.9652	0.6605	9.3092	0.0273	3.3533	0.0194	3.3727	0.8893	0.0179	0.9072		2,818.619 6	2,818.619 6	0.0695	0.0688	2,840.844 5
Total	0.9996	1.9491	9.7897	0.0332	3.5583	0.0257	3.5839	0.9483	0.0238	0.9722		3,450.985 5	3,450.985 5	0.0909	0.1599	3,500.893 2

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7045	8.0845	10.6027	0.0180		0.2970	0.2970		0.2732	0.2732	0.0000	1,740.378 7	1,740.378 7	0.5629		1,754.450 6
Total	0.7045	8.0845	10.6027	0.0180		0.2970	0.2970		0.2732	0.2732	0.0000	1,740.378 7	1,740.378 7	0.5629		1,754.450 6

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	0.0000
Vendor	0.0344	1.2886	0.4805	5.8700e-003	0.2050	6.2500e-003	0.2112	0.0590	5.9800e-003	0.0650		632.3659	632.3659	0.0215	0.0911	660.0488
Worker	0.9652	0.6605	9.3092	0.0273	3.3533	0.0194	3.3727	0.8893	0.0179	0.9072		2,818.619 6	2,818.619 6	0.0695	0.0688	2,840.844 5
Total	0.9996	1.9491	9.7897	0.0332	3.5583	0.0257	3.5839	0.9483	0.0238	0.9722		3,450.985 5	3,450.985 5	0.0909	0.1599	3,500.893 2

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6620	7.5369	10.5558	0.0180		0.2609	0.2609		0.2400	0.2400		1,740.793 9	1,740.793 9	0.5630		1,754.869 1
Total	0.6620	7.5369	10.5558	0.0180		0.2609	0.2609		0.2400	0.2400		1,740.793 9	1,740.793 9	0.5630		1,754.869 1

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	0.0000
Vendor	0.0333	1.2826	0.4718	5.7600e-003	0.2050	6.2700e-003	0.2113	0.0590	6.0000e-003	0.0650		620.9999	620.9999	0.0216	0.0895	648.2161
Worker	0.9058	0.5933	8.6826	0.0264	3.3533	0.0185	3.3718	0.8893	0.0170	0.9064		2,749.982 1	2,749.982 1	0.0627	0.0642	2,770.680 8
Total	0.9391	1.8759	9.1544	0.0322	3.5583	0.0248	3.5831	0.9483	0.0230	0.9714		3,370.982 0	3,370.982 0	0.0843	0.1537	3,418.896 9

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2025****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6620	7.5369	10.5558	0.0180		0.2609	0.2609		0.2400	0.2400	0.0000	1,740.793 9	1,740.793 9	0.5630		1,754.869 1
Total	0.6620	7.5369	10.5558	0.0180		0.2609	0.2609		0.2400	0.2400	0.0000	1,740.793 9	1,740.793 9	0.5630		1,754.869 1

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	0.0000
Vendor	0.0333	1.2826	0.4718	5.7600e-003	0.2050	6.2700e-003	0.2113	0.0590	6.0000e-003	0.0650		620.9999	620.9999	0.0216	0.0895	648.2161
Worker	0.9058	0.5933	8.6826	0.0264	3.3533	0.0185	3.3718	0.8893	0.0170	0.9064		2,749.982 1	2,749.982 1	0.0627	0.0642	2,770.680 8
Total	0.9391	1.8759	9.1544	0.0322	3.5583	0.0248	3.5831	0.9483	0.0230	0.9714		3,370.982 0	3,370.982 0	0.0843	0.1537	3,418.896 9

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5739	5.5845	8.5940	0.0130		0.2703	0.2703		0.2487	0.2487		1,259.9816	1,259.9816	0.4075		1,270.1692
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5739	5.5845	8.5940	0.0130		0.2703	0.2703		0.2487	0.2487		1,259.9816	1,259.9816	0.4075		1,270.1692

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	0.0000
Vendor	0.0172	0.6443	0.2402	2.9400e-003	0.1025	3.1300e-003	0.1056	0.0295	2.9900e-003	0.0325		316.1829	316.1829	0.0107	0.0456	330.0244
Worker	0.1287	0.0881	1.2412	3.6400e-003	0.4471	2.5900e-003	0.4497	0.1186	2.3800e-003	0.1210		375.8160	375.8160	9.2600e-003	9.1700e-003	378.7793
Total	0.1459	0.7324	1.4815	6.5800e-003	0.5496	5.7200e-003	0.5553	0.1481	5.3700e-003	0.1535		691.9989	691.9989	0.0200	0.0547	708.8036

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5739	5.5845	8.5940	0.0130		0.2703	0.2703		0.2487	0.2487	0.0000	1,259.981 6	1,259.981 6	0.4075		1,270.169 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5739	5.5845	8.5940	0.0130		0.2703	0.2703		0.2487	0.2487	0.0000	1,259.981 6	1,259.981 6	0.4075		1,270.169 2

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	0.0000
Vendor	0.0172	0.6443	0.2402	2.9400e-003	0.1025	3.1300e-003	0.1056	0.0295	2.9900e-003	0.0325		316.1829	316.1829	0.0107	0.0456	330.0244
Worker	0.1287	0.0881	1.2412	3.6400e-003	0.4471	2.5900e-003	0.4497	0.1186	2.3800e-003	0.1210		375.8160	375.8160	9.2600e-003	9.1700e-003	378.7793
Total	0.1459	0.7324	1.4815	6.5800e-003	0.5496	5.7200e-003	0.5553	0.1481	5.3700e-003	0.1535		691.9989	691.9989	0.0200	0.0547	708.8036

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5291	5.0498	8.5639	0.0130		0.2358	0.2358		0.2169	0.2169		1,259.922 4	1,259.922 4	0.4075		1,270.109 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5291	5.0498	8.5639	0.0130		0.2358	0.2358		0.2169	0.2169		1,259.922 4	1,259.922 4	0.4075		1,270.109 5

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	0.0000
Vendor	0.0167	0.6413	0.2359	2.8800e-003	0.1025	3.1400e-003	0.1056	0.0295	3.0000e-003	0.0325		310.5000	310.5000	0.0108	0.0448	324.1081
Worker	0.1208	0.0791	1.1577	3.5200e-003	0.4471	2.4700e-003	0.4496	0.1186	2.2700e-003	0.1209		366.6643	366.6643	8.3600e-003	8.5600e-003	369.4241
Total	0.1374	0.7204	1.3936	6.4000e-003	0.5496	5.6100e-003	0.5552	0.1481	5.2700e-003	0.1534		677.1643	677.1643	0.0192	0.0533	693.5322

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2025****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5291	5.0498	8.5639	0.0130		0.2358	0.2358		0.2169	0.2169	0.0000	1,259.922 4	1,259.922 4	0.4075		1,270.109 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5291	5.0498	8.5639	0.0130		0.2358	0.2358		0.2169	0.2169	0.0000	1,259.922 4	1,259.922 4	0.4075		1,270.109 5

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	0.0000
Vendor	0.0167	0.6413	0.2359	2.8800e-003	0.1025	3.1400e-003	0.1056	0.0295	3.0000e-003	0.0325		310.5000	310.5000	0.0108	0.0448	324.1081
Worker	0.1208	0.0791	1.1577	3.5200e-003	0.4471	2.4700e-003	0.4496	0.1186	2.2700e-003	0.1209		366.6643	366.6643	8.3600e-003	8.5600e-003	369.4241
Total	0.1374	0.7204	1.3936	6.4000e-003	0.5496	5.6100e-003	0.5552	0.1481	5.2700e-003	0.1534		677.1643	677.1643	0.0192	0.0533	693.5322

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3959	2.9608	4.7067	7.6100e-003		0.1309	0.1309		0.1302	0.1302		724.5717	724.5717	0.0840		726.6713
Total	10.0839	2.9608	4.7067	7.6100e-003		0.1309	0.1309		0.1302	0.1302		724.5717	724.5717	0.0840		726.6713

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	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
Worker	0.1287	0.0881	1.2412	3.6400e-003	0.4471	2.5900e-003	0.4497	0.1186	2.3800e-003	0.1210		375.8160	375.8160	9.2600e-003	9.1700e-003	378.7793
Total	0.1287	0.0881	1.2412	3.6400e-003	0.4471	2.5900e-003	0.4497	0.1186	2.3800e-003	0.1210		375.8160	375.8160	9.2600e-003	9.1700e-003	378.7793

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****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	9.6879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3959	2.9608	4.7067	7.6100e-003		0.1309	0.1309		0.1302	0.1302	0.0000	724.5717	724.5717	0.0840		726.6713
Total	10.0839	2.9608	4.7067	7.6100e-003		0.1309	0.1309		0.1302	0.1302	0.0000	724.5717	724.5717	0.0840		726.6713

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	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
Worker	0.1287	0.0881	1.2412	3.6400e-003	0.4471	2.5900e-003	0.4497	0.1186	2.3800e-003	0.1210		375.8160	375.8160	9.2600e-003	9.1700e-003	378.7793
Total	0.1287	0.0881	1.2412	3.6400e-003	0.4471	2.5900e-003	0.4497	0.1186	2.3800e-003	0.1210		375.8160	375.8160	9.2600e-003	9.1700e-003	378.7793

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2025****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	9.6879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3756	2.8084	4.7030	7.6100e-003		0.1119	0.1119		0.1112	0.1112		724.5717	724.5717	0.0830		726.6466
Total	10.0635	2.8084	4.7030	7.6100e-003		0.1119	0.1119		0.1112	0.1112		724.5717	724.5717	0.0830		726.6466

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	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
Worker	0.1208	0.0791	1.1577	3.5200e-003	0.4471	2.4700e-003	0.4496	0.1186	2.2700e-003	0.1209		366.6643	366.6643	8.3600e-003	8.5600e-003	369.4241
Total	0.1208	0.0791	1.1577	3.5200e-003	0.4471	2.4700e-003	0.4496	0.1186	2.2700e-003	0.1209		366.6643	366.6643	8.3600e-003	8.5600e-003	369.4241

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2025****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	9.6879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3756	2.8084	4.7030	7.6100e-003		0.1119	0.1119		0.1112	0.1112	0.0000	724.5717	724.5717	0.0830		726.6466
Total	10.0635	2.8084	4.7030	7.6100e-003		0.1119	0.1119		0.1112	0.1112	0.0000	724.5717	724.5717	0.0830		726.6466

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	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
Worker	0.1208	0.0791	1.1577	3.5200e-003	0.4471	2.4700e-003	0.4496	0.1186	2.2700e-003	0.1209		366.6643	366.6643	8.3600e-003	8.5600e-003	369.4241
Total	0.1208	0.0791	1.1577	3.5200e-003	0.4471	2.4700e-003	0.4496	0.1186	2.2700e-003	0.1209		366.6643	366.6643	8.3600e-003	8.5600e-003	369.4241

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.8020	0.8491	7.8251	0.0168	1.8914	0.0126	1.9039	0.5038	0.0117	0.5155		1,760.061 4	1,760.061 4	0.1233	0.0764	1,785.899 9
Unmitigated	0.8020	0.8491	7.8251	0.0168	1.8914	0.0126	1.9039	0.5038	0.0117	0.5155		1,760.061 4	1,760.061 4	0.1233	0.0764	1,785.899 9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unenclosed Parking with Elevator	0.00	0.00	0.00		
University/College (4yr)	299.04	299.04	0.00	769,956	769,956
Total	299.04	299.04	0.00	769,956	769,956

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
University/College (4yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unenclosed Parking with Elevator	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
University/College (4yr)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable 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	lb/day										lb/day					
NaturalGas Mitigated	0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012
NaturalGas Unmitigated	0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	7347.95	0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012
Total		0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012

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					
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	7.34795	0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012
Total		0.0792	0.7204	0.6051	4.3200e-003		0.0548	0.0548		0.0548	0.0548		864.4641	864.4641	0.0166	0.0159	869.6012

6.0 Area Detail

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	2.2246	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818
Unmitigated	2.2246	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818

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	0.2256					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9957					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2900e-003	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818
Total	2.2246	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2256					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9957					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2900e-003	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818
Total	2.2246	3.2000e-004	0.0357	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0768	0.0768	2.0000e-004		0.0818

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Charles Drew University Health Professionals Education Building**

Los Angeles-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4yr)	240.00	Student	1.08	100,000.00	0
Unenclosed Parking with Elevator	111.00	Space	0.89	44,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Uses

Construction Phase - Project Schedule

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Trips and VMT - Project Trips:

~ Demo = 4 loads/day

~ Grading = 8 loads/day

Demolition - Remove existing buildings (9,730 sq ft = 450 tons debris) & surface parking lot (38,700 sq ft = 860 tons debris).

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Excavate approximately 3 feet x 46,650 sq. ft.

Architectural Coating - SCAQMD Rule 1113 = 50 g/L building envelope

Vehicle Trips - 299 Daily Trips after 20% trip reduction credit for transit.

Area Coating - SCAQMD Rule 1113 = 50 g/L building envelope

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 Compliance

Area Mitigation - SCAQMD Rule 1113 Compliance is Standard (Not Mitigation)

Energy Mitigation - Project Description states solar panels will be installed on parking structure to provide 10% of total energy requirements.

Water Mitigation - LAGBC Compliance

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	200.00	415.00
tblConstructionPhase	NumDays	10.00	85.00
tblConstructionPhase	NumDays	10.00	85.00
tblConstructionPhase	PhaseEndDate	3/31/2023	4/7/2023
tblConstructionPhase	PhaseEndDate	4/6/2023	8/25/2023
tblConstructionPhase	PhaseEndDate	1/11/2024	3/28/2025
tblConstructionPhase	PhaseEndDate	1/25/2024	3/28/2025
tblConstructionPhase	PhaseEndDate	2/8/2024	3/28/2025
tblConstructionPhase	PhaseStartDate	4/1/2023	4/10/2023
tblConstructionPhase	PhaseStartDate	4/7/2023	8/28/2023
tblConstructionPhase	PhaseStartDate	1/12/2024	12/2/2024
tblConstructionPhase	PhaseStartDate	1/26/2024	12/2/2024

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblGrading	MaterialExported	0.00	5,200.00
tblLandUse	LandUseSquareFeet	44,111.39	100,000.00
tblLandUse	LotAcreage	1.01	1.08
tblLandUse	LotAcreage	1.00	0.89
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	PhaseName		Architectural Coating
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	HaulingTripNumber	130.00	200.00
tblTripsAndVMT	HaulingTripNumber	650.00	1,600.00
tblTripsAndVMT	VendorTripLength	6.90	12.00
tblTripsAndVMT	VendorTripLength	6.90	12.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	24.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	40.00
tblTripsAndVMT	WorkerTripNumber	61.00	300.00
tblTripsAndVMT	WorkerTripNumber	10.00	40.00
tblTripsAndVMT	WorkerTripNumber	12.00	40.00
tblVehicleTrips	ST_TR	1.30	1.25
tblVehicleTrips	WD_TR	1.56	1.25

2.0 Emissions Summary

Charles Drew University Health Professionals Education Building - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2023	0.1262	1.0581	1.4169	3.8700e-003	0.2393	0.0341	0.2735	0.0581	0.0314	0.0896	0.0000	357.0789	357.0789	0.0514	0.0162	363.1988
2024	0.3334	1.4199	2.8783	7.1000e-003	0.4678	0.0468	0.5146	0.1249	0.0432	0.1681	0.0000	652.4301	652.4301	0.0829	0.0198	660.3878
2025	0.3893	0.5699	1.1275	2.5600e-003	0.1407	0.0202	0.1609	0.0376	0.0189	0.0564	0.0000	234.0661	234.0661	0.0333	6.1900e-003	236.7438
Maximum	0.3893	1.4199	2.8783	7.1000e-003	0.4678	0.0468	0.5146	0.1249	0.0432	0.1681	0.0000	652.4301	652.4301	0.0829	0.0198	660.3878

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					
2023	0.1262	1.0581	1.4169	3.8700e-003	0.2144	0.0341	0.2486	0.0551	0.0314	0.0865	0.0000	357.0787	357.0787	0.0514	0.0162	363.1987
2024	0.3334	1.4199	2.8783	7.1000e-003	0.4678	0.0468	0.5146	0.1249	0.0432	0.1681	0.0000	652.4298	652.4298	0.0829	0.0198	660.3875
2025	0.3893	0.5699	1.1275	2.5600e-003	0.1407	0.0202	0.1609	0.0376	0.0189	0.0564	0.0000	234.0660	234.0660	0.0333	6.1900e-003	236.7437
Maximum	0.3893	1.4199	2.8783	7.1000e-003	0.4678	0.0468	0.5146	0.1249	0.0432	0.1681	0.0000	652.4298	652.4298	0.0829	0.0198	660.3875

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	2.94	0.00	2.62	1.39	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-6-2023	6-5-2023	0.3078	0.3078
2	6-6-2023	9-5-2023	0.3414	0.3414
3	9-6-2023	12-5-2023	0.4005	0.4005
4	12-6-2023	3-5-2024	0.3874	0.3874
5	3-6-2024	6-5-2024	0.3812	0.3812
6	6-6-2024	9-5-2024	0.3795	0.3795
7	9-6-2024	12-5-2024	0.4088	0.4088
8	12-6-2024	3-5-2025	0.9951	0.9951
9	3-6-2025	6-5-2025	0.2507	0.2507
		Highest	0.9951	0.9951

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.4058	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003
Energy	0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	474.3045	474.3045	0.0185	4.5400e-003	476.1203
Mobile	0.1229	0.1342	1.2301	2.6500e-003	0.2893	1.9600e-003	0.2913	0.0772	1.8200e-003	0.0790	0.0000	251.7184	251.7184	0.0174	0.0109	255.3900
Waste						0.0000	0.0000		0.0000	0.0000	8.8910	0.0000	8.8910	0.5254	0.0000	22.0271
Water						0.0000	0.0000		0.0000	0.0000	0.1630	4.9029	5.0660	0.0170	4.2000e-004	5.6167
Total	0.5432	0.2657	1.3450	3.4400e-003	0.2893	0.0120	0.3013	0.0772	0.0118	0.0890	9.0540	730.9345	739.9885	0.5783	0.0158	759.1634

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4058	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003
Energy	0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	441.1862	441.1862	0.0170	4.3500e-003	442.9055
Mobile	0.1229	0.1342	1.2301	2.6500e-003	0.2893	1.9600e-003	0.2913	0.0772	1.8200e-003	0.0790	0.0000	251.7184	251.7184	0.0174	0.0109	255.3900
Waste						0.0000	0.0000		0.0000	0.0000	8.8910	0.0000	8.8910	0.5254	0.0000	22.0271
Water						0.0000	0.0000		0.0000	0.0000	0.1304	4.3119	4.4423	0.0136	3.4000e-004	4.8841
Total	0.5432	0.2657	1.3450	3.4400e-003	0.2893	0.0120	0.3013	0.0772	0.0118	0.0890	9.0214	697.2252	706.2466	0.5734	0.0156	725.2160

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	4.61	4.56	0.86	1.71	4.47

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	3/6/2023	4/7/2023	5	25	
2	Grading	Grading	4/10/2023	8/25/2023	5	100	
3	Building Construction	Building Construction	8/28/2023	3/28/2025	5	415	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	12/2/2024	3/28/2025	5	85
5	Architectural Coating	Architectural Coating	12/2/2024	3/28/2025	5	85

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 50****Acres of Paving: 0.89****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 2,664 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Graders	1	6.00	187	0.41
Demolition	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Aerial Lifts	2	7.00	63	0.31
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Rough Terrain Forklifts	2	7.00	100	0.40
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48
Architectural Coating	Aerial Lifts	2	4.00	63	0.31

Trips and VMT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	3	20.00	2.00	200.00	14.70	12.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	40.00	2.00	1,600.00	14.70	12.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	300.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	40.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0140	0.0000	0.0140	2.1200e-003	0.0000	2.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9100e-003	0.0772	0.0647	1.3000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	11.4351	11.4351	3.7000e-003	0.0000	11.5275
Total	6.9100e-003	0.0772	0.0647	1.3000e-004	0.0140	3.0700e-003	0.0171	2.1200e-003	2.8300e-003	4.9500e-003	0.0000	11.4351	11.4351	3.7000e-003	0.0000	11.5275

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0138	3.5000e-003	6.0000e-005	1.7200e-003	8.0000e-005	1.8000e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	5.8327	5.8327	3.2000e-004	9.3000e-004	6.1168
Vendor	4.0000e-005	1.5400e-003	4.8000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7636	0.7636	3.0000e-005	1.1000e-004	0.7968
Worker	7.9000e-004	6.3000e-004	8.5400e-003	2.0000e-005	2.7400e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.4000e-004	0.0000	2.2079	2.2079	6.0000e-005	6.0000e-005	2.2263
Total	1.0400e-003	0.0159	0.0125	9.0000e-005	4.7300e-003	1.1000e-004	4.8400e-003	1.2800e-003	1.1000e-004	1.3800e-003	0.0000	8.8042	8.8042	4.1000e-004	1.1000e-003	9.1399

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					5.4700e-003	0.0000	5.4700e-003	8.3000e-004	0.0000	8.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9100e-003	0.0772	0.0647	1.3000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	11.4351	11.4351	3.7000e-003	0.0000	11.5275
Total	6.9100e-003	0.0772	0.0647	1.3000e-004	5.4700e-003	3.0700e-003	8.5400e-003	8.3000e-004	2.8300e-003	3.6600e-003	0.0000	11.4351	11.4351	3.7000e-003	0.0000	11.5275

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0138	3.5000e-003	6.0000e-005	1.7200e-003	8.0000e-005	1.8000e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	5.8327	5.8327	3.2000e-004	9.3000e-004	6.1168
Vendor	4.0000e-005	1.5400e-003	4.8000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7636	0.7636	3.0000e-005	1.1000e-004	0.7968
Worker	7.9000e-004	6.3000e-004	8.5400e-003	2.0000e-005	2.7400e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.4000e-004	0.0000	2.2079	2.2079	6.0000e-005	6.0000e-005	2.2263
Total	1.0400e-003	0.0159	0.0125	9.0000e-005	4.7300e-003	1.1000e-004	4.8400e-003	1.2800e-003	1.1000e-004	1.3800e-003	0.0000	8.8042	8.8042	4.1000e-004	1.1000e-003	9.1399

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0268	0.0000	0.0268	2.9100e-003	0.0000	2.9100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0324	0.3670	0.2799	6.0000e-004		0.0142	0.0142		0.0130	0.0130	0.0000	53.0074	53.0074	0.0171	0.0000	53.4360
Total	0.0324	0.3670	0.2799	6.0000e-004	0.0268	0.0142	0.0410	2.9100e-003	0.0130	0.0160	0.0000	53.0074	53.0074	0.0171	0.0000	53.4360

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6900e-003	0.1100	0.0280	4.7000e-004	0.0138	6.6000e-004	0.0144	3.7800e-003	6.3000e-004	4.4100e-003	0.0000	46.6616	46.6616	2.5700e-003	7.4100e-003	48.9340
Vendor	1.5000e-004	6.1500e-003	1.9200e-003	3.0000e-005	1.0900e-003	3.0000e-005	1.1300e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	3.0543	3.0543	1.0000e-004	4.4000e-004	3.1873
Worker	6.3500e-003	5.0400e-003	0.0683	1.9000e-004	0.0219	1.3000e-004	0.0221	5.8200e-003	1.2000e-004	5.9500e-003	0.0000	17.6635	17.6635	4.6000e-004	4.5000e-004	17.8105
Total	8.1900e-003	0.1212	0.0983	6.9000e-004	0.0368	8.2000e-004	0.0376	9.9200e-003	7.8000e-004	0.0107	0.0000	67.3794	67.3794	3.1300e-003	8.3000e-003	69.9317

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					0.0105	0.0000	0.0105	1.1300e-003	0.0000	1.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0324	0.3670	0.2799	6.0000e-004		0.0142	0.0142		0.0130	0.0130	0.0000	53.0074	53.0074	0.0171	0.0000	53.4360
Total	0.0324	0.3670	0.2799	6.0000e-004	0.0105	0.0142	0.0246	1.1300e-003	0.0130	0.0142	0.0000	53.0074	53.0074	0.0171	0.0000	53.4360

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6900e-003	0.1100	0.0280	4.7000e-004	0.0138	6.6000e-004	0.0144	3.7800e-003	6.3000e-004	4.4100e-003	0.0000	46.6616	46.6616	2.5700e-003	7.4100e-003	48.9340
Vendor	1.5000e-004	6.1500e-003	1.9200e-003	3.0000e-005	1.0900e-003	3.0000e-005	1.1300e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	3.0543	3.0543	1.0000e-004	4.4000e-004	3.1873
Worker	6.3500e-003	5.0400e-003	0.0683	1.9000e-004	0.0219	1.3000e-004	0.0221	5.8200e-003	1.2000e-004	5.9500e-003	0.0000	17.6635	17.6635	4.6000e-004	4.5000e-004	17.8105
Total	8.1900e-003	0.1212	0.0983	6.9000e-004	0.0368	8.2000e-004	0.0376	9.9200e-003	7.8000e-004	0.0107	0.0000	67.3794	67.3794	3.1300e-003	8.3000e-003	69.9317

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.3846	0.4787	8.1000e-004		0.0148	0.0148		0.0136	0.0136	0.0000	71.0415	71.0415	0.0230	0.0000	71.6160
Total	0.0331	0.3846	0.4787	8.1000e-004		0.0148	0.0148		0.0136	0.0136	0.0000	71.0415	71.0415	0.0230	0.0000	71.6160

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6300e-003	0.0580	0.0217	2.7000e-004	9.0800e-003	2.8000e-004	9.3500e-003	2.6200e-003	2.7000e-004	2.8900e-003	0.0000	26.1824	26.1824	8.8000e-004	3.7700e-003	27.3272
Worker	0.0429	0.0340	0.4612	1.2800e-003	0.1479	9.1000e-004	0.1488	0.0393	8.4000e-004	0.0401	0.0000	119.2288	119.2288	3.1300e-003	3.0700e-003	120.2205
Total	0.0445	0.0921	0.4829	1.5500e-003	0.1570	1.1900e-003	0.1582	0.0419	1.1100e-003	0.0430	0.0000	145.4112	145.4112	4.0100e-003	6.8400e-003	147.5477

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	0.0331	0.3846	0.4786	8.1000e-004		0.0148	0.0148		0.0136	0.0136	0.0000	71.0415	71.0415	0.0230	0.0000	71.6159
Total	0.0331	0.3846	0.4786	8.1000e-004		0.0148	0.0148		0.0136	0.0136	0.0000	71.0415	71.0415	0.0230	0.0000	71.6159

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6300e-003	0.0580	0.0217	2.7000e-004	9.0800e-003	2.8000e-004	9.3500e-003	2.6200e-003	2.7000e-004	2.8900e-003	0.0000	26.1824	26.1824	8.8000e-004	3.7700e-003	27.3272
Worker	0.0429	0.0340	0.4612	1.2800e-003	0.1479	9.1000e-004	0.1488	0.0393	8.4000e-004	0.0401	0.0000	119.2288	119.2288	3.1300e-003	3.0700e-003	120.2205
Total	0.0445	0.0921	0.4829	1.5500e-003	0.1570	1.1900e-003	0.1582	0.0419	1.1100e-003	0.0430	0.0000	145.4112	145.4112	4.0100e-003	6.8400e-003	147.5477

3.4 Building Construction - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0923	1.0591	1.3890	2.3600e-003		0.0389	0.0389		0.0358	0.0358	0.0000	206.8287	206.8287	0.0669	0.0000	208.5010
Total	0.0923	1.0591	1.3890	2.3600e-003		0.0389	0.0389		0.0358	0.0358	0.0000	206.8287	206.8287	0.0669	0.0000	208.5010

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5900e-003	0.1693	0.0619	7.7000e-004	0.0264	8.2000e-004	0.0272	7.6300e-003	7.8000e-004	8.4100e-003	0.0000	75.0763	75.0763	2.5600e-003	0.0108	78.3631
Worker	0.1164	0.0884	1.2506	3.6300e-003	0.4307	2.5400e-003	0.4332	0.1144	2.3400e-003	0.1167	0.0000	339.9568	339.9568	8.2600e-003	8.2900e-003	342.6348
Total	0.1210	0.2577	1.3125	4.4000e-003	0.4571	3.3600e-003	0.4604	0.1220	3.1200e-003	0.1251	0.0000	415.0331	415.0331	0.0108	0.0191	420.9979

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	0.0923	1.0591	1.3890	2.3600e-003		0.0389	0.0389		0.0358	0.0358	0.0000	206.8285	206.8285	0.0669	0.0000	208.5008
Total	0.0923	1.0591	1.3890	2.3600e-003		0.0389	0.0389		0.0358	0.0358	0.0000	206.8285	206.8285	0.0669	0.0000	208.5008

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5900e-003	0.1693	0.0619	7.7000e-004	0.0264	8.2000e-004	0.0272	7.6300e-003	7.8000e-004	8.4100e-003	0.0000	75.0763	75.0763	2.5600e-003	0.0108	78.3631
Worker	0.1164	0.0884	1.2506	3.6300e-003	0.4307	2.5400e-003	0.4332	0.1144	2.3400e-003	0.1167	0.0000	339.9568	339.9568	8.2600e-003	8.2900e-003	342.6348
Total	0.1210	0.2577	1.3125	4.4000e-003	0.4571	3.3600e-003	0.4604	0.1220	3.1200e-003	0.1251	0.0000	415.0331	415.0331	0.0108	0.0191	420.9979

3.4 Building Construction - 2025**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	0.0209	0.2374	0.3325	5.7000e-004		8.2200e-003	8.2200e-003		7.5600e-003	7.5600e-003	0.0000	49.7455	49.7455	0.0161	0.0000	50.1477
Total	0.0209	0.2374	0.3325	5.7000e-004		8.2200e-003	8.2200e-003		7.5600e-003	7.5600e-003	0.0000	49.7455	49.7455	0.0161	0.0000	50.1477

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2025****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	1.0700e-003	0.0405	0.0146	1.8000e-004	6.3500e-003	2.0000e-004	6.5500e-003	1.8300e-003	1.9000e-004	2.0200e-003	0.0000	17.7279	17.7279	6.2000e-004	2.5600e-003	18.5049
Worker	0.0262	0.0191	0.2804	8.4000e-004	0.1036	5.8000e-004	0.1041	0.0275	5.4000e-004	0.0280	0.0000	79.7520	79.7520	1.7900e-003	1.8600e-003	80.3517
Total	0.0273	0.0596	0.2950	1.0200e-003	0.1099	7.8000e-004	0.1107	0.0293	7.3000e-004	0.0301	0.0000	97.4799	97.4799	2.4100e-003	4.4200e-003	98.8566

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	0.0209	0.2374	0.3325	5.7000e-004		8.2200e-003	8.2200e-003		7.5600e-003	7.5600e-003	0.0000	49.7454	49.7454	0.0161	0.0000	50.1476
Total	0.0209	0.2374	0.3325	5.7000e-004		8.2200e-003	8.2200e-003		7.5600e-003	7.5600e-003	0.0000	49.7454	49.7454	0.0161	0.0000	50.1476

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2025****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	1.0700e-003	0.0405	0.0146	1.8000e-004	6.3500e-003	2.0000e-004	6.5500e-003	1.8300e-003	1.9000e-004	2.0200e-003	0.0000	17.7279	17.7279	6.2000e-004	2.5600e-003	18.5049
Worker	0.0262	0.0191	0.2804	8.4000e-004	0.1036	5.8000e-004	0.1041	0.0275	5.4000e-004	0.0280	0.0000	79.7520	79.7520	1.7900e-003	1.8600e-003	80.3517
Total	0.0273	0.0596	0.2950	1.0200e-003	0.1099	7.8000e-004	0.1107	0.0293	7.3000e-004	0.0301	0.0000	97.4799	97.4799	2.4100e-003	4.4200e-003	98.8566

3.5 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3100e-003	0.0614	0.0945	1.4000e-004		2.9700e-003	2.9700e-003		2.7400e-003	2.7400e-003	0.0000	12.5734	12.5734	4.0700e-003	0.0000	12.6751
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.3100e-003	0.0614	0.0945	1.4000e-004		2.9700e-003	2.9700e-003		2.7400e-003	2.7400e-003	0.0000	12.5734	12.5734	4.0700e-003	0.0000	12.6751

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	7.1100e-003	2.6000e-003	3.0000e-005	1.1100e-003	3.0000e-005	1.1400e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	3.1521	3.1521	1.1000e-004	4.5000e-004	3.2901
Worker	1.3000e-003	9.9000e-004	0.0140	4.0000e-005	4.8200e-003	3.0000e-005	4.8500e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.8061	3.8061	9.0000e-005	9.0000e-005	3.8361
Total	1.4900e-003	8.1000e-003	0.0166	7.0000e-005	5.9300e-003	6.0000e-005	5.9900e-003	1.6000e-003	6.0000e-005	1.6600e-003	0.0000	6.9582	6.9582	2.0000e-004	5.4000e-004	7.1262

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3100e-003	0.0614	0.0945	1.4000e-004		2.9700e-003	2.9700e-003		2.7400e-003	2.7400e-003	0.0000	12.5734	12.5734	4.0700e-003	0.0000	12.6750
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.3100e-003	0.0614	0.0945	1.4000e-004		2.9700e-003	2.9700e-003		2.7400e-003	2.7400e-003	0.0000	12.5734	12.5734	4.0700e-003	0.0000	12.6750

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	7.1100e-003	2.6000e-003	3.0000e-005	1.1100e-003	3.0000e-005	1.1400e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	3.1521	3.1521	1.1000e-004	4.5000e-004	3.2901
Worker	1.3000e-003	9.9000e-004	0.0140	4.0000e-005	4.8200e-003	3.0000e-005	4.8500e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.8061	3.8061	9.0000e-005	9.0000e-005	3.8361
Total	1.4900e-003	8.1000e-003	0.0166	7.0000e-005	5.9300e-003	6.0000e-005	5.9900e-003	1.6000e-003	6.0000e-005	1.6600e-003	0.0000	6.9582	6.9582	2.0000e-004	5.4000e-004	7.1262

3.5 Paving - 2025**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	0.0167	0.1591	0.2698	4.1000e-004		7.4300e-003	7.4300e-003		6.8300e-003	6.8300e-003	0.0000	36.0039	36.0039	0.0116	0.0000	36.2951
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0167	0.1591	0.2698	4.1000e-004		7.4300e-003	7.4300e-003		6.8300e-003	6.8300e-003	0.0000	36.0039	36.0039	0.0116	0.0000	36.2951

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2025****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	5.4000e-004	0.0203	7.3100e-003	9.0000e-005	3.1800e-003	1.0000e-004	3.2700e-003	9.2000e-004	9.0000e-005	1.0100e-003	0.0000	8.8640	8.8640	3.1000e-004	1.2800e-003	9.2525
Worker	3.5000e-003	2.5500e-003	0.0374	1.1000e-004	0.0138	8.0000e-005	0.0139	3.6700e-003	7.0000e-005	3.7400e-003	0.0000	10.6336	10.6336	2.4000e-004	2.5000e-004	10.7136
Total	4.0400e-003	0.0228	0.0447	2.0000e-004	0.0170	1.8000e-004	0.0172	4.5900e-003	1.6000e-004	4.7500e-003	0.0000	19.4976	19.4976	5.5000e-004	1.5300e-003	19.9660

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	0.0167	0.1591	0.2698	4.1000e-004		7.4300e-003	7.4300e-003		6.8300e-003	6.8300e-003	0.0000	36.0039	36.0039	0.0116	0.0000	36.2950
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0167	0.1591	0.2698	4.1000e-004		7.4300e-003	7.4300e-003		6.8300e-003	6.8300e-003	0.0000	36.0039	36.0039	0.0116	0.0000	36.2950

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2025****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	5.4000e-004	0.0203	7.3100e-003	9.0000e-005	3.1800e-003	1.0000e-004	3.2700e-003	9.2000e-004	9.0000e-005	1.0100e-003	0.0000	8.8640	8.8640	3.1000e-004	1.2800e-003	9.2525
Worker	3.5000e-003	2.5500e-003	0.0374	1.1000e-004	0.0138	8.0000e-005	0.0139	3.6700e-003	7.0000e-005	3.7400e-003	0.0000	10.6336	10.6336	2.4000e-004	2.5000e-004	10.7136
Total	4.0400e-003	0.0228	0.0447	2.0000e-004	0.0170	1.8000e-004	0.0172	4.5900e-003	1.6000e-004	4.7500e-003	0.0000	19.4976	19.4976	5.5000e-004	1.5300e-003	19.9660

3.6 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3600e-003	0.0326	0.0518	8.0000e-005		1.4400e-003	1.4400e-003		1.4300e-003	1.4300e-003	0.0000	7.2305	7.2305	8.4000e-004	0.0000	7.2515
Total	0.1109	0.0326	0.0518	8.0000e-005		1.4400e-003	1.4400e-003		1.4300e-003	1.4300e-003	0.0000	7.2305	7.2305	8.4000e-004	0.0000	7.2515

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	9.9000e-004	0.0140	4.0000e-005	4.8200e-003	3.0000e-005	4.8500e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.8061	3.8061	9.0000e-005	9.0000e-005	3.8361
Total	1.3000e-003	9.9000e-004	0.0140	4.0000e-005	4.8200e-003	3.0000e-005	4.8500e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.8061	3.8061	9.0000e-005	9.0000e-005	3.8361

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	0.1066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3600e-003	0.0326	0.0518	8.0000e-005		1.4400e-003	1.4400e-003		1.4300e-003	1.4300e-003	0.0000	7.2305	7.2305	8.4000e-004	0.0000	7.2515
Total	0.1109	0.0326	0.0518	8.0000e-005		1.4400e-003	1.4400e-003		1.4300e-003	1.4300e-003	0.0000	7.2305	7.2305	8.4000e-004	0.0000	7.2515

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	9.9000e-004	0.0140	4.0000e-005	4.8200e-003	3.0000e-005	4.8500e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.8061	3.8061	9.0000e-005	9.0000e-005	3.8361
Total	1.3000e-003	9.9000e-004	0.0140	4.0000e-005	4.8200e-003	3.0000e-005	4.8500e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.8061	3.8061	9.0000e-005	9.0000e-005	3.8361

3.6 Architectural Coating - 2025**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	0.3052					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.0885	0.1481	2.4000e-004		3.5200e-003	3.5200e-003		3.5000e-003	3.5000e-003	0.0000	20.7056	20.7056	2.3700e-003	0.0000	20.7649
Total	0.3170	0.0885	0.1481	2.4000e-004		3.5200e-003	3.5200e-003		3.5000e-003	3.5000e-003	0.0000	20.7056	20.7056	2.3700e-003	0.0000	20.7649

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-003	2.5500e-003	0.0374	1.1000e-004	0.0138	8.0000e-005	0.0139	3.6700e-003	7.0000e-005	3.7400e-003	0.0000	10.6336	10.6336	2.4000e-004	2.5000e-004	10.7136
Total	3.5000e-003	2.5500e-003	0.0374	1.1000e-004	0.0138	8.0000e-005	0.0139	3.6700e-003	7.0000e-005	3.7400e-003	0.0000	10.6336	10.6336	2.4000e-004	2.5000e-004	10.7136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3052					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.0885	0.1481	2.4000e-004		3.5200e-003	3.5200e-003		3.5000e-003	3.5000e-003	0.0000	20.7056	20.7056	2.3700e-003	0.0000	20.7649
Total	0.3170	0.0885	0.1481	2.4000e-004		3.5200e-003	3.5200e-003		3.5000e-003	3.5000e-003	0.0000	20.7056	20.7056	2.3700e-003	0.0000	20.7649

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-003	2.5500e-003	0.0374	1.1000e-004	0.0138	8.0000e-005	0.0139	3.6700e-003	7.0000e-005	3.7400e-003	0.0000	10.6336	10.6336	2.4000e-004	2.5000e-004	10.7136
Total	3.5000e-003	2.5500e-003	0.0374	1.1000e-004	0.0138	8.0000e-005	0.0139	3.6700e-003	7.0000e-005	3.7400e-003	0.0000	10.6336	10.6336	2.4000e-004	2.5000e-004	10.7136

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.1229	0.1342	1.2301	2.6500e-003	0.2893	1.9600e-003	0.2913	0.0772	1.8200e-003	0.0790	0.0000	251.7184	251.7184	0.0174	0.0109	255.3900
Unmitigated	0.1229	0.1342	1.2301	2.6500e-003	0.2893	1.9600e-003	0.2913	0.0772	1.8200e-003	0.0790	0.0000	251.7184	251.7184	0.0174	0.0109	255.3900

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unenclosed Parking with Elevator	0.00	0.00	0.00		
University/College (4yr)	299.04	299.04	0.00	769,956	769,956
Total	299.04	299.04	0.00	769,956	769,956

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
University/College (4yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unenclosed Parking with Elevator	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
University/College (4yr)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable 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	298.0645	298.0645	0.0142	1.7200e-003	298.9333
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	331.1828	331.1828	0.0158	1.9100e-003	332.1481
NaturalGas Mitigated	0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	143.1217	143.1217	2.7400e-003	2.6200e-003	143.9722
NaturalGas Unmitigated	0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	143.1217	143.1217	2.7400e-003	2.6200e-003	143.9722

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	2.682e+006	0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	143.1217	143.1217	2.7400e-003	2.6200e-003	143.9722
Total		0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	143.1217	143.1217	2.7400e-003	2.6200e-003	143.9722

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					
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	2.682e+006	0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	143.1217	143.1217	2.7400e-003	2.6200e-003	143.9722
Total		0.0145	0.1315	0.1104	7.9000e-004		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	143.1217	143.1217	2.7400e-003	2.6200e-003	143.9722

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unenclosed Parking with Elevator	86136	27.0361	1.2900e-003	1.6000e-004	27.1149
University/College (4yr)	969000	304.1467	0.0145	1.7600e-003	305.0332
Total		331.1828	0.0158	1.9200e-003	332.1481

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unenclosed Parking with Elevator	77522.4	24.3325	1.1600e-003	1.4000e-004	24.4034
University/College (4yr)	872100	273.7320	0.0131	1.5800e-003	274.5299
Total		298.0645	0.0142	1.7200e-003	298.9333

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.4058	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003
Unmitigated	0.4058	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-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	0.0412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003
Total	0.4058	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003
Total	0.4058	4.0000e-005	4.4700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7100e-003	8.7100e-003	2.0000e-005	0.0000	9.2800e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.4423	0.0136	3.4000e-004	4.8841
Unmitigated	5.0660	0.0170	4.2000e-004	5.6167

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	0.513864 / 0.803736	5.0660	0.0170	4.2000e-004	5.6167
Total		5.0660	0.0170	4.2000e-004	5.6167

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	0.411091 / 0.754708	4.4423	0.0136	3.4000e-004	4.8841
Total		4.4423	0.0136	3.4000e-004	4.8841

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.8910	0.5254	0.0000	22.0271
Unmitigated	8.8910	0.5254	0.0000	22.0271

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	43.8	8.8910	0.5254	0.0000	22.0271
Total		8.8910	0.5254	0.0000	22.0271

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
University/College (4yr)	43.8	8.8910	0.5254	0.0000	22.0271
Total		8.8910	0.5254	0.0000	22.0271

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

CONSTRUCTION ENERGY

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Demolition	Demolition	3/6/2023	4/7/2023	5	25
2	Grading	Grading	4/10/2023	8/25/2023	5	100
3	Building Construction	Building Construction	8/28/2023	3/28/2025	5	415
4	Paving	Paving	12/2/2024	3/28/2025	5	85
5	Architectural Coating	Architectural Coating	12/2/2024	3/28/2025	5	85

Diesel Equipment

gal/bhp-hr

USEPA 2020 Fuel

HP>100	BSFC (lb/hp-hr)	0.367	0.051625427	kgCO2/gal-D	10.21
HP<100	BSFC (lb/hp-hr)	0.408	0.057392846	kgCO2/gal-G	8.78
				lbCO2/gal-G	19.36

<u>Phase</u>	<u>Vehicle</u>	<u>lbCO2/day</u>	<u>days</u>	<u>gallons</u>	<u>fuel</u>
Demolition	Hauling	514.67	25	571.6 D	
Demolition	Vendor	67.3749	25	74.8 D	
Demolition	Worker	191.8453	25	247.8 G	
Grading	Hauling	1,029.34	100	4,573.0 D	
Grading	Vendor	67.3749	100	299.3 D	
Grading	Worker	383.6907	100	1,982.2 G	
Building Construction	Hauling	0	415	0.0 D	
Building Construction	Vendor	641.985	415	11,836.2 D	
Building Construction	Worker	2,877.68	415	61,696.8 G	
Paving	Hauling	0	85	0.0 D	
Paving	Vendor	316.1829	85	1,194.0 D	
Paving	Worker	375.816	85	1,650.3 G	
Architectural Coating	Hauling	0	85	0.0 D	
Architectural Coating	Vendor	0	85	0.0 D	
Architectural Coating	Worker	375.816	85	1,650.3 G	

LDA/LDT	Gasoline	67,227.4
MHDT/HHDT	Diesel	18,549.0
Equipment	Diesel	388,026.6

CONSTRUCTION ENERGY

[illegible]

<u>Ops-Mobile</u>	OPERATIONAL ENERGY		
	lbCO2/day	days/year	annual gallons of gasoline
	1,760.06	312	28,369.7

Electricity

Land Use	kWh/yr
Unenclosed Parking with Elevator	77522.4
University/College (4yr)	872100
	949.6224

Nat Gas

Land Use	MMBTU/year
Unenclosed Parking with Elevator	0
University/College (4yr)	2,682,000.0

<u>Water Electricity</u>	kWh/Mmgal			
	Supply Water	Treat Water	Distribute Water	Wastewater Treatment
	9727	111	1272	1911

	Indoor	Outdoor	Total
Water Use (gal/year)	411,091	754,708	1,165,799
Wastewater (gal/year)	411,091		
Electricity (MWh/year)	13.7		
	963.4		

Appendix B

Noise and Vibration Calculations

Noise and Vibration Calculations

Noise Formulas

Noise Distance Attenuation

Hard Site
 $N_i = N_o - 20 * \text{LOG}(D_i/D_o)$

D_i = distance to receptor ($D_i > D_o$)

N_i = attenuated noise level of interest
 N_o = reference noise level

D_o = reference distance

Source: (Bolt, Beranek, and Newman, 1971)

Summation of Noise Levels

Equation: $N_s = 10 \times \text{LOG}10((10^{(N_1/10)}) + (10^{(N_2/10)}) + (10^{(N_3/10)}) + (10^{(N_4/10)}))$

N_s = Noise Level Sum
 N_1 = Noise Level 1
 N_2 = Noise Level 2
 N_3 = Noise Level 3
 N_4 = Noise Level 4

Source: California Department of Transportation, Technical Noise Supplement, 2013

Construction Noise Analysis

Phased Construction Noise Levels	
Construction Equipment	Noise Level at 50 feet (dBA)
Demolition	
Concrete Saw	82.6
Backhoe	73.6
Dozer	77.7
Demolition Combined	84.2
Site Preparation	
Grader	81
Backhoe	73.6
Dozer	77.7
Site Preparation Combined	83.2
Grading	
Grader	81
Backhoe	73.6
Dozer	77.7
Grading Combined	83.2
Building Construction	
Crane	72.6
Generator	77.6
Gradall	79.4
Backhoe	73.6
Welder	70
Building Construction Combined	82.9
Paving	
Concrete Mixer	74.8
Paver	74.2
Roller	73.0
Backhoe	73.6
Paving Combined	80.0
Architectural Coating	
Air Compressor	73.7
Architectural Coating Combined	73.7

Source: Federal Highway Administration, Roadway Construction Noise Model, 2008

Construction: Resulting Noise Level Increases								
Sensitive Receptor	Distance (feet)	Intervening Building /a/	Reference Noise Level (dBA)	Max Construction Noise (dBA, Leq)	Existing Ambient (dBA, Leq)	County Threshold	Exceed Threshold?	Noise Level Change
Building Project Site (Proposed Health Professions Education Building) - HPEB								
(Site 2) King Drew Magnet High School to the west	50	0	84.2	84.2	58.3	70.0	Yes	14.2
(Site 3) Residences to the northwest	120	0	84.2	76.6	53.7	65.0	Yes	11.6
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	300	0	84.2	68.6	63.6	70.0	No	-1.4
(Site 1) Martin Luther King Jr. Community Hospital to the south	400	0	84.2	66.1	63.6	70.0	No	-3.9
(Site 4) Residences to the West	590	9	84.2	53.8	67.4	60.0	No	-6.2
Proposed Parking Structure								
Residences to the northeast along E. 117th St.	50	0	84.2	84.2	67.4	65.0	Yes	19.2
Residences to the east along E. 118th St.	120	0	84.2	76.6	60.4	65.0	Yes	11.6
Residences to the northeast along E. 117th St.	220	4.5	84.2	66.8	67.4	60.0	Yes	6.8
(Site 6) Residences to the east along E. 118th St.	280	4.5	84.2	64.7	60.4	65.0	No	-0.3

/a/ -4.5 dB for on intervening row of buildings and -1.5 dB for each subsequent row

Mitigated Construction: Resulting Noise Level Increases										
Sensitive Receptor	Distance (feet)	Intervening Building /a/	Reference Noise Level (dBA)	Mitigation Measure /b/	Mitigation /b/	Mitigated Noise Level	Max Construction Noise (dBA, Leq)	Existing Ambient (dBA, Leq)	County Threshold	Exceed Threshold?
Building Project Site (Proposed Health Professions Education Building) - HPEB										
(Site 2) King Drew Magnet High School to the west	50	0	84.2	N1, N2	15	69.2	69.2	58.3	70.0	No
(Site 3) Residences to the northwest	120	0	84.2	N1, N2	15	69.2	61.6	53.7	65.0	No
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	300	0	84.2	N1, N2	5	79.2	63.6	63.6	70.0	No
(Site 1) Martin Luther King Jr. Community Hospital to the south	400	0	84.2	N1, N2	5	79.2	61.1	63.6	70.0	No
(Site 4) Residences to the West	590	9	84.2	N1, N2	5	79.2	48.8	67.4	60.0	No
Proposed Parking Structure										
Residences to the northeast along E. 117th St.	50	0	84.2	N1, N3	20	64.2	64.2	67.4	65.0	No
Residences to the east along E. 118th St.	120	0	84.2	N1, N3	20	64.2	56.6	60.4	65.0	No
Residences to the northeast along E. 117th St.	220	4.5	84.2	N1, N3	20	64.2	46.8	67.4	60.0	No
(Site 6) Residences to the east along E. 118th St.	280	4.5	84.2	N1, N3	20	64.2	44.7	60.4	65.0	No

/a/ -4.5 dB for on intervening row of buildings and -1.5 dB for each subsequent row

/b/ Mitigation Measures N1 Includes a 5 dB reduction for equipment mufflers,
Mitigation Measure N2 includes a 10 dB reduction for a temporary noise barrier,
Mitigation Measure N3 includes a 15 dB reduction for a temporary noise barrier.

Operational Noise - New Operational Noise Standards					
Sensitive Receptors	Distance to Construction (Feet)	Use	Existing Ambient Noise Level (dBA, Leq)	County Daytime Noise Standards Based on Use	Use Existing Ambient as New Exterior Noise Standards?
Building Project Site (Proposed Health Professions Education Building) - HPEB					
(Site 2) King Drew Magnet High School to the west	50	Noise Sensitive	58.3	50	Yes
(Site 3) Residences to the northwest	120	Residential	53.7	50	Yes
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	300	Commercial	63.6	60	Yes
(Site 1) Martin Luther King Jr. Community Hospital to the south	400	Commercial	63.6	60	Yes
(Site 4) Residences to the West	590	Residential	67.4	50	Yes
Proposed Parking Structure					
Residences to the northeast along E. 117th St.	50	Residential	67.4	50	Yes
Residences to the east along E. 118th St.	120	Residential	60.4	50	Yes
Residences to the northeast along E. 117th St.	220	Residential	67.4	50	Yes
(Site 6) Residences to the east along E. 118th St.	280	Residential	60.4	50	Yes

Operational Noise - HVAC Equipment Noise Level							
Sensitive Receptor	Reference Noise Level (dBA)	HVAC Equipment Noise Level (dBA, Leq) /a/	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Exterior Noise Standards	Exceed Standards?	Noise Level Difference (dBA, Leq)
Building Project Site (Proposed Health Professions Education Building) - HPEB							
(Site 2) King Drew Magnet High School to the west	50	43.9	58.3	58.5	58.3	No	-0.2
(Site 3) Residences to the northwest	50	38.0	53.7	53.8	53.7	No	-0.1
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	50	36.4	63.6	63.6	63.6	No	0.0
(Site 1) Martin Luther King Jr. Community Hospital to the south	50	37.3	63.6	63.6	63.6	No	0.0
(Site 4) Residences to the West	50	33.4	67.4	67.4	67.4	No	0.0
Residences to the east along E. 118th St.	50	31.0	60.4	60.4	60.4	No	0.0
Proposed Parking Structure							
Not applicable.							

/a/ Noise level calculated using Soundplan.

Reference Voice Level (Outdoor Area Noise Level)	
Number of People	Noise Level at 6 feet (dBA)
1	57.8
5	64.8
8	66.8
10	67.8

Operational Noise - Outdoor Operational Noise Levels /a/								
Sensitive Receptor	Distance to HPEB (feet)	Intervening Building	Reference Noise Level (dBA)	Outdoor Noise Level (dBA, Leq) /b/ /c/	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Exterior Noise Standards	Exceed Standards?
Building Project Site (Proposed Health Professions Education Building) - HPEB								
(Site 2) King Drew Magnet High School to the west	50	0	-	0.0	58.3	58.3	58.3	No
(Site 2) Residences to the northwest	120	0	-	22.3	53.7	53.7	53.7	No
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	300	0	-	26.3	63.6	63.6	63.6	No
(Site 1) Martin Luther King Jr. Community Hospital to the south	400	0	-	22.9	63.6	63.6	63.6	No
(Site 4) Residences to the West	590	9	-	0.0	67.4	67.4	67.4	No
Residences to the east along E. 118th St.	770	4.5	-	20.0	60.4	60.4	60.4	No
Proposed Parking Structure								
Not applicable.								

/a/ takes into account anticipated noise levels received by the ground floor cafe seating area, ground floor amphitheater, and rooftop terrace

/b/ noise level calculated using Soundplan

/c/ for noise levels of 0, Soundplan had indicated that outdoor operational noise will not reach the sensitive receptor

Parking Activity Noise Level	
Parking Lot Noise = Reference Noise Level + 10 x LOG (Number of Average Peak Hour Trips/1000)	
Reference Noise Level at 50 feet (dBA, Leq)	Reference Parking Lot Capacity (Parking Spaces)
56.4	1,000
Proposed Project Parking Noise Level at 50 feet (dBA, Leq)	Number of Average Peak Hour Trips
41.0	29

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* , September 2018

Operational Noise - Parking Activity							
Sensitive Receptor	Distance	Intervening Building	Reference Noise Level (dBA)	Parking Activity Noise Level (dBA, Leq)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Exceed Standards?
Building Project Site (Proposed Health Professions Education Building) - HPEB							
Not applicable.							
Proposed Parking Structure							
Residences to the northeast along E. 117th St.	50	0	41.0	41.0	67.4	67.4	No
Residences to the east along E. 118th St.	120	0	41.0	33.4	60.4	60.4	No
Residences to the northeast along E. 117th St.	220	4.5	41.0	23.6	67.4	67.4	No
(Site 6) Residences to the east along E. 118th St.	280	4.5	41.0	21.5	60.4	60.4	No

Estimated Mobile Source Noise Levels (Existing)						
Roadway Segment	Estimated Noise Levels (dBA, Leq)			Estimated Noise Levels (dBA, CNEL)		
	Existing Conditions	Existing Conditions Plus Project	Change	Existing Conditions	Existing Conditions Plus Project	Change
Compton Ave. north of 118th St.	64.1	64.1	0.0	59.2	59.2	0.0
Compton Ave. between 118th St. and 120th St.	64.1	64.1	0.0	59.2	59.2	0.0
Wilmington Ave. north of 118th St.	66.1	66.1	0.0	61.2	61.2	0.0
Wilmington Ave. between 118th St. and 120th St.	65.9	65.9	0.0	61.0	61.0	0.0
118th St. east of Compton Ave.	54.6	54.9	0.3	49.7	50.0	0.3
118th St. west of Wilmington Ave.	56.4	56.5	0.1	51.5	51.6	0.1
120th St. east of Compton Ave.	65.3	65.3	0.0	60.4	60.4	0.0
120th St. west of Wilmington Ave.	64.1	64.1	0.0	59.2	59.2	0.0

Estimated Mobile Source Noise Levels (Opening Year 2023)						
Roadway Segment	Estimated Noise Levels (dBA, Leq)			Estimated Noise Levels (dBA, CNEL)		
	Opening Year 2023 No Project	Opening Year 2023 With Project	Change	Opening Year 2023 No Project	Opening Year 2023 With Project	Change
Compton Ave. north of 118th St.	64.1	64.1	0.0	59.2	59.2	0.0
Compton Ave. between 118th St. and 120th St.	64.1	64.2	0.1	59.2	59.3	0.1
Wilmington Ave. north of 118th St.	66.1	66.1	0.0	61.2	61.2	0.0
Wilmington Ave. between 118th St. and 120th St.	65.9	65.9	0.0	61.0	61.0	0.0
118th St. east of Compton Ave.	54.7	55.0	0.3	49.8	50.1	0.3
118th St. west of Wilmington Ave.	56.5	56.6	0.1	51.6	51.7	0.1
120th St. east of Compton Ave.	65.3	65.3	0.0	60.4	60.4	0.0
120th St. west of Wilmington Ave.	64.1	64.1	0.0	59.2	59.2	0.0

Combined Stationary Source Noise Analysis								
Sensitive Receptor	HVAC Equipment Noise Level (dBA, Leq) /a/	Outdoor Area Noise Level (dBA, Leq) /a/	Parking Activity Noise Level (dBA, Leq) /a/	Combined Noise Level (dBA, Leq)	County Standard		Exceed Standard?	
					Day	Night /b/	Day	Night /b/
Building Project Site (Proposed Health Professions Education Building) - HPEB								
(Site 2) King Drew Magnet High School to the west	43.9	0.0	0.0	43.9	60.0	n/a	No	n/a
(Site 3) Residences to the northwest	38.0	22.3	0.0	38.1	53.7	n/a	No	n/a
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	36.4	26.3	0.0	36.9	63.6	n/a	No	n/a
(Site 1) Martin Luther King Jr. Community Hospital to the south	37.3	22.9	0.0	37.5	63.6	n/a	No	n/a
(Site 4) Residences to the West	33.4	0.0	0.0	33.4	67.4	n/a	No	n/a
Proposed Parking Structure								
Residences to the northeast along E. 117th St.	0.0	0.0	41.0	41.0	67.4	n/a	No	n/a
Residences to the east along E. 118th St.	31.0	0.0	33.4	35.4	60.4	n/a	No	n/a
Residences to the northeast along E. 117th St.	0.0	0.0	23.6	23.7	67.4	n/a	No	n/a
(Site 6) Residences to the east along E. 118th St.	0.0	0.0	21.5	21.6	60.4	n/a	No	n/a

/a/ Calculated in Soundplan.

/b/ Are used to show that the proposed parking structure would primarily occur during the day and therefore only daytime standards would be

SOURCE: TAHA, 2021.

Project Site Height	Diagonal Distance from Sensitive Receptor to 5th Floor
75	90
75	140
75	310
75	405
75	600

Vibration Formulas

Vibration PPV Attenuation

Equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance

PPV (ref) is the reference vibration level in in/sec at 25 feet from Table 12-2

D is the distance from the equipment to the receiver.

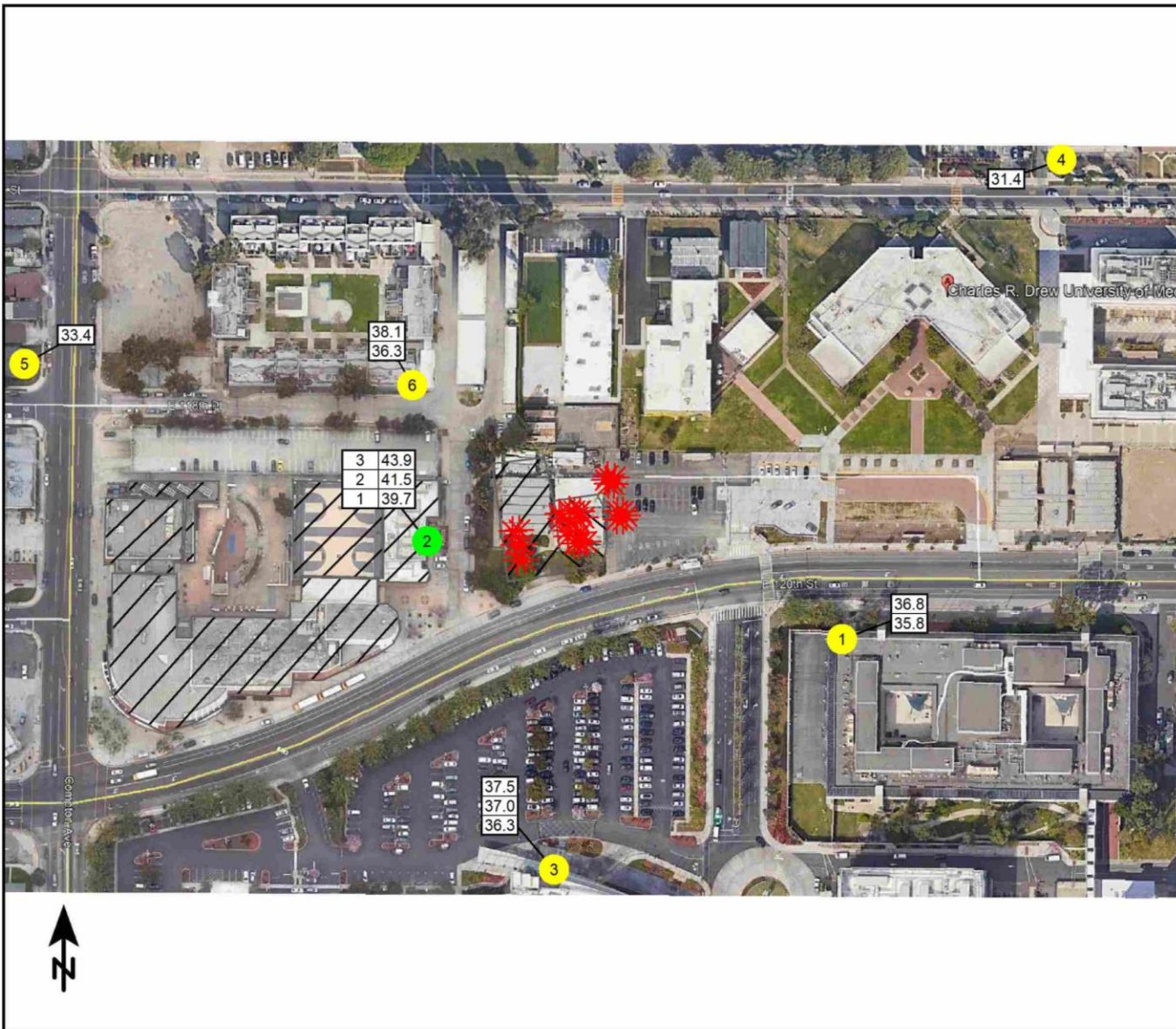
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

Vibration Velocities for Construction Equipment	
Equipment	Peak Particle Velocity at 25 feet (Inches/Second)
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

SOURCE: FTA, Transit Noise and Vibration Impact Assessment, September 2018.

Vibration Assessment				
Sensitive Receptor	Distance (feet)	Reference Vibration Level	Damage Assessment	Perception Threshold
Building Project Site (Health Professions Education Building)				
(Site 2) King Drew Magnet High School to the west	50	0.089	0.031	0.01
(Site 3) Residences to the northwest	120	0.089	0.008	0.01
(Site 1) Augustus F. Hawkins Mental Health Center to the southeast	300	0.089	0.002	0.01
(Site 1) Martin Luther King Jr. Community Hospital to the south	400	0.089	0.001	0.01
(Site 4) Residences to the West	590	0.089	0.001	0.01
Parking Lot Project Site				
Residences to the northeast along E. 117th St.	50	0.089	0.031	0.01
Residences to the east along E. 118th St.	120	0.089	0.008	0.01
Residences to the northeast along E. 117th St.	220	0.089	0.003	0.01
(Site 6) Residences to the east along E. 118th St.	280	0.089	0.002	0.01

Soundplan Model Runs



Signs and symbols

- Receiver
- Receiver at building
- Calculation area
- ✱ Point source

1 : 189

0 45 90 180 270 360 feet

Receiver List

No.	Receiver name	Building side	Floor	Limit				Level				Conflict			
				Leq1	Leq2	Leq3	Lmax	Leq1	Leq2	Leq3	Lmax	Leq1	Leq2	Leq3	Lmax
				dB(A)				dB(A)				dB(A)			
1	August F. Hawkins Menta		GF	-	-	-	-	35.8	-39.0	-39.0	0.0	-	-	-	-
			1.FI	-	-	-	-	36.8	-38.3	-38.3	0.0	-	-	-	-
2	King Drew Magnet High S	East	GF	-	-	-	-	39.7	-44.8	-44.8	0.0	-	-	-	-
			1.FI	-	-	-	-	41.5	-43.2	-43.2	0.0	-	-	-	-
			2.FI	-	-	-	-	43.9	-40.9	-40.9	0.0	-	-	-	-
3	Martin Luther King Jr Hos		GF	-	-	-	-	36.3	-42.2	-42.2	0.0	-	-	-	-
			1.FI	-	-	-	-	37.0	-41.7	-41.7	0.0	-	-	-	-
			2.FI	-	-	-	-	37.5	-41.1	-41.1	0.0	-	-	-	-
4	Residences along E 118th		GF	-	-	-	-	31.4	-44.5	-44.5	0.0	-	-	-	-
5	Residences to Northwest		GF	-	-	-	-	33.4	-50.9	-50.9	0.0	-	-	-	-
6	Willowbrook Apts		GF	-	-	-	-	36.3	-42.8	-42.8	0.0	-	-	-	-
			1.FI	-	-	-	-	38.1	-41.5	-41.5	0.0	-	-	-	-

Traffic Noise Model Runs

Existing Conditions

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	54.6	66	54.6	10	----	54.6	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier						With Barrier			
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB			dBA	dB	dB	dB
Receiver1	1	1	0.0	56.4	66	56.4	10	----		56.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
Receiver1	1	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal
								Sub'l Inc				Calculated
												minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Existing Plus Project Conditions

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
Receiver1	1	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier						With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
Receiver1	1	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal
								Sub'l Inc				Calculated
												minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Opening Year No Project Conditions

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	54.7	66	54.7	10	----	54.7	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>													
<Analysis By?>													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier						With Barrier			
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
Receiver1	1	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

<Project Name?>

<Organization?>												
<Analysis By?>												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
RUN:												
BARRIER DESIGN:												
ATMOSPHERICS:												
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
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All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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All that meet NR Goal		0	0.0	0.0	0.0							

Opening Year Plus Project Conditions

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All that meet NR Goal		0	0.0	0.0	0.0							

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All Impacted		0	0.0	0.0	0.0							
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Receiver1	1	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
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All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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Receiver1	1	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
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All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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Receiver1	1	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
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All Selected		1	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Appendix C

Transportation Impact Analysis



Charles R. Drew University
Health Professions Education Building
Transportation Impact Analysis
Draft Report

September 28, 2022

Submitted to:



11239 | Prepared by Iteris, Inc.

Innovating Through Informatics™



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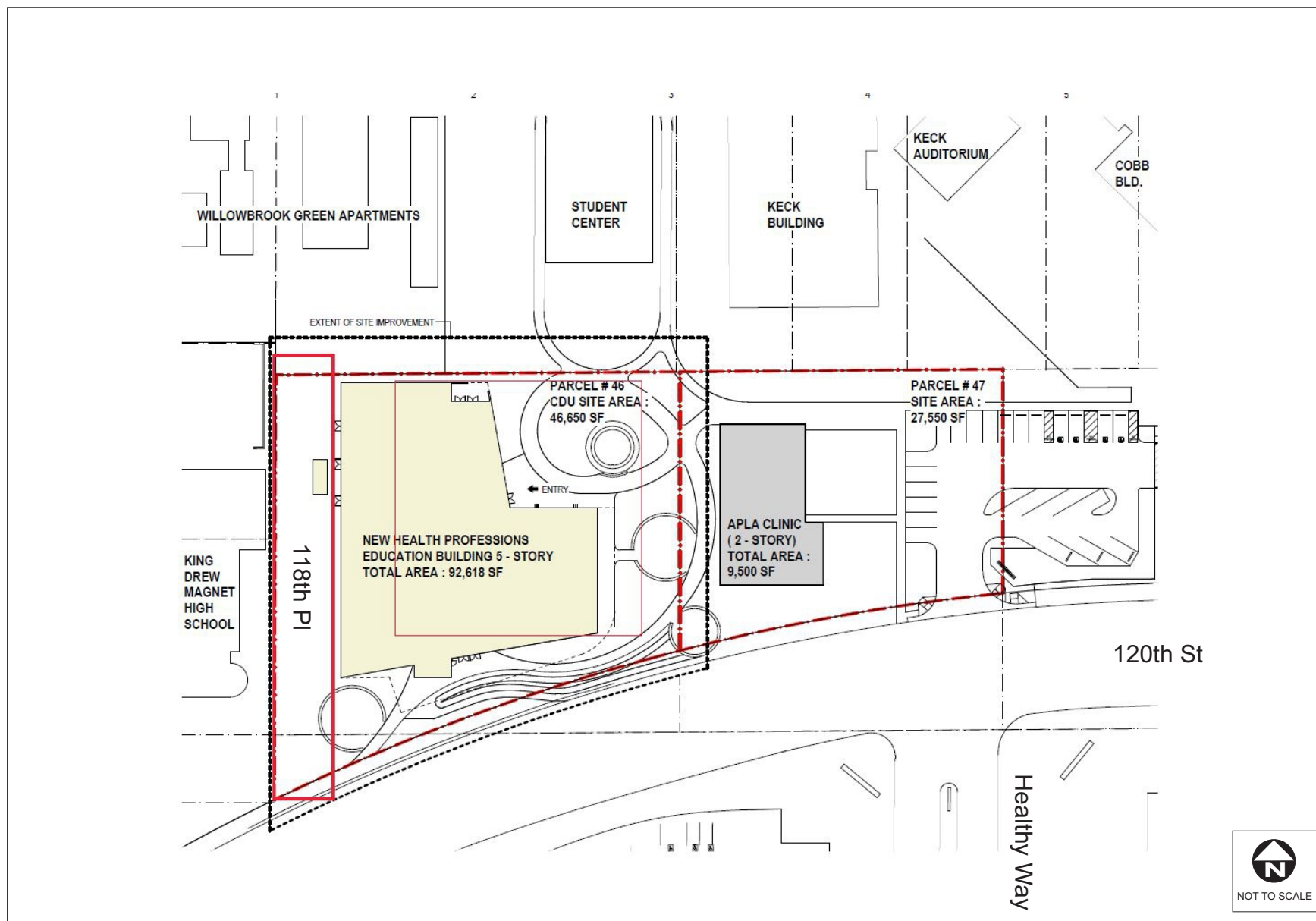
1.0 INTRODUCTION

This report summarizes the results of a transportation impact analysis for the proposed Charles R. Drew University (CDU) Health Professions Education Building (HPEB), located at 1731 East 120th Street-in the Willowbrook area of unincorporated Los Angeles County. This report provides a California Environmental Quality Act (CEQA) and non-CEQA transportation analysis based on the County's latest *Transportation Impact Analysis Guidelines*.

1.1 Project Description

The proposed HPEB project site is a 46,650 square foot parcel comprising one lot located at the southwest corner of the CDU campus. The proposed new building will be located at 1731 East 120th Street, west of Compton Avenue, between a newly constructed CDU APLA Wellness Center to the east and the existing King/Drew Magnet High School of Medicine and Science to the west. The site currently consists of two modular buildings used for offices and facilities. These uses will be moved into other buildings on campus, including facilities and security offices in the proposed HPEB. **Figure 1** illustrates the proposed project site plan.

As part of the new HPEB building, an additional enrollment of 240 students is anticipated. While the new building will be located along 120th Street, it is anticipated that students and employees accessing the site would utilize the current and future CDU parking facilities along 118th Street. The project is located within the Willowbrook Transit Oriented District (TOD) Specific Plan area, approximately 0.42 miles from the Willowbrook/Rosa Parks Metro Station (serving the A Line and C Line).





2.0 ENVIRONMENTAL SETTING

This section presents an overview of the existing roadway network within the study area.

2.1 Roadway Configurations

The existing configurations of the significant roadways within the study area are described below:

- **Compton Avenue** is a four-lane undivided roadway, oriented in a north-south direction. On-street parking is provided within the study area and the roadway's posted speed limit is 35 mph.
- **Wilmington Avenue** is a four to five-lane divided roadway, oriented in a north-south direction, providing access to I-105. On-street parking is provided within the study area and the roadway's posted speed limit is 35 mph.
- **120th Street** is a two-lane divided roadway, oriented in an east-west direction. On-street parking is provided within the study area and the roadway's posted speed limit is 35 mph. A Class II bike lane is provided on both sides of the roadway in the vicinity of CDU.
- **118th Street** is a two-lane undivided roadway, oriented in an east-west direction, providing access to current and future CDU parking facilities related to the project. On-street parking is provided within the study area and the roadway's posted speed limit is 25 mph.



3.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) TRANSPORTATION ANALYSIS

This section provides the California Environmental Quality Act (CEQA) transportation analysis of the proposed project. The project's impacts are evaluated per Section 15064.3 of the current CEQA guidelines (Appendix G), which requires that projects be assessed for how they would affect the four criteria listed below:

- a. *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*
- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
- d. *Would the project result in inadequate emergency access?*

The proposed project's potential CEQA transportation impacts are evaluated as follows:

- a. *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less than Significant Impact: The project site consists of one parcel being leased from the County of Los Angeles, which is currently part of the existing Charles R. Drew University of Medicine and Science (CDU) campus. The area is surrounded by other Charles R. Drew University buildings, CDU APLA Wellness Center, King Drew Medical Magnet High School, Martin Luther King Community Health Center, other various County and Civic building. To the east, Rosa Parks Metro Station includes the Metro A (Blue) and C (Green) lines, located adjacent to the Kenneth Hahn Shopping Center. The proposed project is consistent with the zoning and policies of the Willowbrook Transit Oriented Development Specific Plan.

The proposed project would not negatively affect the existing bus stops along Compton Avenue, Wilmington, and 120th Street, the sidewalks along 120th Street and 118th Street, nor the Class II bicycle lanes along 120th Street designated in the Los Angeles County Bicycle Master Plan.

Willowbrook Transit Oriented District Specific Plan. The project site is governed by the Willowbrook Transit Oriented District Specific Plan development and design standards. The Specific Plan is intended to facilitate the transformation of the area around the Metro Willowbrook/Rosa Parks Station into a vibrant transit-oriented district, while strengthening its connections to the adjacent residential neighborhoods and the rest of the Willowbrook community. Two mixed use zones are established to facilitate integrated commercial and residential development through optimal site planning and efficient use of land and to promote walking, bicycling, recreation, transit use and community reinvestment. The Specific Plan also presents short and long term land use strategies for the various institutions and facilities in the Specific Plan area, which will be important in achieving the established community goals.



The Specific Plan implemented roadway modifications to enhance pedestrian and bicycle circulation. The roadway modifications in the Specific Plan included the now implemented Road Diet and Bicycle Lanes on 120th Street in the section between Compton Avenue and Wilmington Avenue as part of the Willowbrook Area Access Improvement Project.

The Specific Plan Programmatic Environmental Impact Report (PEIR) included Charles R. Drew University with 49 multi-family housing units and 625 total students with 477,842 square feet of building space in the existing conditions with 119 multi-family housing units and 1,450 students in 772,990 square feet of building space under future conditions. This was a net change of 70 multi-family dwelling units, 825 students, and 295,148 square feet of building space. Trip generation estimates were developed for the CDU Master Plan based on ITE Trip Generation 9th Edition, with adjustment factors appropriate for the CDU campus and a TOD area. The CDU portion of the Specific Plan was forecasted to generate 125 a.m. peak hour trips (4% of total Specific Plan a.m. peak hour trips) and 126 p.m. peak hour trips (3% of total Specific Plan p.m. peak hour trips).

The PEIR Section 3.12 Transportation and Traffic concerned the circulation system in the project area. The section evaluated potential Specific Plan-related impacts at 66 study intersections, ten freeway segments, and ten freeway off-ramps that provide local and regional access to the traffic study area and define the extent of the boundaries for this traffic impact analysis. Investigations at these key locations were used to evaluate potential traffic-related impacts associated with build out of the proposed Specific Plan. The section also provided mitigation measures, where feasible, that would reduce potential impacts from build out of the proposed Specific Plan to be implemented by site specific development applications within the Specific Plan area prior to issuance of a grading permit. Monitoring agencies include the Los Angeles County Department of Regional Planning, City of Compton, City of Los Angeles, and Caltrans.

The **Los Angeles County Bicycle Master Plan** designates a countywide network of bicycle paths, bicycle-lanes, and bicycle routes in the vicinity of the Specific Plan area. Bicycle lanes are present along 120th Street from Compton Avenue to Wilmington Boulevard and a bicycle route is designated from Wilmington Boulevard to Mona Boulevard along 120th/119th Street.

Therefore, the proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.



- b. *Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less than Significant Impact: As part of the County's guidelines, projects may potentially be screened out from CEQA analysis within this criteria based on certain features such as location, land use type, density, etc. The applicable screening criteria evaluated for the proposed project is "Proximity to Transit Based Screening Criteria" (Section 3.1.2.3). Given that the project is located within a one-half mile radius of a major transit stop, the following questions are to be considered as part of this criteria:

- Does the project have a Floor Area Ratio (FAR) less than 0.75?
- Does the project provide more parking than required by the County Code?
- Is the project inconsistent with the SCAG RTP/SCS?
- Does the project replace residential units set aside for lower income households with a smaller number of market-rate residential units?

The answers to the four criteria questions are as follows:

- *Does the project have a Floor Area Ratio less than 0.75?* **No**, the proposed project would have an FAR of 2.15.
- *Does the project provide more parking than required by the County Code?* **No**, a total of 73 parking spaces would be allocated to the proposed project from the existing surface parking lot at the northeast corner of Compton Avenue and from the parking facility on 118th Street. The Willowbrook TOD Specific Plan and TOD Parking Reduction Overlay Zone set the parking requirements contained in Chapter 22.112 of the County of Los Angeles Code of Ordinances as the maximum parking standards for non-residential uses. The minimum parking standard for non-residential uses in the Willowbrook TOD Specific Plan and TOD Parking Reduction Overlay Zone is 40 percent of the maximum requirement. The maximum parking requirement for the proposed project, as required by Chapter 22.112 of the County of Los Angeles Code of Ordinances, is 181 spaces. At 40 percent of the maximum parking requirement, the minimum parking requirement for the proposed project would be 73 parking spaces.
- *Is the project inconsistent with the SCAG RTP/SCS?* **No**, the proposed project is consistent with the growth projections that were used for the SCAG RTP/SCS.
- *Does the project replace residential units set aside for lower income households with a smaller number of market-rate residential units?* **No**, no residential units are located on the project site and the proposed project would not remove any residential units.

As described, the answer to all four of the criteria questions is No. Therefore, based on the screening criteria, further analysis is not required and the project's impacts are considered to be less than significant.

Furthermore, CEQA Guideline Section 15064.3, subdivision (b)(1), states lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a



high-quality transit corridor will have a less-than-significant impact on VMT. A major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (CA Public Resource Code Section 21064.3).

The Project site is approximately 0.42 miles from the major transit stop of the Willowbrook-Rosa Parks Station which is served by Metro A (Blue) and C (Green) light rail lines and is also directly served by several bus lines via off-street bus loading bays. As such, the project is located within a Transit Priority Area (TPA) as defined by the Southern California Association of Government (SCAG), as part of SCAG's 2045 Regional Transportation Plan/Sustainable Communities Strategy, updated as of June 2019.

Since the project is within ½ mile of an existing major transit stop along an existing high quality transit corridor (in a transit priority area) and is a part of a mixed-use transit-oriented district specific plan, the project is presumed to cause a less than significant transportation impact. Thus, the project would not conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

- c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less than Significant Impact: Parking for the project would be provided as a part of the overall campus parking. The existing surface parking lot at the northeast corner of the Compton Avenue/118th Street intersection would allocate 65 parking spaces to the proposed project. In addition, the parking facility on 118th Street (between the former Abraham Lincoln Elementary School and the Park Water Company Well 19C property) would be expanded. This expansion will include structured parking over an existing surface parking lot, with connections to an existing three level parking structure. While the new building will be located along 120th Street, it is anticipated that students and employees accessing the site would utilize the current and future CDU parking facilities along 118th Street.

Driveway access will be designed to ensure no hazardous design features related to vehicle and pedestrian mobility (sharp curves, line of sight obstructions) are included. The project would not substantially increase hazards due to a geometric design feature or incompatible uses.

- d. Would the project result in inadequate emergency access?*

Less than Significant Impact With Mitigation Incorporated: The project site is immediately adjacent to the west of Los Angeles County Fire Department Station 41 and the access to the hospital emergency department along 120th Street. Previous construction efforts closed the north lane of 120th Street and utilized the two-way left turn lane as a travel lane.

Mitigation Measure: Prior to construction, a construction traffic management plan shall be implemented to address construction-related traffic and emergency access issues. Flag persons and/or detours shall be



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provided as needed, and construction signs shall be posted to advise motorists of reduced construction zone speed limits. The construction traffic management plan shall be developed in coordination with the Martin Luther King, Jr. medical facility and LACFD to ensure that emergency vehicle access along 118th and 120th Streets are maintained and that access to LSCFD Station 41 and the Martin Luther King, Jr. Medical Campus is not restricted. Thus, construction and operation of the proposed project would not result in inadequate emergency access assuming this mitigation measure.



4.0 NON-CEQA ANALYSIS

This section presents the non-CEQA analysis of the projects impacts on circulation, per the County's Site Access Studies guidelines. Given the results of the CEQA analysis, this non-CEQA traffic operational analysis is not required per County screening criteria guidelines. Thus, this analysis is being provided for informational purposes only.

4.1 Traffic Operations Analysis Methodology

Intersections are typically considered to represent the most critical locations for traffic flow bottlenecks and general congestion on roadways. Conflicting traffic movements are created at intersections since the right-of-way must be shared by opposing traffic streams. For purposes of this study, intersection level of service (LOS) is measured to determine the peak hour operating conditions at the study intersections.

Traffic operations analysis was conducted utilizing the Highway Capacity Manual methodology. HCM methodology defines LOS by the average vehicle delay experienced by all vehicles traveling through the intersection. **Table 1** presents a brief description of each level of service letter grade, as well as the range of HCM average intersection delay associated with each grade for signalized intersections.

Table 1: Intersection Level of Service Definitions – HCM Methodology

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤ 20
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤ 35
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and ≤ 55
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and ≤ 80
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80

Source: Highway Capacity Manual 2000, Transportation Research Board, Washington, D.C., 2000.



4.2 Existing Conditions

This section presents the existing traffic operations in the study area. The proposed study area for site access analysis includes the following four (4) significant signalized intersections in the vicinity of the project site:

1. Compton Avenue/118th Street;
2. Compton Avenue/120th Street;
3. Wilmington Avenue/118th Street; and
4. Wilmington Avenue/120th Street-119th Street.

The study intersections for analysis were selected based on the expected distribution of project-generated trips, to and from the parking access along 118th Street, which typically utilize higher capacity roadways. The project site location and proposed study intersections are shown in **Figure 2**.

Traffic operations were evaluated for each of the following scenarios during the weekday a.m. (7:00 – 9:00) and p.m. (4:00 – 6:00) peak hours:

- Existing Conditions;
- Existing Plus Project Conditions;
- Opening Year 2023 Without Project Conditions; and
- Opening Year 2023 With Project Conditions.

Based on construction information provided by the project team, the projected opening year for the proposed project is 2025.

4.2.1 Existing Traffic Volumes

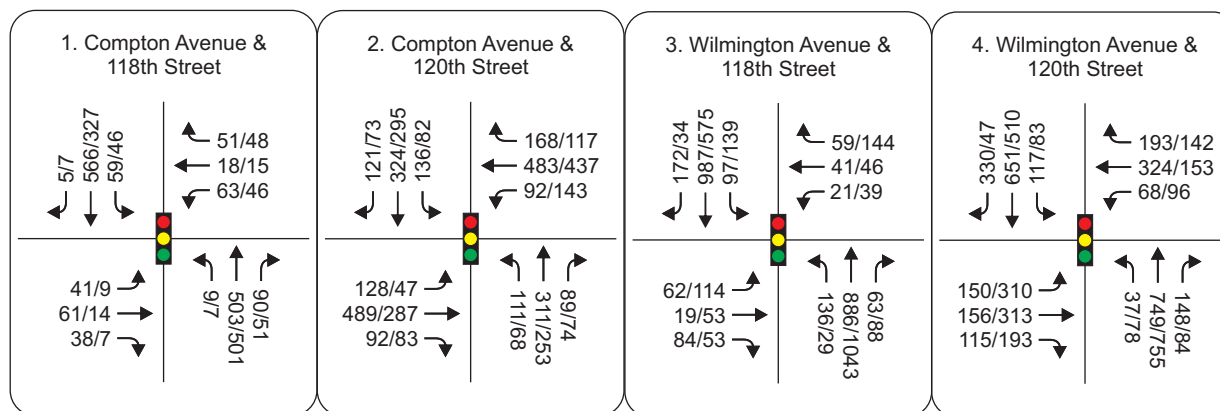
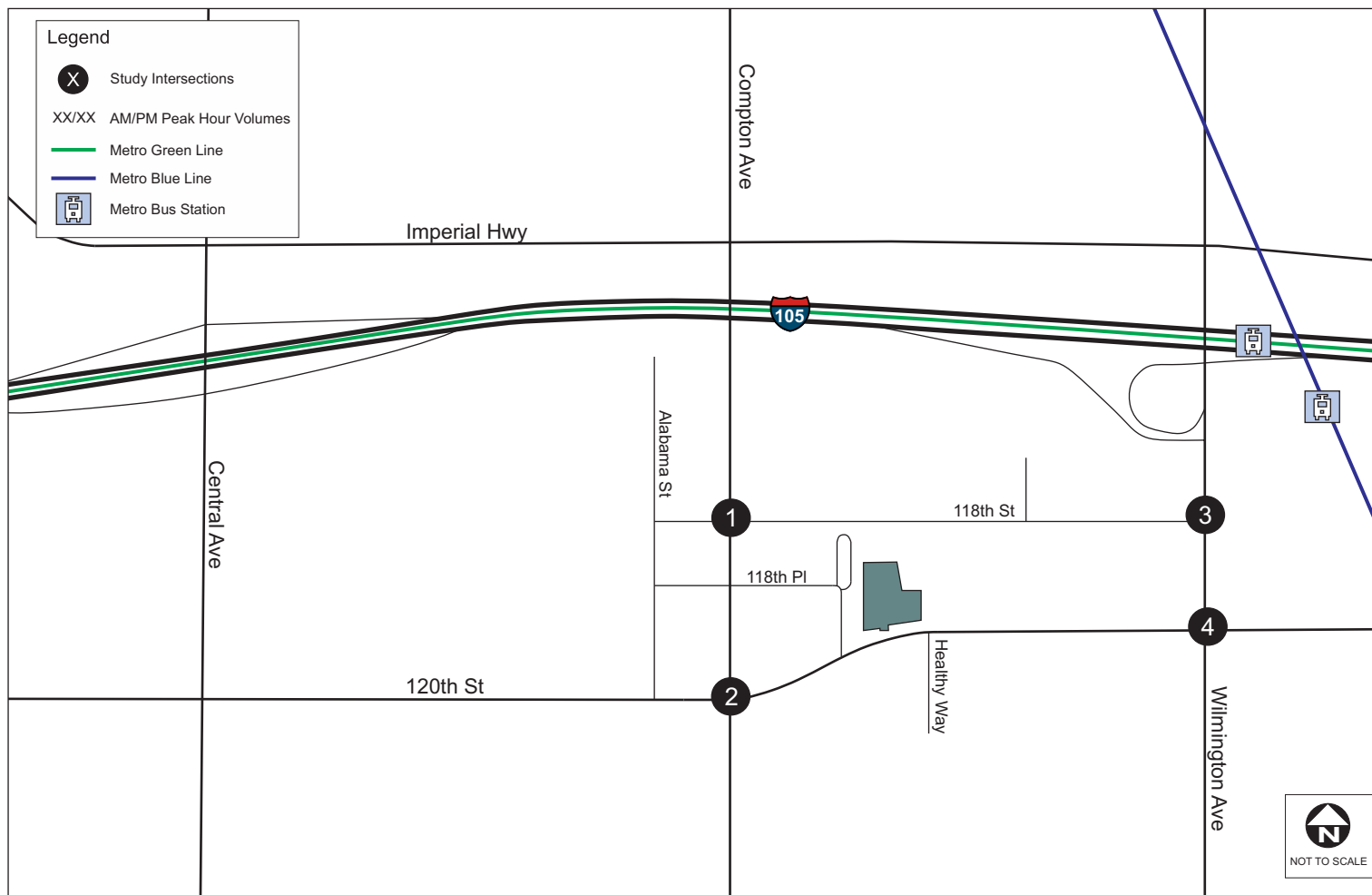
Due to the uncertainty of current traffic conditions related to the Covid-19 pandemic, new traffic data was not collected at the study intersections. In addition, current construction activities along 120th Street adjacent to the project site could result in atypical traffic patterns. Thus, as an alternative to collecting new data, Iteris utilized existing traffic volumes (a.m. and p.m. peak hour) from the *Willowbrook TOD Specific Plan EIR Traffic Study* (May 2017), where available.

Detailed vehicle turning movement data are included in **Appendix A**. The 2015 historical counts were then increased by an annual growth rate of 1% in order to develop a 2020-equivalent volume set for use in this analysis. **Figure 3** shows the existing peak hour volumes at the study intersections.

4.2.2 Existing Intersection Levels of Service

A level of service analysis was conducted to evaluate existing intersection operations during the a.m. and p.m. peak hours at the study intersections. **Figure 4** shows the existing intersection lane configurations. **Table 2** summarizes the existing LOS at the study intersections. LOS calculation sheets are provided in **Appendix B**.





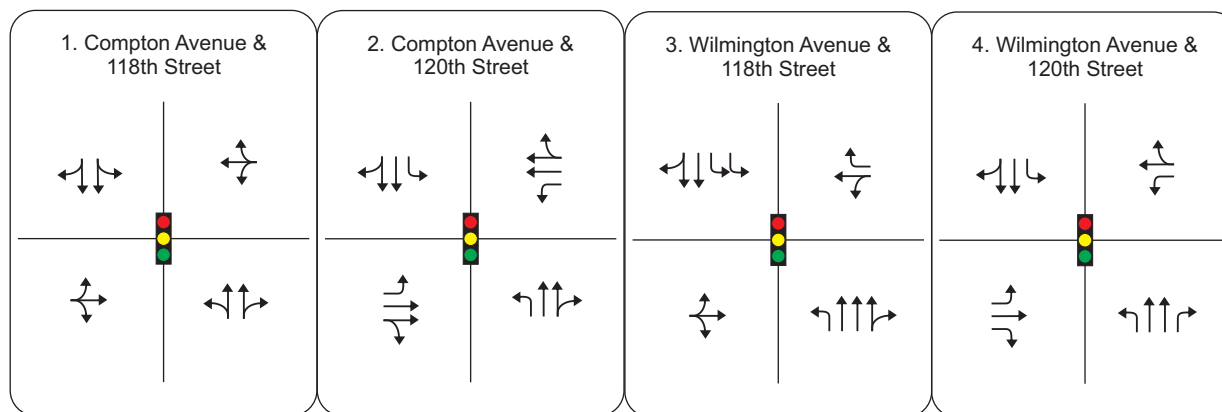




Table 2: Existing Intersection Peak Hour Levels of Service

Intersection		Control Type	AM Peak Hour		PM Peak Hour	
			Delay (sec)	LOS	Delay (sec)	LOS
1	Compton Ave/118 th St	signalized	9.4	A	6.3	A
2	Compton Ave/120 th St	signalized	19.8	B	15.7	B
3	Wilmington Ave/118 th St	signalized	16.8	B	17.3	B
4	Wilmington Ave/120 th St-119 th St	signalized	26.1	C	22.0	C

Notes:

sec = seconds; LOS = Level of Service.

As shown in **Table 2**, the study intersections are currently operating at LOS C or better.

4.3 Proposed Project Traffic

The first step in analyzing the traffic conditions with the project is to estimate the number of new trips expected to be generated by the proposed project. As part of the new HPEB building, an additional enrollment of 240 students is anticipated. This section describes the methodology used to determine project trip generation and the distribution of project traffic within the study area. The forecast trip generation for the project is calculated using Institute of Transportation Engineers (ITE) *Trip Generation 10th Edition* manual. The ITE land use category for the proposed project is identified as University/College (Code 550), using the number of students as the metric. The Junior/Community College (Code 540) category was reviewed as well for potential use in the analysis. However, trip rates for this category are based on fewer sample studies than the University/College trip rates.

4.3.1 Project Trip Generation

The number of trips forecast to be generated by the proposed project was calculated by multiplying the trip generation rate by the proposed number of new student enrollment. The net trip calculations assume trip discounts accounting for the project's proximity to a major transit station (Metro the A Line and C Line) resulting in non-vehicular trips (i.e., walking and bicycling trips) in lieu of vehicular trips. The result of this calculation is shown in **Table 3**.



Charles Drew University HPEB
Transportation Impact Analysis
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Table 3: Proposed Project Trip Generation

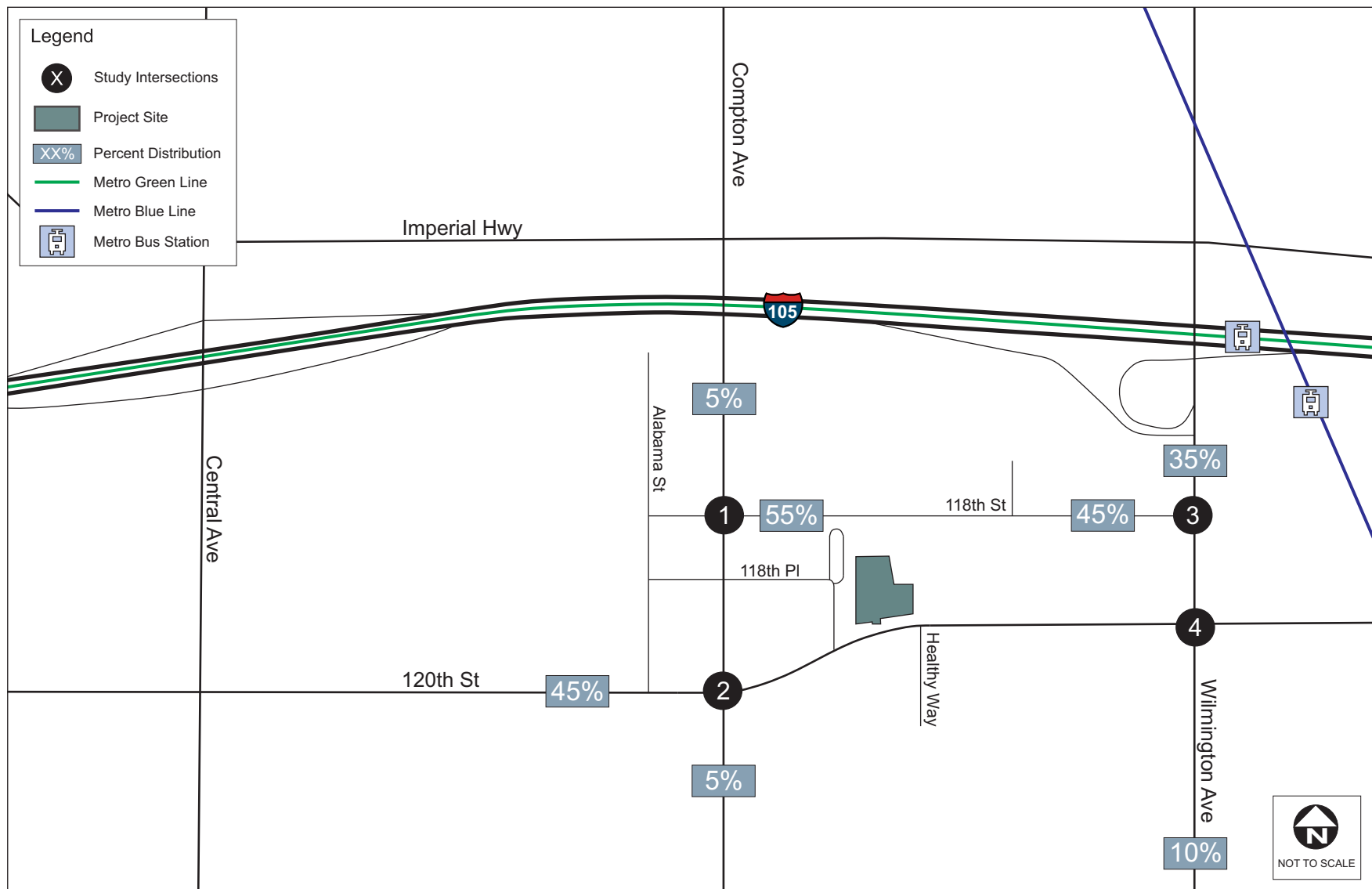
Land Use (ITE Code)	Size	Units	Trip Generation Rates							Trip Generation						
			AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
University/College (550)	240	Students	78%	22%	0.15	32%	68%	0.15	1.56	28	8	36	12	24	36	374
Transit Oriented Development (TOD) Reduction (20%)										-6	-2	-8	-2	-5	-7	-75
NET PROJECT TOTAL										22	6	28	10	19	29	299

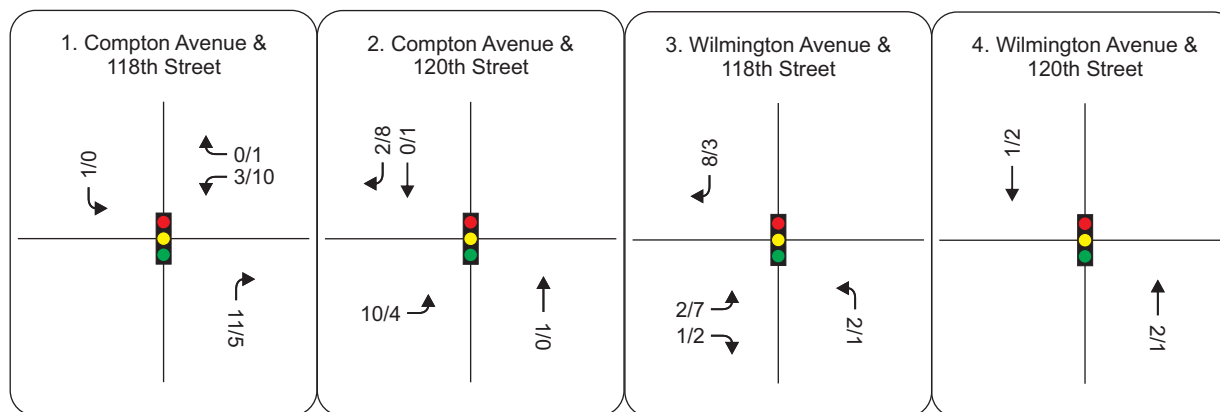
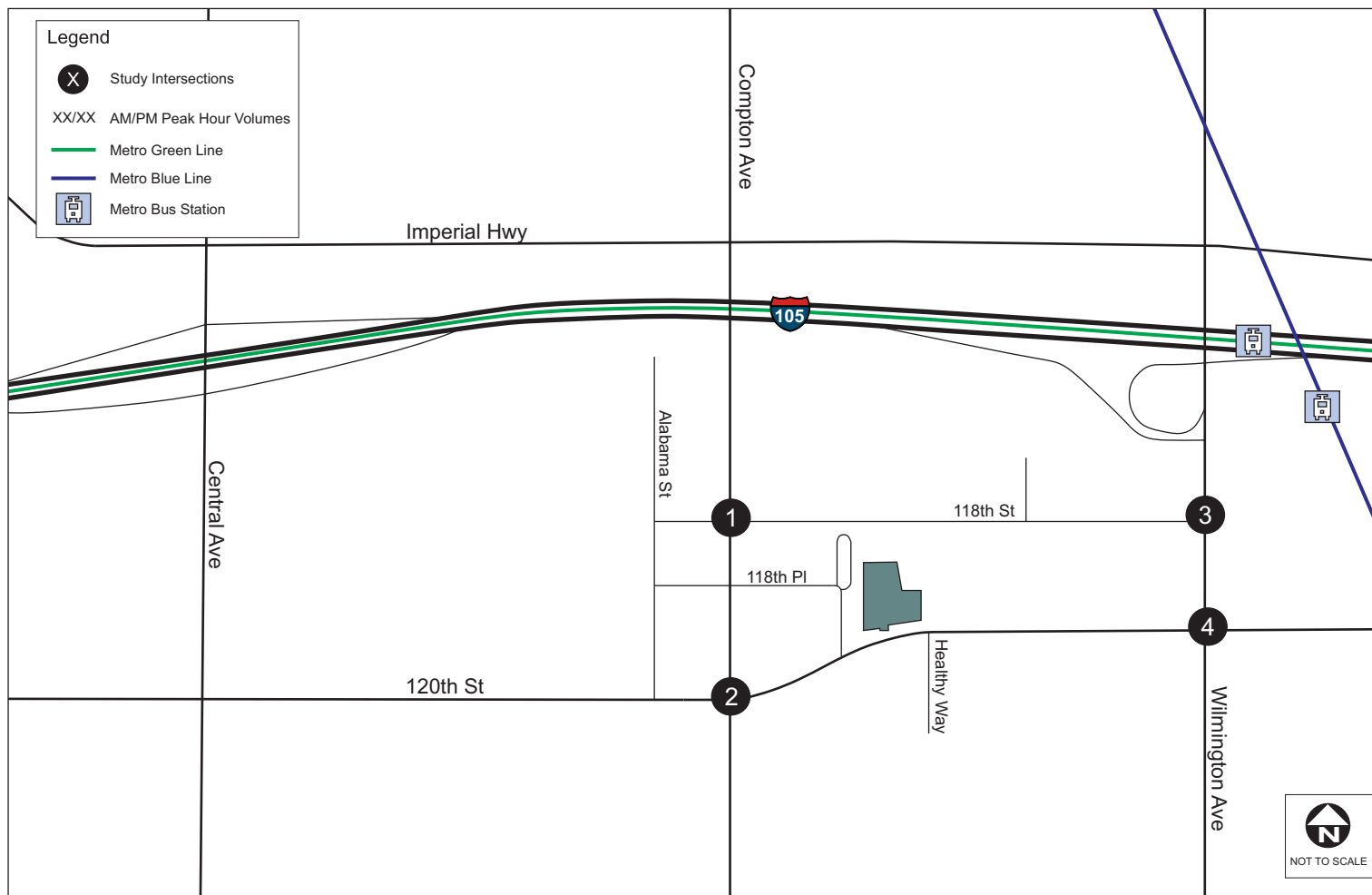
As shown, the proposed project's increase in student enrollment is forecast to generate 28 net new a.m. peak hour trips, 29 net new p.m. peak hour trips, and 299 net new daily trips.



4.3.2 Project Trip Distribution and Assignment

Trip distribution assumptions are used to determine the origin and destination of new vehicle trips associated with the project. Trip distribution is based on information provided by CDU, regarding where current students live. While the new building will be located along 120th Street, it is anticipated that students and employees accessing the site would utilize the current and future CDU parking facilities along 118th Street. The project trip distribution is shown in **Figure 5**. The new trips generated by the project are then assigned to the surrounding roadway system based on the distribution patterns to estimate the project-related peak-hour traffic at each of the study intersections. **Figure 6** illustrates the proposed project trip assignment onto the roadway network during the a.m. and p.m. peak hours.







4.4 Existing Plus Project Conditions

Existing plus project conditions were developed by adding trips generated by the proposed project to existing volumes. **Figure 7** illustrates the existing plus project traffic volumes at the study intersections. **Table 4** summarizes the existing plus project level of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

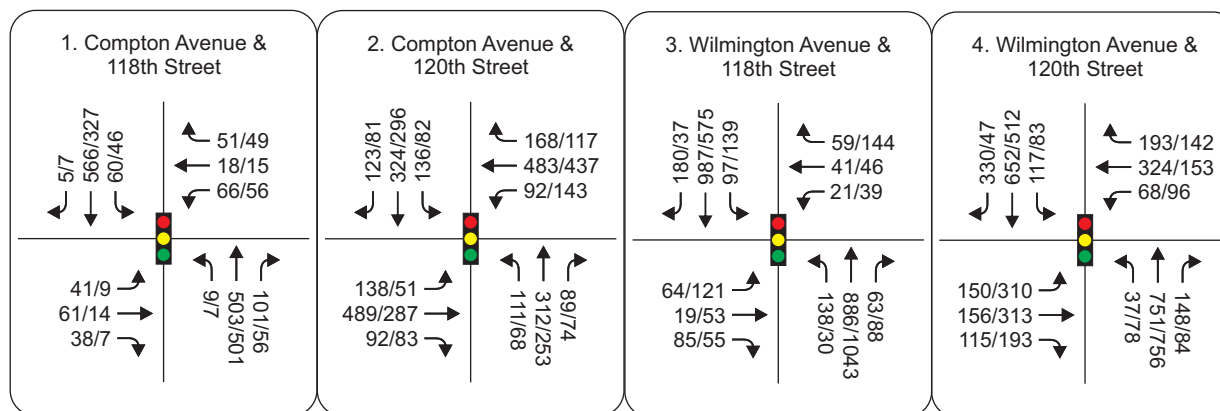
Table 4: Existing Plus Project Intersection Peak Hour Levels of Service

Intersection		Existing Conditions				Existing Plus Project Conditions				Change in Delay (s)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS		
1	Compton Ave/118 th St	9.4	A	6.3	A	9.4	A	7.1	A	0.0	0.8
2	Compton Ave/120 th St	19.8	B	15.7	B	19.6	B	16.3	B	0.2	0.6
	Wilmington Ave/118 th St	16.8	B	17.3	B	16.4	B	16.2	B	0.4	0.9
	Wilmington Ave/120 th St-119 th St	26.1	C	22.0	C	26.1	C	22.1	C	0.0	0.1

Notes:

s = seconds, LOS = Level of Service.

As shown in **Table 4**, project-related increases in peak hour intersection delay are minimal. These increases in peak hour traffic are not forecast to result in worsening of intersection LOS at the significant intersections in the vicinity of the project.





4.5 Opening Year 2023 Without Project Conditions

The project opening year is 2023. Therefore, this section analyzes opening year 2023 traffic conditions without the proposed project. Opening year 2023 without project traffic volumes were developed by considering traffic increases due to ambient growth, without consideration of the proposed project.

Ambient traffic growth is the traffic growth that will occur in the study area due to general employment growth, housing growth, and growth in regional through trips in Southern California. The Southern California Association of Governments (SCAG) travel-demand model was reviewed to determine the estimated growth in traffic volumes along roadways within the study area. Based on the review of baseline (2018) and future (2040) SCAG model scenarios, the roadways within the study area are forecast to increase traffic volumes by 0.5% per year.

A level of service analysis was conducted to evaluate opening year 2023 without project intersection operations during the weekday a.m. and p.m. peak hours. Opening year 2023 without project peak hour volumes at the study intersections are provided in **Appendix C. Table 5** summarizes the opening year 2023 without project levels of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

Table 5: Opening Year 2023 Without Project Intersection Peak Hour Levels of Service

Intersection		Control Type	AM Peak Hour		PM Peak Hour	
			Delay (sec)	LOS	Delay (sec)	LOS
1	Compton Ave/118 th St	signalized	9.5	A	6.8	A
2	Compton Ave/120 th St	signalized	19.7	B	16.4	B
3	Wilmington Ave/118 th St	signalized	16.4	B	16.1	B
4	Wilmington Ave/120 th St-119 th St	signalized	26.4	C	22.6	C

Notes:

s = seconds, LOS = Level of Service.

As shown in **Table 5**, the study intersections are forecast to operate at LOS C or better in opening year 2023.



4.6 Opening Year 2023 With Project Conditions

Opening year 2023 with project conditions were developed by adding trips generated by the proposed project to opening year 2023 without project volumes. Opening year 2023 with project traffic volumes at the study intersections are provided in **Appendix C**.

A level of service analysis was conducted to evaluate year 2023 with project intersection operations during the a.m. and p.m. peak hours. **Table 6** summarizes the opening year 2023 with project levels of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

Table 6: Opening Year 2023 With Project Intersection Peak Hour Level of Service

Intersection		Existing Conditions				Existing Plus Project Conditions				Change in Delay (s)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS		
1	Compton Ave/118 th St	9.5	A	6.8	A	9.5	A	7.2	A	0.0	0.4
2	Compton Ave/120 th St	19.7	B	16.4	B	19.8	B	16.4	B	0.1	0.0
	Wilmington Ave/118 th St	16.4	B	16.1	B	16.5	B	16.5	B	0.1	0.4
	Wilmington Ave/120 th St-119 th St	26.4	C	22.6	C	26.4	C	22.6	C	0.0	0.0

Notes:

s = seconds, LOS = Level of Service.

As shown in **Table 6**, project-related increases in peak hour intersection delay are minimal. These increases in traffic are not forecast to result in worsening of intersection LOS at the significant intersections in the vicinity of the project in the opening year.

4.7 Construction Phase & Local Residential Street Cut-Through Analyses

This section provides a qualitative assessment of construction activities and the potential for residential street cut-through as a result of the project.

The project construction activities are evaluated to determine any potential negative effects on pedestrian, bicycle, transit, or vehicle circulation. This assessment considers whether any temporary lane closures, loss of on-street parking, or removal of bus stops would occur during construction activities. Based on information provided by the project applicant, it is not anticipated that construction activities would require closure of any travel lanes. However, there is the potential for a temporary closure of the curb/parking lane along 120th Street.

Vehicle cut-through trips are defined as those which feature travel along local streets as an alternative to



a higher classification street segment. The parking access is provided along 118th Street, which is a current access point for CDU students and employees. Thus, the project would not add a new access point to the network. New project trips would distribute through the circulation network similar to current CDU trips. Therefore, it is not anticipated that the project would result in any new vehicle cut-through trips to a local street as an alternative to utilizing the higher capacities roadways such as Wilmington Avenue, Compton Avenue, and 120th Street.

5.0 CONCLUSIONS

The proposed HPEB project site is a 46,650 square foot parcel comprising one lot located at the southwest corner of the CDU campus. The proposed new building will be located along 120th Street, west of Compton Avenue, between a newly constructed CDU APLA Wellness Center to the east and the existing King/Drew Magnet High School of Medicine and Science to the west.

The results of the analysis are as follows:

- CEQA Analysis
 - Based on the County's screening criteria (Proximity to Transit Based Screening Criteria), further analysis is not required and the project's impacts are considered to be less than significant.
- Non-CEQA Analysis
 - The significant intersections in the vicinity of the project are currently operating at LOS C or better.
 - The proposed project's increase in student enrollment is forecast to generate 28 net new a.m. peak hour trips, 29 net new p.m. peak hour trips, and 299 net new daily trips.
 - The project-related increases in peak hour traffic are not forecast to result in deficient operations at the significant intersections in the vicinity of the project.



Charles R. Drew University
Health Professions Education Building
Transportation Impact Analysis
Technical Appendix

Submitted to:



11239 | Prepared by Iteris, Inc.

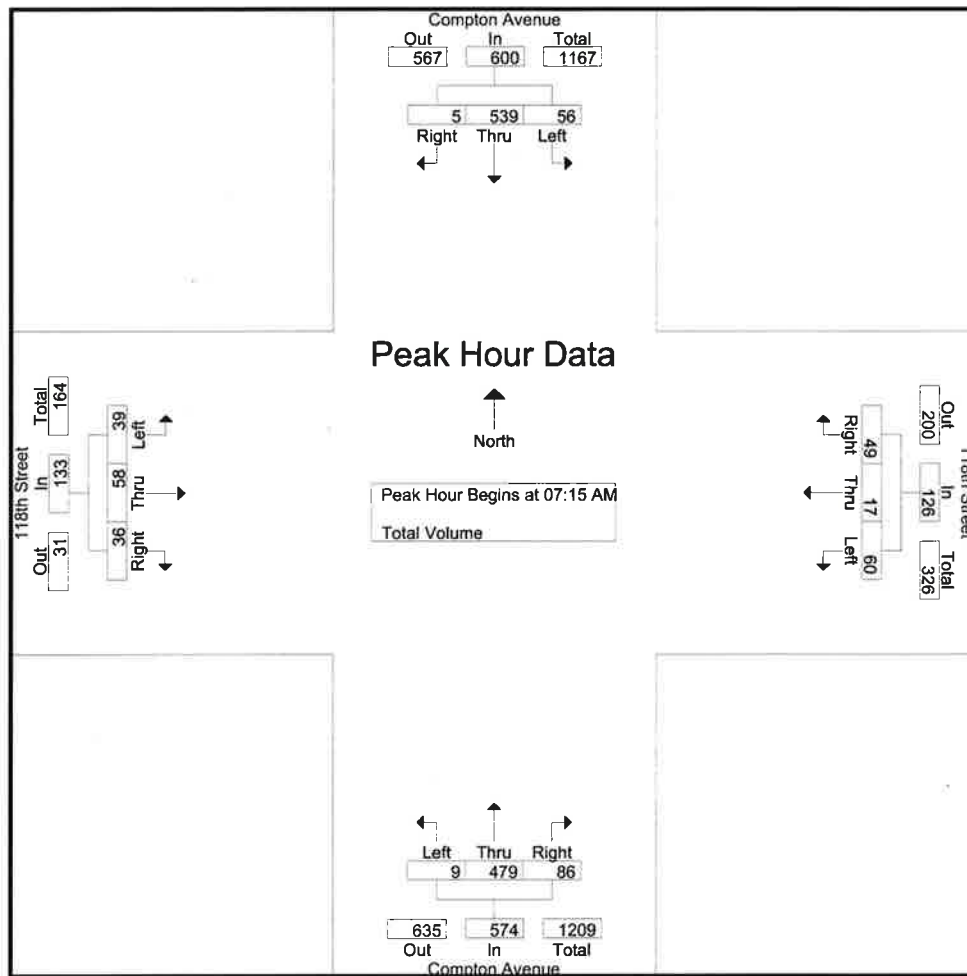
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APPENDIX A – EXISTING TRAFFIC COUNTS

County of Los Angeles
N/S: Compton Avenue
E/W: 118th Street
Weather: Clear

File Name : CLACO118AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2

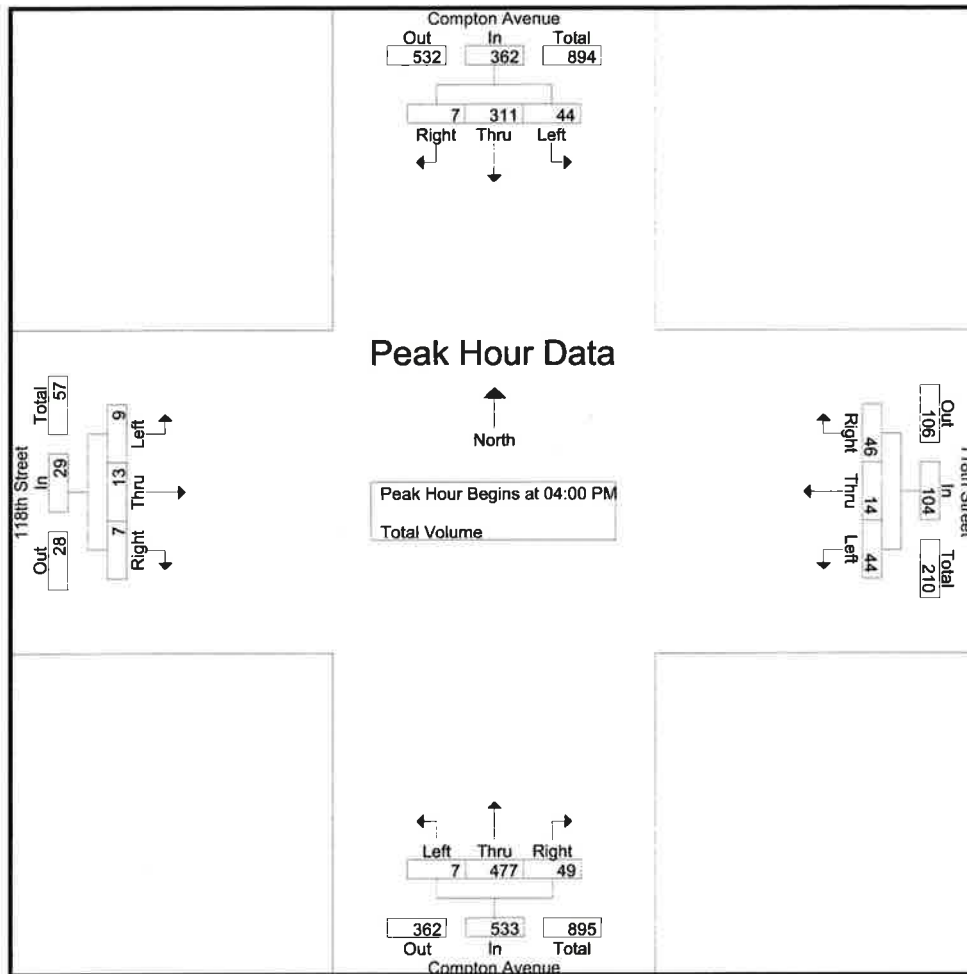


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				07:15 AM			
+0 mins.	8	119	1	128	22	3	10	35	4	113	9	126	2	6	12	20
+15 mins.	9	146	0	155	18	8	16	42	3	123	25	151	12	14	9	35
+30 mins.	20	158	3	181	15	5	15	35	0	135	32	167	17	21	12	50
+45 mins.	19	116	1	136	15	4	9	28	2	108	20	130	8	17	3	28
Total Volume	56	539	5	600	70	20	50	140	9	479	86	574	39	58	36	133
% App. Total	9.3	89.8	0.8		50	14.3	35.7		1.6	83.4	15		29.3	43.6	27.1	
PHF	.700	.853	.417	.829	.795	.625	.781	.833	.563	.887	.672	.859	.574	.690	.750	.665

County of Los Angeles
N/S: Compton Avenue
E/W: 118th Street
Weather: Clear

File Name : CLACO118PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2

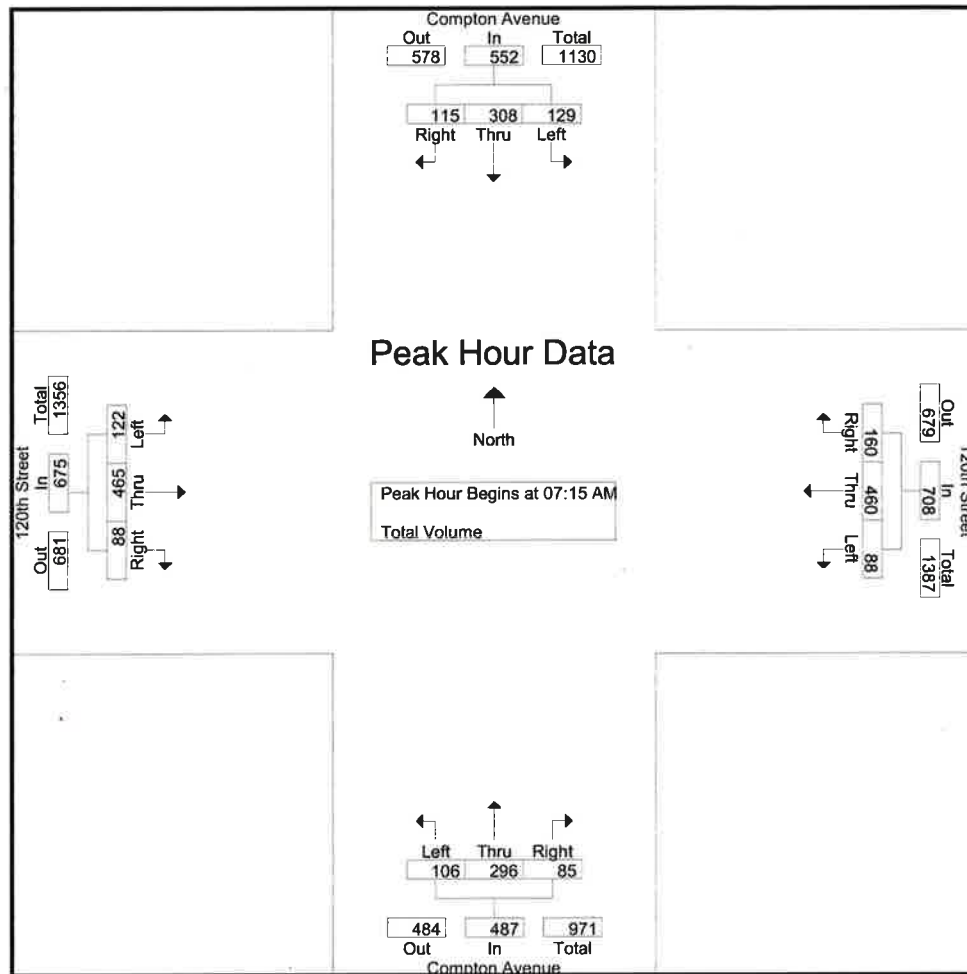


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:30 PM				04:45 PM			
+0 mins.	13	79	4	96	12	3	16	31	4	104	14	122	2	5	2	9
+15 mins.	16	79	1	96	13	7	18	38	0	127	17	144	1	4	1	6
+30 mins.	10	73	1	84	6	3	8	17	2	133	12	147	0	4	2	6
+45 mins.	5	80	1	86	12	4	11	27	1	113	6	120	3	7	3	13
Total Volume	44	311	7	362	43	17	53	113	7	477	49	533	6	20	8	34
% App. Total	12.2	85.9	1.9		38.1	15	46.9		1.3	89.5	9.2		17.6	58.8	23.5	
PHF	.688	.972	.438	.943	.827	.607	.736	.743	.438	.897	.721	.906	.500	.714	.667	.654

County of Los Angeles
N/S: Compton Avenue
E/W: 120th Street
Weather: Clear

File Name : CLACO120AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2

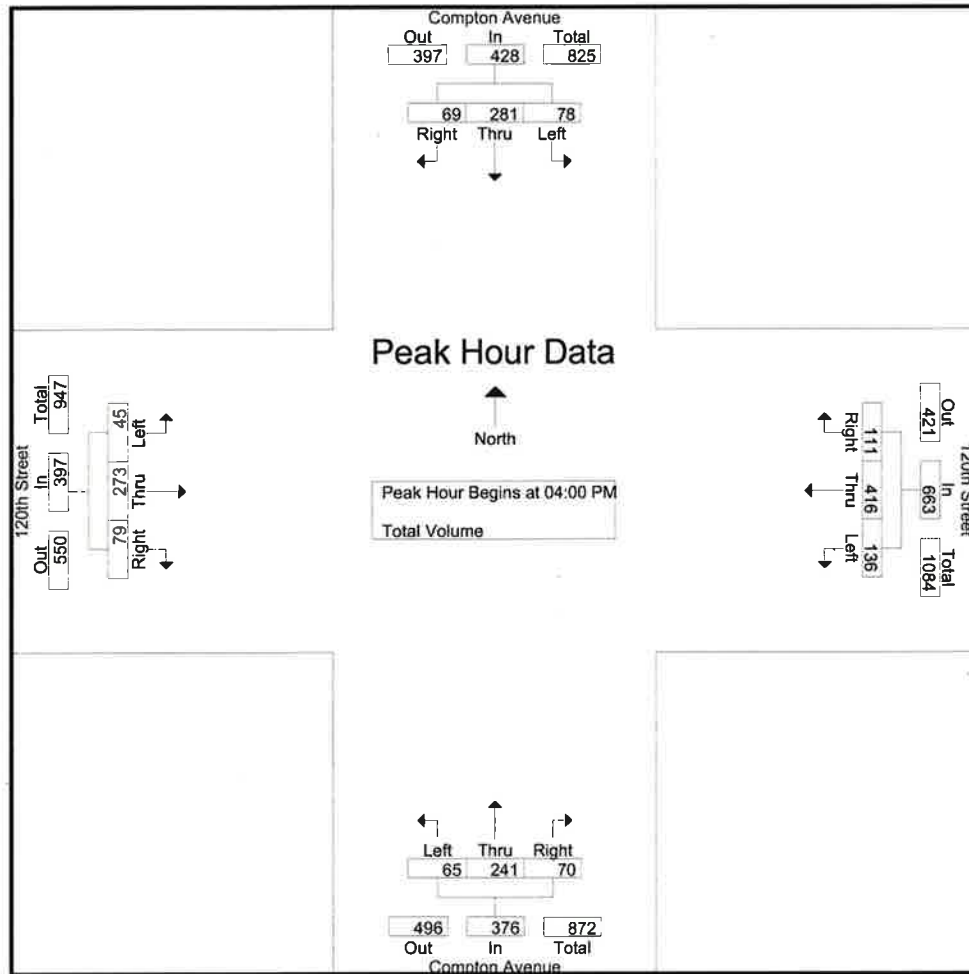


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	17	84	24	125	12	86	32	130	20	76	18	114	27	73	14	114
+15 mins.	30	89	20	139	32	129	41	202	29	78	22	129	34	106	25	165
+30 mins.	47	69	44	160	30	158	47	235	33	76	21	130	34	164	28	226
+45 mins.	35	66	27	128	14	87	40	141	24	66	24	114	27	122	21	170
Total Volume	129	308	115	552	88	460	160	708	106	296	85	487	122	465	88	675
% App. Total	23.4	55.8	20.8		12.4	65	22.6		21.8	60.8	17.5		18.1	68.9	13	
PHF	.686	.865	.653	.863	.688	.728	.851	.753	.803	.949	.885	.937	.897	.709	.786	.747

County of Los Angeles
N/S: Compton Avenue
E/W: 120th Street
Weather: Clear

File Name : CLACO120PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2

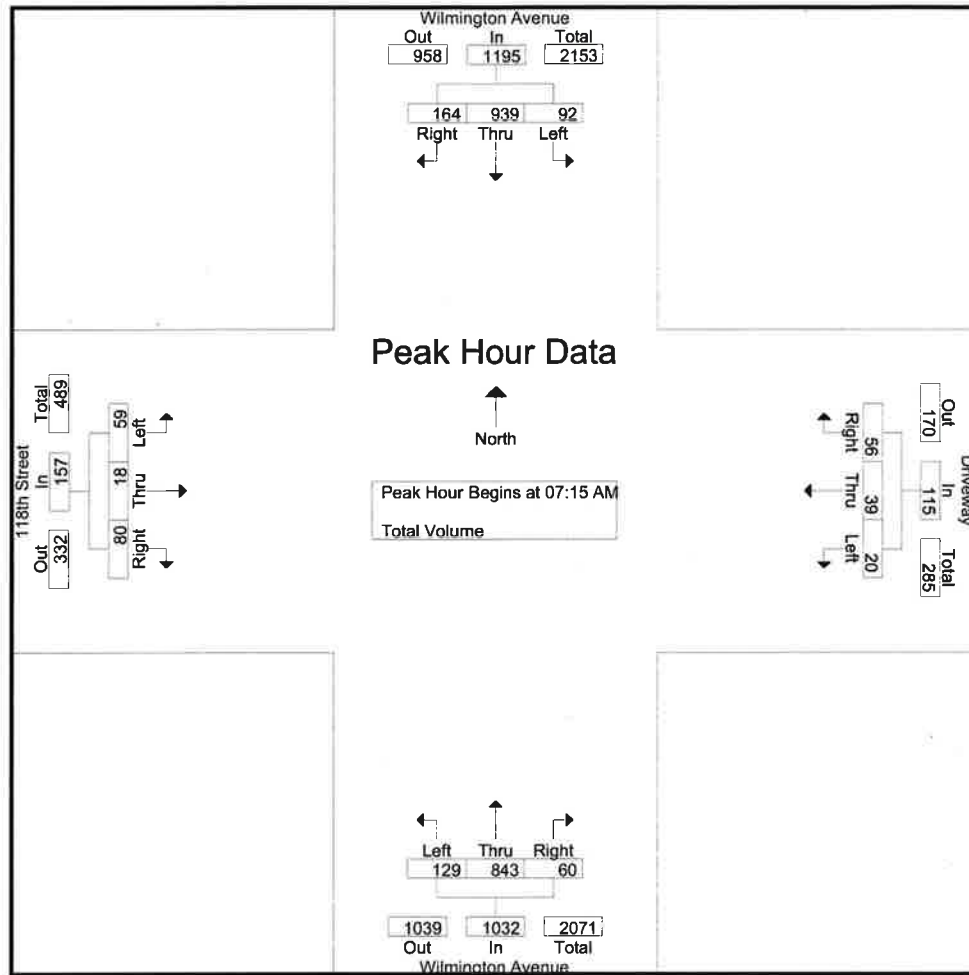


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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+0 mins.	24	66	13	103	25	97	27	149	11	77	13	101	15	89	26	130
+15 mins.	18	91	15	124	41	103	27	171	19	48	23	90	12	79	20	111
+30 mins.	16	65	19	100	31	119	24	174	24	59	17	100	6	70	14	90
+45 mins.	20	59	22	101	38	133	19	190	9	60	17	86	5	51	20	76
Total Volume	78	281	69	428	135	452	97	684	63	244	70	377	38	289	80	407
% App. Total	18.2	65.7	16.1		19.7	66.1	14.2		16.7	64.7	18.6		9.3	71	19.7	
PHF	.813	.772	.784	.863	.823	.850	.898	.900	.656	.792	.761	.933	.633	.812	.769	.783

County of Los Angeles
N/S: Wilmington Avenue
E/W: 118th Street
Weather: Clear

File Name : CLAWI118AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



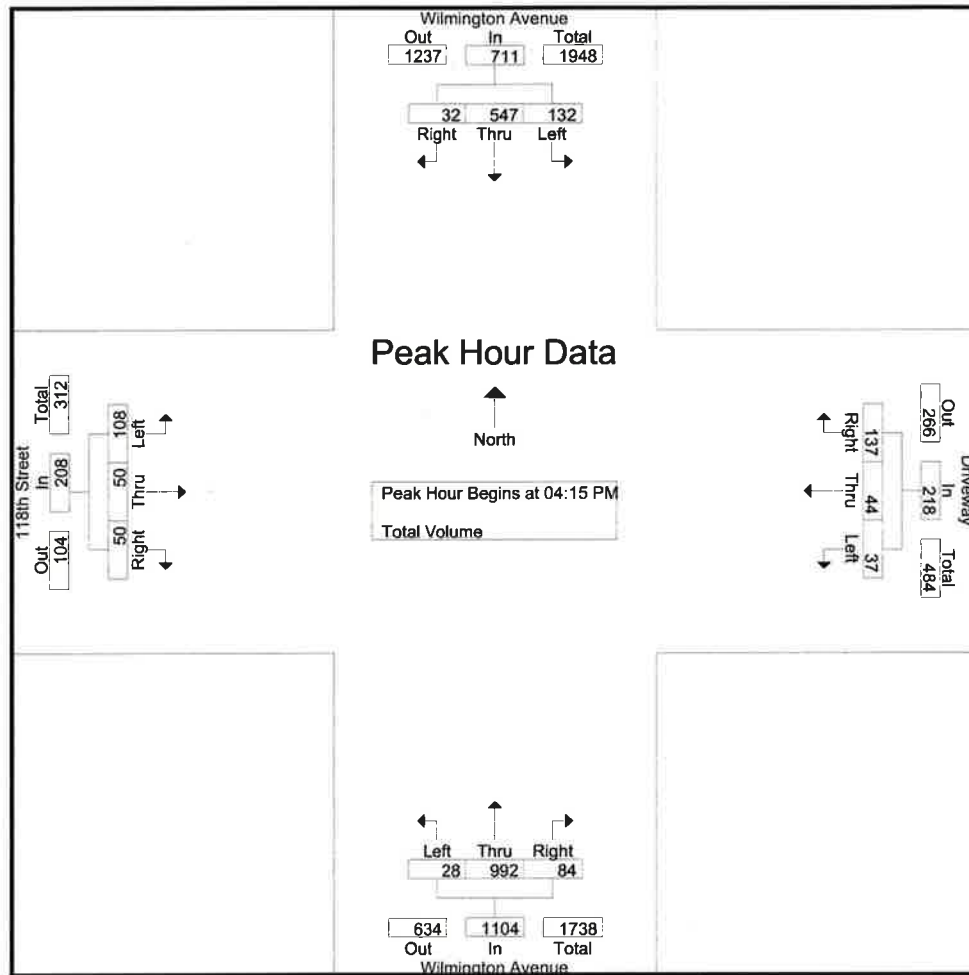
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:00 AM				07:30 AM			
+0 mins.	23	208	31	262	3	13	14	30	5	221	6	232	14	3	20	37
+15 mins.	20	252	38	310	7	7	26	40	17	225	9	251	23	7	19	49
+30 mins.	26	245	50	321	7	6	24	37	36	250	17	303	12	6	31	49
+45 mins.	23	234	45	302	5	7	18	30	42	203	17	262	9	9	17	35
Total Volume	92	939	164	1195	22	33	82	137	100	899	49	1048	58	25	87	170
% App. Total	7.7	78.6	13.7		16.1	24.1	59.9		9.5	85.8	4.7		34.1	14.7	51.2	
PHF	.885	.932	.820	.931	.786	.635	.788	.856	.595	.899	.721	.865	.630	.694	.702	.867

County of Los Angeles
N/S: Wilmington Avenue
E/W: 118th Street
Weather: Clear

File Name : CLAWI118PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2

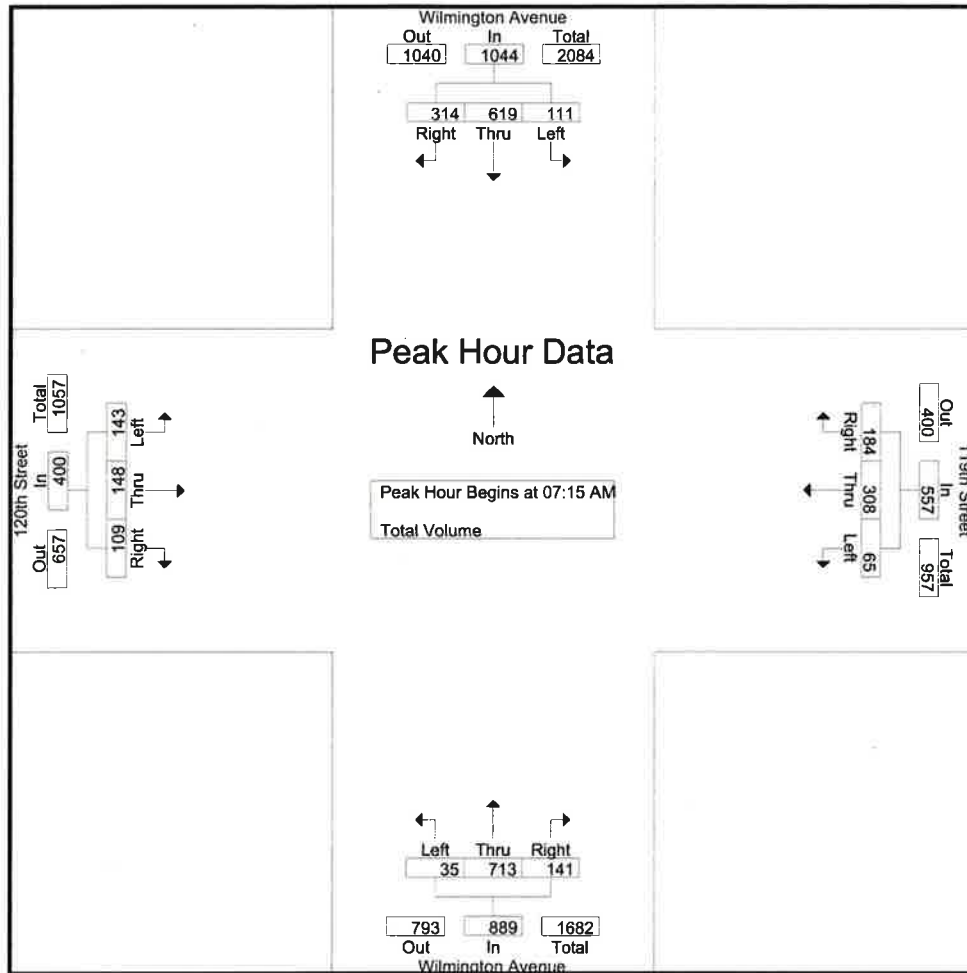


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:30 PM				04:15 PM			
+0 mins.	24	135	9	168	7	8	44	59	10	274	25	309	20	19	17	56
+15 mins.	39	150	11	200	12	9	32	53	5	247	18	270	33	16	14	63
+30 mins.	32	137	8	177	16	12	34	62	4	254	25	283	28	5	8	41
+45 mins.	37	125	4	166	9	9	45	63	5	241	17	263	27	10	11	48
Total Volume	132	547	32	711	44	38	155	237	24	1016	85	1125	108	50	50	208
% App. Total	18.6	76.9	4.5		18.6	16	65.4		2.1	90.3	7.6		51.9	24	24	
PHF	.846	.912	.727	.889	.688	.792	.861	.940	.600	.927	.850	.910	.818	.658	.735	.825

County of Los Angeles
N/S: Wilmington Avenue
E/W: 119th Street
Weather: Clear

File Name : CLAWI119AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2

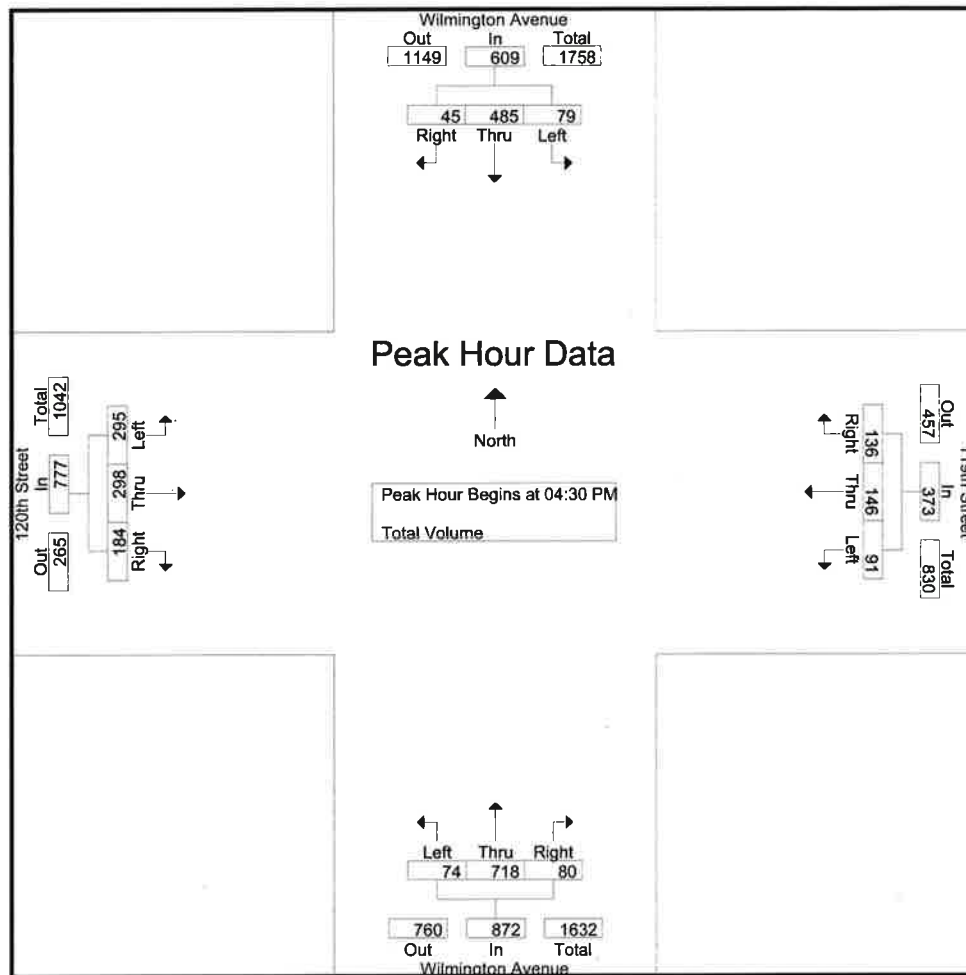


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	20	140	63	223	8	76	34	118	5	184	22	211	31	23	20	74
+15 mins.	25	166	90	281	22	85	46	153	7	184	30	221	42	36	24	102
+30 mins.	27	144	95	266	14	92	53	159	6	218	41	265	32	48	38	118
+45 mins.	39	169	66	274	21	55	51	127	11	174	46	231	38	41	27	106
Total Volume	111	619	314	1044	65	308	184	557	29	760	139	928	143	148	109	400
% App. Total	10.6	59.3	30.1		11.7	55.3	33		3.1	81.9	15		35.8	37	27.2	
PHF	.712	.916	.826	.929	.739	.837	.868	.876	.659	.872	.755	.875	.851	.771	.717	.847

County of Los Angeles
N/S: Wilmington Avenue
E/W: 119th Street
Weather: Clear

File Name : CLAW1119PM
Site Code : 12815514
Start Date : 9/23/2015
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:

	04:15 PM				04:30 PM				05:00 PM				04:30 PM			
+0 mins.	18	132	12	162	13	36	43	92	16	172	21	209	78	86	64	228
+15 mins.	23	139	14	176	26	44	30	100	18	181	15	214	75	95	45	215
+30 mins.	15	127	15	157	28	30	30	88	17	208	20	245	79	48	38	165
+45 mins.	20	115	7	142	24	36	33	93	18	169	22	209	63	69	37	169
Total Volume	76	513	48	637	91	146	136	373	69	730	78	877	295	298	184	777
% App. Total	11.9	80.5	7.5		24.4	39.1	36.5		7.9	83.2	8.9		38	38.4	23.7	
PHF	.826	.923	.800	.905	.813	.830	.791	.933	.958	.877	.886	.895	.934	.784	.719	.852



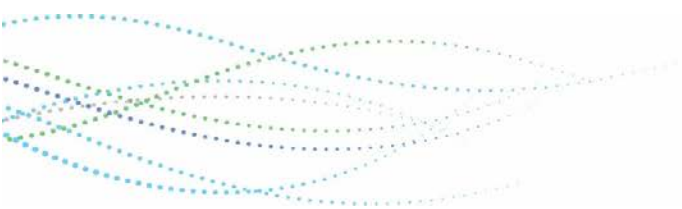
APPENDIX B – LOS CALCULATION SHEETS





















Charles Drew University HPEB Transportation Impact Analysis

Existing LOS Calculation Sheets

























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

Existing
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	61	38	63	18	51	9	503	90	59	566	5
Future Volume (veh/h)	41	61	38	63	18	51	9	503	90	59	566	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	78	49	81	23	65	12	645	115	76	726	6
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	122	66	155	43	83	60	2203	388	239	2183	18
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	379	836	455	607	298	566	18	2919	514	246	2892	24
Grp Volume(v), veh/h	180	0	0	169	0	0	412	0	360	377	0	431
Grp Sat Flow(s),veh/h/ln	1670	0	0	1471	0	0	1841	0	1610	1464	0	1698
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	5.7	0.0	0.0	6.7
Cycle Q Clear(g_c), s	8.2	0.0	0.0	8.9	0.0	0.0	5.6	0.0	5.7	5.0	0.0	6.7
Prop In Lane	0.29		0.27	0.48		0.38	0.03		0.32	0.20		0.01
Lane Grp Cap(c), veh/h	302	0	0	281	0	0	1436	0	1215	1159	0	1282
V/C Ratio(X)	0.60	0.00	0.00	0.60	0.00	0.00	0.29	0.00	0.30	0.33	0.00	0.34
Avail Cap(c_a), veh/h	680	0	0	623	0	0	1436	0	1215	1159	0	1282
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.9	0.0	0.0	33.1	0.0	0.0	3.1	0.0	3.1	3.0	0.0	3.3
Incr Delay (d2), s/veh	1.9	0.0	0.0	2.1	0.0	0.0	0.5	0.0	0.6	0.7	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	3.3	0.0	0.0	1.6	0.0	1.4	1.5	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	0.0	0.0	35.2	0.0	0.0	3.6	0.0	3.7	3.8	0.0	4.0
LnGrp LOS	C	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		180			169			772			808	
Approach Delay, s/veh		34.8			35.2			3.7			3.9	
Approach LOS		C			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		15.8		65.0		15.8				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		61.0		31.0		61.0		31.0				
Max Q Clear Time (g_c+I1), s		7.7		10.2		8.7		10.9				
Green Ext Time (p_c), s		6.0		1.0		6.8		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									


CDU Health Professions Building Traffic
2: 120th St & Compton Ave

Existing
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	489	92	92	483	168	111	311	89	136	324	121
Future Volume (veh/h)	128	489	92	92	483	168	111	311	89	136	324	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	596	112	112	589	205	135	379	109	166	395	148
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	876	743	243	1212	421	372	1210	344	399	1124	416
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	684	1870	1585	741	2587	899	863	2731	776	908	2539	939
Grp Volume(v), veh/h	156	596	112	112	404	390	135	245	243	166	275	268
Grp Sat Flow(s),veh/h/ln	684	1870	1585	741	1777	1709	863	1777	1731	908	1777	1701
Q Serve(g_s), s	18.4	22.4	3.6	12.6	14.1	14.2	11.1	8.0	8.2	13.1	9.2	9.4
Cycle Q Clear(g_c), s	32.6	22.4	3.6	35.0	14.1	14.2	20.5	8.0	8.2	21.3	9.2	9.4
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.45	1.00		0.55
Lane Grp Cap(c), veh/h	293	876	743	243	833	801	372	787	766	399	787	753
V/C Ratio(X)	0.53	0.68	0.15	0.46	0.49	0.49	0.36	0.31	0.32	0.42	0.35	0.36
Avail Cap(c_a), veh/h	366	1077	913	322	1023	984	372	787	766	399	787	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	18.7	13.7	32.4	16.5	16.5	23.4	16.3	16.3	23.2	16.6	16.6
Incr Delay (d2), s/veh	1.5	1.3	0.1	1.4	0.4	0.5	2.7	1.0	1.1	3.2	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	9.4	1.3	2.3	5.6	5.4	2.5	3.4	3.4	3.1	3.9	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	20.0	13.8	33.7	17.0	17.0	26.1	17.3	17.4	26.4	17.8	18.0
LnGrp LOS	C	C	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		864			906			623			709	
Approach Delay, s/veh		20.9			19.0			19.2			19.9	
Approach LOS		C			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.0		46.3		44.0		46.3				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		40.0		52.0		40.0		52.0				
Max Q Clear Time (g_c+I1), s		22.5		34.6		23.3		37.0				
Green Ext Time (p_c), s		3.6		5.4		4.0		5.3				
Intersection Summary												
HCM 6th Ctrl Delay				19.8								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

Existing
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↑↑↑		↔	↔	
Traffic Volume (veh/h)	62	19	84	21	41	59	136	886	63	97	987	172
Future Volume (veh/h)	62	19	84	21	41	59	136	886	63	97	987	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	20	90	23	44	63	146	953	68	104	1061	185
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	38	108	108	182	236	180	3307	235	164	1895	330
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.10	0.68	0.68	0.05	0.63	0.63
Sat Flow, veh/h	442	257	723	390	1217	1585	1781	4866	346	3456	3026	526
Grp Volume(v), veh/h	177	0	0	67	0	63	146	666	355	104	622	624
Grp Sat Flow(s),veh/h/ln	1422	0	0	1607	0	1585	1781	1702	1808	1728	1777	1776
Q Serve(g_s), s	8.8	0.0	0.0	0.0	0.0	3.4	7.8	7.6	7.6	2.9	19.5	19.7
Cycle Q Clear(g_c), s	11.9	0.0	0.0	3.1	0.0	3.4	7.8	7.6	7.6	2.9	19.5	19.7
Prop In Lane	0.38		0.51	0.34		1.00	1.00		0.19	1.00		0.30
Lane Grp Cap(c), veh/h	263	0	0	289	0	236	180	2314	1229	164	1113	1112
V/C Ratio(X)	0.67	0.00	0.00	0.23	0.00	0.27	0.81	0.29	0.29	0.63	0.56	0.56
Avail Cap(c_a), veh/h	393	0	0	431	0	375	330	2314	1229	249	1113	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	0.0	36.5	0.0	36.6	42.7	6.2	6.2	45.4	10.4	10.5
Incr Delay (d2), s/veh	3.0	0.0	0.0	0.4	0.0	0.6	8.4	0.3	0.6	4.0	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	1.4	0.0	1.4	3.8	2.5	2.7	1.3	7.5	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	0.0	0.0	36.9	0.0	37.2	51.2	6.5	6.8	49.4	12.5	12.5
LnGrp LOS	D	A	A	D	A	D	D	A	A	D	B	B
Approach Vol, veh/h		177			130			1167			1350	
Approach Delay, s/veh		43.3			37.0			12.2			15.3	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	70.0		18.5	13.8	64.8		18.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	66.0		23.0	18.0	55.0		23.0				
Max Q Clear Time (g_c+I1), s	4.9	9.6		13.9	9.8	21.7		5.4				
Green Ext Time (p_c), s	0.0	8.8		0.6	0.2	11.0		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

















CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

Existing
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	156	115	68	324	193	37	749	148	117	651	330
Future Volume (veh/h)	150	156	115	68	324	193	37	749	148	117	651	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	177	131	77	368	219	42	851	168	133	740	375
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	898	761	528	527	314	158	1564	697	218	1005	508
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	829	1870	1585	1071	1099	654	505	3554	1585	553	2284	1155
Grp Volume(v), veh/h	170	177	131	77	0	587	42	851	168	133	575	540
Grp Sat Flow(s),veh/h/ln	829	1870	1585	1071	0	1753	505	1777	1585	553	1777	1662
Q Serve(g_s), s	20.2	5.4	4.7	4.4	0.0	26.2	7.5	17.6	6.6	23.3	26.8	26.9
Cycle Q Clear(g_c), s	46.4	5.4	4.7	9.9	0.0	26.2	34.4	17.6	6.6	40.9	26.8	26.9
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	253	898	761	528	0	841	158	1564	697	218	782	731
V/C Ratio(X)	0.67	0.20	0.17	0.15	0.00	0.70	0.27	0.54	0.24	0.61	0.74	0.74
Avail Cap(c_a), veh/h	253	898	761	528	0	841	158	1564	697	218	782	731
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	14.9	14.7	17.8	0.0	20.3	37.5	20.6	17.5	35.7	23.2	23.2
Incr Delay (d2), s/veh	6.8	0.1	0.1	0.1	0.0	2.6	4.1	1.4	0.8	12.1	6.1	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.3	1.7	1.1	0.0	10.8	1.1	7.4	2.5	3.8	12.1	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.3	15.0	14.8	17.9	0.0	22.9	41.5	22.0	18.4	47.8	29.3	29.8
LnGrp LOS	D	B	B	B	A	C	D	C	B	D	C	C
Approach Vol, veh/h		478			664			1061			1248	
Approach Delay, s/veh		25.7			22.3			22.2			31.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		48.0		52.0		48.0		52.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		44.0		48.0		44.0		48.0				
Max Q Clear Time (g_c+I1), s		36.4		48.4		42.9		28.2				
Green Ext Time (p_c), s		4.0		0.0		0.8		4.4				
Intersection Summary												
HCM 6th Ctrl Delay				26.1								
HCM 6th LOS				C								























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

Existing
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	14	7	46	15	48	7	501	51	46	327	7
Future Volume (veh/h)	9	14	7	46	15	48	7	501	51	46	327	7
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	15	8	50	16	52	8	545	55	50	355	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	107	44	125	34	71	60	2506	250	311	2189	50
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	287	1039	424	547	325	687	14	3174	316	318	2771	64
Grp Volume(v), veh/h	33	0	0	118	0	0	322	0	286	200	0	213
Grp Sat Flow(s),veh/h/ln	1750	0	0	1560	0	0	1859	0	1645	1462	0	1691
Q Serve(g_s), s	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2.3
Cycle Q Clear(g_c), s	1.3	0.0	0.0	5.4	0.0	0.0	3.3	0.0	3.3	1.9	0.0	2.3
Prop In Lane	0.30		0.24	0.42		0.44	0.02		0.19	0.25		0.04
Lane Grp Cap(c), veh/h	243	0	0	229	0	0	1517	0	1299	1215	0	1335
V/C Ratio(X)	0.14	0.00	0.00	0.51	0.00	0.00	0.21	0.00	0.22	0.16	0.00	0.16
Avail Cap(c_a), veh/h	786	0	0	746	0	0	1517	0	1299	1215	0	1335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	0.0	32.4	0.0	0.0	2.0	0.0	2.0	1.8	0.0	1.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.8	0.0	0.0	0.3	0.0	0.4	0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	2.1	0.0	0.0	0.7	0.0	0.7	0.4	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	0.0	0.0	34.2	0.0	0.0	2.3	0.0	2.4	2.1	0.0	2.1
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h	33			118			608			413		
Approach Delay, s/veh	30.9			34.2			2.3			2.1		
Approach LOS	C			C			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	63.0			11.7			63.0			11.7		
Change Period (Y+Rc), s	4.0			4.0			4.0			4.0		
Max Green Setting (Gmax), s	59.0			33.0			59.0			33.0		
Max Q Clear Time (g_c+I1), s	5.3			3.3			4.3			7.4		
Green Ext Time (p_c), s	4.3			0.1			3.0			0.6		
Intersection Summary												
HCM 6th Ctrl Delay	6.3											
HCM 6th LOS	A											

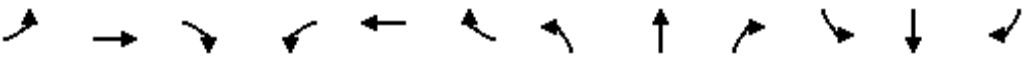
CDU Health Professions Building Traffic
2: 120th St & Compton Ave

Existing
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	287	83	143	437	117	68	253	74	82	295	73
Future Volume (veh/h)	47	287	83	143	437	117	68	253	74	82	295	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	334	97	166	508	136	79	294	86	95	343	85
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	727	616	341	1079	287	514	1375	395	541	1429	350
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	786	1870	1585	957	2775	739	960	2724	782	1003	2830	692
Grp Volume(v), veh/h	55	334	97	166	324	320	79	190	190	95	214	214
Grp Sat Flow(s),veh/h/ln	786	1870	1585	957	1777	1737	960	1777	1730	1003	1777	1746
Q Serve(g_s), s	4.2	10.0	3.0	11.8	10.3	10.4	3.8	4.5	4.6	4.4	5.1	5.2
Cycle Q Clear(g_c), s	14.6	10.0	3.0	21.8	10.3	10.4	9.0	4.5	4.6	9.0	5.1	5.2
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.45	1.00		0.40
Lane Grp Cap(c), veh/h	293	727	616	341	691	675	514	897	873	541	897	881
V/C Ratio(X)	0.19	0.46	0.16	0.49	0.47	0.47	0.15	0.21	0.22	0.18	0.24	0.24
Avail Cap(c_a), veh/h	551	1342	1137	655	1275	1247	514	897	873	541	897	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	17.1	15.0	25.2	17.2	17.2	13.1	10.3	10.4	12.9	10.5	10.5
Incr Delay (d2), s/veh	0.3	0.5	0.1	1.1	0.5	0.5	0.6	0.5	0.6	0.7	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	1.0	2.6	4.0	4.0	0.9	1.7	1.7	1.0	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	17.6	15.1	26.3	17.7	17.7	13.7	10.9	10.9	13.6	11.1	11.2
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		486			810			459			523	
Approach Delay, s/veh		17.7			19.5			11.4			11.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		33.3		42.0		33.3				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		38.0		54.0		38.0		54.0				
Max Q Clear Time (g_c+I1), s		11.0		16.6		11.0		23.8				
Green Ext Time (p_c), s		2.8		3.0		3.2		5.5				
Intersection Summary												
HCM 6th Ctrl Delay				15.7								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

Existing
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕↕↕		↕↕	↕↕	
Traffic Volume (veh/h)	114	53	53	39	46	144	29	1043	88	139	575	34
Future Volume (veh/h)	114	53	53	39	46	144	29	1043	88	139	575	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	62	62	46	54	169	34	1227	104	164	676	40
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	91	73	204	217	389	47	2564	217	248	1977	117
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.53	0.53	0.07	0.58	0.58
Sat Flow, veh/h	573	372	299	566	884	1585	1781	4795	406	3456	3409	202
Grp Volume(v), veh/h	258	0	0	100	0	169	34	871	460	164	352	364
Grp Sat Flow(s),veh/h/ln	1243	0	0	1450	0	1585	1781	1702	1797	1728	1777	1834
Q Serve(g_s), s	12.6	0.0	0.0	0.0	0.0	7.3	1.5	13.0	13.0	3.7	8.4	8.4
Cycle Q Clear(g_c), s	16.5	0.0	0.0	3.9	0.0	7.3	1.5	13.0	13.0	3.7	8.4	8.4
Prop In Lane	0.52		0.24	0.46		1.00	1.00		0.23	1.00		0.11
Lane Grp Cap(c), veh/h	373	0	0	421	0	389	47	1820	961	248	1031	1064
V/C Ratio(X)	0.69	0.00	0.00	0.24	0.00	0.43	0.72	0.48	0.48	0.66	0.34	0.34
Avail Cap(c_a), veh/h	612	0	0	688	0	665	154	1820	961	469	1031	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	0.0	24.4	0.0	25.8	39.2	11.8	11.8	36.7	8.9	8.9
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.3	0.0	0.8	18.8	0.9	1.7	3.0	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.0	1.5	0.0	2.7	0.9	4.7	5.2	1.7	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	0.0	0.0	24.7	0.0	26.6	57.9	12.7	13.5	39.7	9.8	9.8
LnGrp LOS	C	A	A	C	A	C	E	B	B	D	A	A
Approach Vol, veh/h		258			269			1365			880	
Approach Delay, s/veh		32.2			25.9			14.1			15.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	47.3		23.9	6.1	51.0		23.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	43.0		34.0	7.0	47.0		34.0				
Max Q Clear Time (g_c+I1), s	5.7	15.0		18.5	3.5	10.4		9.3				
Green Ext Time (p_c), s	0.2	11.1		1.4	0.0	5.1		1.1				
Intersection Summary												
HCM 6th Ctrl Delay			17.3									
HCM 6th LOS			B									

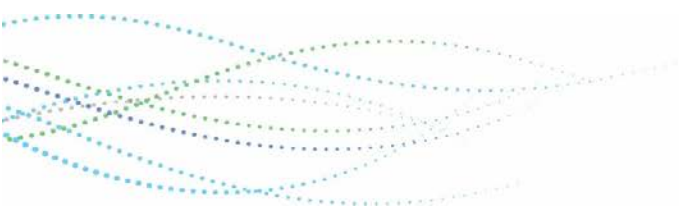
CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

Existing
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	313	193	96	153	142	78	755	84	83	510	47
Future Volume (veh/h)	310	313	193	96	153	142	78	755	84	83	510	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	348	352	217	108	172	160	88	848	94	93	573	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	906	768	382	432	402	325	1539	687	226	1425	132
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1048	1870	1585	843	892	829	799	3554	1585	595	3289	304
Grp Volume(v), veh/h	348	352	217	108	0	332	88	848	94	93	309	317
Grp Sat Flow(s),veh/h/ln	1048	1870	1585	843	0	1721	799	1777	1585	595	1777	1816
Q Serve(g_s), s	30.8	11.6	7.9	9.1	0.0	12.0	8.2	17.2	3.5	13.4	11.6	11.6
Cycle Q Clear(g_c), s	42.7	11.6	7.9	20.6	0.0	12.0	19.9	17.2	3.5	30.6	11.6	11.6
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	453	906	768	382	0	834	325	1539	687	226	770	787
V/C Ratio(X)	0.77	0.39	0.28	0.28	0.00	0.40	0.27	0.55	0.14	0.41	0.40	0.40
Avail Cap(c_a), veh/h	486	965	817	408	0	888	325	1539	687	226	770	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	15.9	14.9	22.4	0.0	16.0	25.7	20.5	16.6	31.8	18.9	18.9
Incr Delay (d2), s/veh	6.9	0.3	0.2	0.4	0.0	0.3	2.0	1.4	0.4	5.4	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.8	2.8	1.8	0.0	4.6	1.7	7.2	1.3	2.2	5.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	16.2	15.1	22.8	0.0	16.3	27.7	21.9	17.0	37.3	20.4	20.4
LnGrp LOS	D	B	B	C	A	B	C	C	B	D	C	C
Approach Vol, veh/h		917			440			1030			719	
Approach Delay, s/veh		23.6			17.9			21.9			22.6	
Approach LOS		C			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		51.0		46.0		51.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		42.0		50.0		42.0		50.0				
Max Q Clear Time (g_c+I1), s		21.9		44.7		32.6		22.6				
Green Ext Time (p_c), s		7.0		2.2		3.3		3.0				
Intersection Summary												
HCM 6th Ctrl Delay				22.0								
HCM 6th LOS				C								



















Existing Plus Project LOS Calculation Sheets

























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

Existing Plus Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	61	38	66	18	51	9	503	101	60	566	5
Future Volume (veh/h)	41	61	38	66	18	51	9	503	101	60	566	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	78	49	85	23	65	12	645	129	77	726	6
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	126	68	161	43	83	59	2146	424	240	2160	18
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	377	839	455	626	290	551	17	2861	565	248	2879	24
Grp Volume(v), veh/h	180	0	0	173	0	0	421	0	365	376	0	433
Grp Sat Flow(s),veh/h/ln	1672	0	0	1468	0	0	1843	0	1600	1453	0	1698
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	6.8
Cycle Q Clear(g_c), s	8.0	0.0	0.0	9.0	0.0	0.0	5.8	0.0	5.9	5.0	0.0	6.8
Prop In Lane	0.29		0.27	0.49		0.38	0.03		0.35	0.20		0.01
Lane Grp Cap(c), veh/h	309	0	0	287	0	0	1429	0	1201	1144	0	1274
V/C Ratio(X)	0.58	0.00	0.00	0.60	0.00	0.00	0.29	0.00	0.30	0.33	0.00	0.34
Avail Cap(c_a), veh/h	707	0	0	646	0	0	1429	0	1201	1144	0	1274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	0.0	32.6	0.0	0.0	3.2	0.0	3.2	3.1	0.0	3.3
Incr Delay (d2), s/veh	1.7	0.0	0.0	2.0	0.0	0.0	0.5	0.0	0.7	0.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	3.3	0.0	0.0	1.6	0.0	1.5	1.5	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	0.0	0.0	34.7	0.0	0.0	3.7	0.0	3.9	3.9	0.0	4.1
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		180			173			786			809	
Approach Delay, s/veh		34.0			34.7			3.8			4.0	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		64.0		16.0		64.0		16.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		60.0		32.0		60.0		32.0				
Max Q Clear Time (g_c+I1), s		7.9		10.0		8.8		11.0				
Green Ext Time (p_c), s		6.1		1.0		6.8		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									






















CDU Health Professions Building Traffic
2: 120th St & Compton Ave

Existing Plus Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	489	92	92	483	168	111	312	89	136	324	123
Future Volume (veh/h)	138	489	92	92	483	168	111	312	89	136	324	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	596	112	112	589	205	135	380	109	166	395	150
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	881	747	247	1219	423	368	1199	340	396	1109	416
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	684	1870	1585	741	2587	899	862	2733	775	907	2528	948
Grp Volume(v), veh/h	168	596	112	112	404	390	135	245	244	166	276	269
Grp Sat Flow(s),veh/h/ln	684	1870	1585	741	1777	1709	862	1777	1731	907	1777	1700
Q Serve(g_s), s	19.8	22.0	3.6	12.3	13.8	13.9	11.0	8.0	8.2	13.0	9.2	9.4
Cycle Q Clear(g_c), s	33.7	22.0	3.6	34.3	13.8	13.9	20.4	8.0	8.2	21.2	9.2	9.4
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.45	1.00		0.56
Lane Grp Cap(c), veh/h	296	881	747	247	837	805	368	780	759	396	780	746
V/C Ratio(X)	0.57	0.68	0.15	0.45	0.48	0.48	0.37	0.31	0.32	0.42	0.35	0.36
Avail Cap(c_a), veh/h	382	1115	945	339	1060	1019	368	780	759	396	780	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	18.2	13.4	31.5	16.1	16.1	23.4	16.2	16.3	23.2	16.6	16.6
Incr Delay (d2), s/veh	1.7	1.1	0.1	1.3	0.4	0.5	2.8	1.1	1.1	3.2	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	9.2	1.2	2.2	5.4	5.2	2.5	3.4	3.3	3.0	3.9	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	19.4	13.5	32.8	16.5	16.6	26.2	17.3	17.4	26.5	17.8	18.0
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		876			906			624			711	
Approach Delay, s/veh		20.5			18.6			19.3			19.9	
Approach LOS		C			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.0		45.9		43.0		45.9				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		39.0		53.0		39.0		53.0				
Max Q Clear Time (g_c+I1), s		22.4		35.7		23.2		36.3				
Green Ext Time (p_c), s		3.5		5.5		4.0		5.6				
Intersection Summary												
HCM 6th Ctrl Delay				19.6								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

Existing Plus Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	19	85	21	41	59	138	886	63	97	987	180
Future Volume (veh/h)	64	19	85	21	41	59	138	886	63	97	987	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	20	91	23	44	63	148	953	68	104	1061	194
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	39	109	112	187	240	184	3255	232	167	1844	336
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.10	0.67	0.67	0.05	0.61	0.61
Sat Flow, veh/h	449	257	721	390	1238	1585	1781	4866	346	3456	3001	547
Grp Volume(v), veh/h	180	0	0	67	0	63	148	666	355	104	627	628
Grp Sat Flow(s),veh/h/ln	1427	0	0	1628	0	1585	1781	1702	1808	1728	1777	1772
Q Serve(g_s), s	8.4	0.0	0.0	0.0	0.0	3.2	7.4	7.3	7.4	2.7	19.2	19.3
Cycle Q Clear(g_c), s	11.3	0.0	0.0	2.9	0.0	3.2	7.4	7.3	7.4	2.7	19.2	19.3
Prop In Lane	0.38		0.51	0.34		1.00	1.00		0.19	1.00		0.31
Lane Grp Cap(c), veh/h	270	0	0	299	0	240	184	2277	1209	167	1091	1088
V/C Ratio(X)	0.67	0.00	0.00	0.22	0.00	0.26	0.81	0.29	0.29	0.62	0.57	0.58
Avail Cap(c_a), veh/h	371	0	0	409	0	348	332	2277	1209	265	1091	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	0.0	0.0	34.1	0.0	34.2	40.0	6.2	6.2	42.6	10.5	10.5
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.4	0.0	0.6	8.1	0.3	0.6	3.8	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	1.3	0.0	1.3	3.6	2.4	2.6	1.2	7.3	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	0.0	0.0	34.4	0.0	34.8	48.1	6.5	6.8	46.3	12.7	12.7
LnGrp LOS	D	A	A	C	A	C	D	A	A	D	B	B
Approach Vol, veh/h		180			130			1169			1359	
Approach Delay, s/veh		40.6			34.6			11.9			15.3	
Approach LOS		D			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	65.0		17.8	13.4	60.0		17.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	61.0		20.0	17.0	51.0		20.0				
Max Q Clear Time (g_c+I1), s	4.7	9.4		13.3	9.4	21.3		5.2				
Green Ext Time (p_c), s	0.1	8.8		0.5	0.2	10.7		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									

















CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

Existing Plus Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	156	115	68	324	193	37	751	148	117	652	330
Future Volume (veh/h)	150	156	115	68	324	193	37	751	148	117	652	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	177	131	77	368	219	42	853	168	133	741	375
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	898	761	528	527	314	158	1564	697	217	1005	508
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	829	1870	1585	1071	1099	654	505	3554	1585	552	2285	1154
Grp Volume(v), veh/h	170	177	131	77	0	587	42	853	168	133	576	540
Grp Sat Flow(s),veh/h/ln	829	1870	1585	1071	0	1753	505	1777	1585	552	1777	1663
Q Serve(g_s), s	20.2	5.4	4.7	4.4	0.0	26.2	7.5	17.7	6.6	23.4	26.9	26.9
Cycle Q Clear(g_c), s	46.4	5.4	4.7	9.9	0.0	26.2	34.5	17.7	6.6	41.1	26.9	26.9
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	253	898	761	528	0	841	158	1564	697	217	782	732
V/C Ratio(X)	0.67	0.20	0.17	0.15	0.00	0.70	0.27	0.55	0.24	0.61	0.74	0.74
Avail Cap(c_a), veh/h	253	898	761	528	0	841	158	1564	697	217	782	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	14.9	14.7	17.8	0.0	20.3	37.5	20.6	17.5	35.8	23.2	23.2
Incr Delay (d2), s/veh	6.8	0.1	0.1	0.1	0.0	2.6	4.1	1.4	0.8	12.2	6.1	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.3	1.7	1.1	0.0	10.8	1.1	7.4	2.5	3.8	12.1	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.3	15.0	14.8	17.9	0.0	22.9	41.6	22.0	18.4	48.0	29.3	29.8
LnGrp LOS	D	B	B	B	A	C	D	C	B	D	C	C
Approach Vol, veh/h		478			664			1063			1249	
Approach Delay, s/veh		25.7			22.3			22.2			31.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		48.0		52.0		48.0		52.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		44.0		48.0		44.0		48.0				
Max Q Clear Time (g_c+I1), s		36.5		48.4		43.1		28.2				
Green Ext Time (p_c), s		4.0		0.0		0.7		4.4				
Intersection Summary												
HCM 6th Ctrl Delay				26.1								
HCM 6th LOS				C								























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

Existing Plus Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	14	7	56	15	49	7	501	56	46	327	7
Future Volume (veh/h)	9	14	7	56	15	49	7	501	56	46	327	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	18	9	72	19	63	9	642	72	59	419	9
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	133	53	151	38	83	58	2397	266	297	2073	45
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	331	1022	406	621	293	633	12	3138	348	311	2714	59
Grp Volume(v), veh/h	39	0	0	154	0	0	384	0	339	229	0	258
Grp Sat Flow(s),veh/h/ln	1758	0	0	1547	0	0	1859	0	1639	1392	0	1691
Q Serve(g_s), s	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0	4.7	0.0	0.0	3.2
Cycle Q Clear(g_c), s	1.5	0.0	0.0	7.2	0.0	0.0	4.6	0.0	4.7	2.5	0.0	3.2
Prop In Lane	0.31		0.23	0.47		0.41	0.02		0.21	0.26		0.03
Lane Grp Cap(c), veh/h	292	0	0	272	0	0	1469	0	1252	1123	0	1292
V/C Ratio(X)	0.13	0.00	0.00	0.57	0.00	0.00	0.26	0.00	0.27	0.20	0.00	0.20
Avail Cap(c_a), veh/h	798	0	0	751	0	0	1469	0	1252	1123	0	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	0.0	31.7	0.0	0.0	2.7	0.0	2.7	2.4	0.0	2.5
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.9	0.0	0.0	0.4	0.0	0.5	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.8	0.0	0.0	1.2	0.0	1.1	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	0.0	0.0	33.6	0.0	0.0	3.1	0.0	3.2	2.8	0.0	2.8
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		39			154			723			487	
Approach Delay, s/veh		29.5			33.6			3.1			2.8	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		62.0		13.9		62.0		13.9				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		58.0		34.0		58.0		34.0				
Max Q Clear Time (g_c+I1), s		6.7		3.5		5.2		9.2				
Green Ext Time (p_c), s		5.4		0.2		3.7		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				7.1								
HCM 6th LOS				A								





















CDU Health Professions Building Traffic
2: 120th St & Compton Ave

Existing Plus Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	287	83	143	437	117	68	253	74	82	296	81
Future Volume (veh/h)	51	287	83	143	437	117	68	253	74	82	296	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	350	101	174	533	143	83	309	90	100	361	99
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	753	639	341	1117	298	482	1351	387	515	1370	371
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	763	1870	1585	940	2773	741	932	2726	781	986	2764	748
Grp Volume(v), veh/h	62	350	101	174	341	335	83	200	199	100	230	230
Grp Sat Flow(s),veh/h/ln	763	1870	1585	940	1777	1737	932	1777	1730	986	1777	1736
Q Serve(g_s), s	5.2	10.8	3.2	13.1	11.2	11.2	4.5	5.0	5.2	5.1	5.9	6.1
Cycle Q Clear(g_c), s	16.4	10.8	3.2	24.0	11.2	11.2	10.5	5.0	5.2	10.2	5.9	6.1
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.45	1.00		0.43
Lane Grp Cap(c), veh/h	290	753	639	341	716	700	482	880	857	515	880	860
V/C Ratio(X)	0.21	0.46	0.16	0.51	0.48	0.48	0.17	0.23	0.23	0.19	0.26	0.27
Avail Cap(c_a), veh/h	496	1259	1067	595	1197	1170	482	880	857	515	880	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	17.3	15.0	26.1	17.4	17.4	14.6	11.3	11.3	14.2	11.5	11.5
Incr Delay (d2), s/veh	0.4	0.4	0.1	1.2	0.5	0.5	0.8	0.6	0.6	0.8	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.5	1.1	2.9	4.4	4.3	1.0	2.0	2.0	1.2	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	17.7	15.1	27.2	17.9	17.9	15.4	11.9	12.0	15.1	12.2	12.3
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		513			850			482			560	
Approach Delay, s/veh		17.9			19.8			12.5			12.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.0		35.7		43.0		35.7				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		39.0		53.0		39.0		53.0				
Max Q Clear Time (g_c+I1), s		12.5		18.4		12.2		26.0				
Green Ext Time (p_c), s		3.0		3.2		3.5		5.7				
Intersection Summary												
HCM 6th Ctrl Delay				16.3								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

Existing Plus Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	53	55	39	46	144	30	1043	88	139	575	37
Future Volume (veh/h)	121	53	55	39	46	144	30	1043	88	139	575	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	57	59	42	49	155	32	1122	95	149	618	40
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	209	86	71	200	211	368	46	2627	222	232	1996	129
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.55	0.55	0.07	0.59	0.59
Sat Flow, veh/h	596	372	305	572	906	1585	1781	4796	406	3456	3389	219
Grp Volume(v), veh/h	246	0	0	91	0	155	32	796	421	149	324	334
Grp Sat Flow(s),veh/h/ln	1273	0	0	1478	0	1585	1781	1702	1797	1728	1777	1831
Q Serve(g_s), s	11.4	0.0	0.0	0.0	0.0	6.5	1.4	10.8	10.9	3.3	7.2	7.2
Cycle Q Clear(g_c), s	14.8	0.0	0.0	3.4	0.0	6.5	1.4	10.8	10.9	3.3	7.2	7.2
Prop In Lane	0.53		0.24	0.46		1.00	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	366	0	0	411	0	368	46	1864	984	232	1047	1079
V/C Ratio(X)	0.67	0.00	0.00	0.22	0.00	0.42	0.70	0.43	0.43	0.64	0.31	0.31
Avail Cap(c_a), veh/h	661	0	0	739	0	707	182	1864	984	440	1047	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	0.0	24.3	0.0	25.6	38.0	10.5	10.5	35.7	8.1	8.1
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.3	0.0	0.8	17.7	0.7	1.4	3.0	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	1.4	0.0	2.5	0.8	3.8	4.2	1.5	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	0.0	0.0	24.6	0.0	26.4	55.7	11.2	11.8	38.7	8.9	8.9
LnGrp LOS	C	A	A	C	A	C	E	B	B	D	A	A
Approach Vol, veh/h		246			246			1249			807	
Approach Delay, s/veh		31.4			25.7			12.6			14.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	47.0		22.2	6.0	50.2		22.2				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	10.0	43.0		35.0	8.0	45.0		35.0				
Max Q Clear Time (g_c+I1), s	5.3	12.9		16.8	3.4	9.2		8.5				
Green Ext Time (p_c), s	0.2	10.1		1.4	0.0	4.6		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									

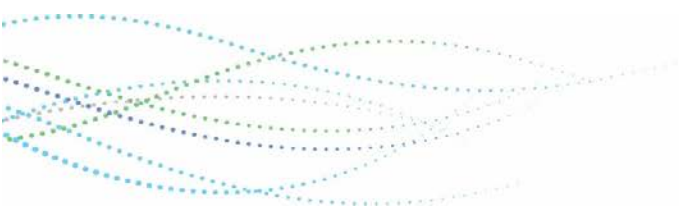
CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

Existing Plus Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	313	193	96	153	142	78	756	84	83	512	47
Future Volume (veh/h)	310	313	193	96	153	142	78	756	84	83	512	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	352	356	219	109	174	161	89	859	95	94	582	53
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	919	778	386	439	406	314	1513	675	218	1403	127
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1045	1870	1585	838	894	827	793	3554	1585	588	3294	299
Grp Volume(v), veh/h	352	356	219	109	0	335	89	859	95	94	313	322
Grp Sat Flow(s),veh/h/ln	1045	1870	1585	838	0	1721	793	1777	1585	588	1777	1816
Q Serve(g_s), s	30.9	11.5	7.9	9.0	0.0	11.8	8.5	17.6	3.5	13.9	11.8	11.9
Cycle Q Clear(g_c), s	42.7	11.5	7.9	20.6	0.0	11.8	20.4	17.6	3.5	31.5	11.8	11.9
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	460	919	778	386	0	845	314	1513	675	218	757	773
V/C Ratio(X)	0.77	0.39	0.28	0.28	0.00	0.40	0.28	0.57	0.14	0.43	0.41	0.42
Avail Cap(c_a), veh/h	500	991	840	418	0	912	314	1513	675	218	757	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	15.4	14.5	21.9	0.0	15.5	26.4	20.9	16.9	32.9	19.3	19.3
Incr Delay (d2), s/veh	6.5	0.3	0.2	0.4	0.0	0.3	2.2	1.5	0.4	6.1	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.8	2.8	1.8	0.0	4.5	1.8	7.4	1.3	2.3	5.1	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	15.7	14.7	22.3	0.0	15.8	28.6	22.5	17.3	39.0	20.9	20.9
LnGrp LOS	D	B	B	C	A	B	C	C	B	D	C	C
Approach Vol, veh/h		927			444			1043			729	
Approach Delay, s/veh		22.9			17.4			22.5			23.3	
Approach LOS		C			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		45.0		51.3		45.0		51.3				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		41.0		51.0		41.0		51.0				
Max Q Clear Time (g_c+I1), s		22.4		44.7		33.5		22.6				
Green Ext Time (p_c), s		6.9		2.6		2.8		3.0				
Intersection Summary												
HCM 6th Ctrl Delay				22.1								
HCM 6th LOS				C								



















Opening Year 2023 Without Project LOS Calculation Sheets

























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

2023 No Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	62	38	64	18	52	9	508	91	60	572	5
Future Volume (veh/h)	41	62	38	64	18	52	9	508	91	60	572	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	79	49	82	23	67	12	651	117	77	733	6
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	125	67	155	43	85	59	2195	390	239	2173	18
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	375	841	451	604	293	572	18	2915	517	247	2886	23
Grp Volume(v), veh/h	181	0	0	172	0	0	416	0	364	380	0	436
Grp Sat Flow(s),veh/h/ln	1667	0	0	1469	0	0	1842	0	1609	1458	0	1698
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	5.9	0.0	0.0	6.9
Cycle Q Clear(g_c), s	8.2	0.0	0.0	9.1	0.0	0.0	5.7	0.0	5.9	5.1	0.0	6.9
Prop In Lane	0.29		0.27	0.48		0.39	0.03		0.32	0.20		0.01
Lane Grp Cap(c), veh/h	305	0	0	284	0	0	1432	0	1211	1151	0	1278
V/C Ratio(X)	0.59	0.00	0.00	0.61	0.00	0.00	0.29	0.00	0.30	0.33	0.00	0.34
Avail Cap(c_a), veh/h	678	0	0	621	0	0	1432	0	1211	1151	0	1278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	0.0	33.1	0.0	0.0	3.2	0.0	3.2	3.1	0.0	3.3
Incr Delay (d2), s/veh	1.8	0.0	0.0	2.1	0.0	0.0	0.5	0.0	0.6	0.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	3.3	0.0	0.0	1.6	0.0	1.5	1.5	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	0.0	35.2	0.0	0.0	3.7	0.0	3.8	3.9	0.0	4.1
LnGrp LOS	C	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		181			172			780			816	
Approach Delay, s/veh		34.7			35.2			3.8			4.0	
Approach LOS		C			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		16.0		65.0		16.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		61.0		31.0		61.0		31.0				
Max Q Clear Time (g_c+I1), s		7.9		10.2		8.9		11.1				
Green Ext Time (p_c), s		6.0		1.0		6.9		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									




















CDU Health Professions Building Traffic
2: 120th St & Compton Ave

2023 No Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	494	93	93	488	170	112	314	90	137	327	122
Future Volume (veh/h)	129	494	93	93	488	170	112	314	90	137	327	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	602	113	113	595	207	137	383	110	167	399	149
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	888	752	246	1228	426	363	1191	338	390	1108	409
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	678	1870	1585	736	2587	898	859	2732	775	904	2541	937
Grp Volume(v), veh/h	157	602	113	113	408	394	137	247	246	167	278	270
Grp Sat Flow(s),veh/h/ln	678	1870	1585	736	1777	1709	859	1777	1731	904	1777	1702
Q Serve(g_s), s	18.4	22.3	3.6	12.6	14.0	14.1	11.4	8.2	8.3	13.3	9.3	9.5
Cycle Q Clear(g_c), s	32.5	22.3	3.6	34.9	14.0	14.1	20.9	8.2	8.3	21.7	9.3	9.5
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.45	1.00		0.55
Lane Grp Cap(c), veh/h	296	888	752	246	843	811	363	775	754	390	775	742
V/C Ratio(X)	0.53	0.68	0.15	0.46	0.48	0.49	0.38	0.32	0.33	0.43	0.36	0.36
Avail Cap(c_a), veh/h	376	1108	939	333	1053	1012	363	775	754	390	775	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	18.2	13.3	31.7	16.0	16.0	23.9	16.5	16.6	23.7	16.9	16.9
Incr Delay (d2), s/veh	1.5	1.2	0.1	1.3	0.4	0.5	3.0	1.1	1.1	3.4	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	9.3	1.3	2.3	5.5	5.3	2.5	3.4	3.4	3.1	3.9	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	19.4	13.4	33.0	16.5	16.5	26.9	17.6	17.7	27.1	18.2	18.3
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		872			915			630			715	
Approach Delay, s/veh		20.3			18.5			19.7			20.3	
Approach LOS		C			B			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.0		46.5		43.0		46.5				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		39.0		53.0		39.0		53.0				
Max Q Clear Time (g_c+I1), s		22.9		34.5		23.7		36.9				
Green Ext Time (p_c), s		3.5		5.7		3.9		5.6				
Intersection Summary												
HCM 6th Ctrl Delay				19.7								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

2023 No Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	19	85	21	41	60	137	895	64	98	997	174
Future Volume (veh/h)	63	19	85	21	41	60	137	895	64	98	997	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	20	91	23	44	65	147	962	69	105	1072	187
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	38	108	111	185	237	181	3267	234	168	1871	326
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.10	0.67	0.67	0.05	0.62	0.62
Sat Flow, veh/h	443	257	724	389	1234	1585	1781	4864	348	3456	3026	526
Grp Volume(v), veh/h	179	0	0	67	0	65	147	673	358	105	628	631
Grp Sat Flow(s),veh/h/ln	1425	0	0	1623	0	1585	1781	1702	1808	1728	1777	1776
Q Serve(g_s), s	8.5	0.0	0.0	0.0	0.0	3.4	7.5	7.5	7.5	2.8	19.3	19.4
Cycle Q Clear(g_c), s	11.4	0.0	0.0	2.9	0.0	3.4	7.5	7.5	7.5	2.8	19.3	19.4
Prop In Lane	0.38		0.51	0.34		1.00	1.00		0.19	1.00		0.30
Lane Grp Cap(c), veh/h	267	0	0	295	0	237	181	2287	1214	168	1099	1098
V/C Ratio(X)	0.67	0.00	0.00	0.23	0.00	0.27	0.81	0.29	0.30	0.63	0.57	0.57
Avail Cap(c_a), veh/h	350	0	0	386	0	326	289	2287	1214	262	1099	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	0.0	0.0	34.6	0.0	34.8	40.6	6.2	6.2	43.1	10.4	10.4
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.4	0.0	0.6	8.8	0.3	0.6	3.8	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	1.3	0.0	1.3	3.7	2.4	2.7	1.3	7.4	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	0.0	0.0	35.0	0.0	35.4	49.4	6.5	6.8	46.9	12.6	12.6
LnGrp LOS	D	A	A	C	A	D	D	A	A	D	B	B
Approach Vol, veh/h		179			132			1178			1364	
Approach Delay, s/veh		41.4			35.2			12.0			15.2	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	66.0		17.8	13.4	61.1		17.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	62.0		19.0	15.0	54.0		19.0				
Max Q Clear Time (g_c+I1), s	4.8	9.5		13.4	9.5	21.4		5.4				
Green Ext Time (p_c), s	0.1	8.9		0.4	0.2	11.1		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									

















CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

2023 No Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	158	116	69	327	195	37	757	149	118	658	333
Future Volume (veh/h)	152	158	116	69	327	195	37	757	149	118	658	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	173	180	132	78	372	222	42	860	169	134	748	378
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	898	761	525	527	314	155	1564	697	215	1006	507
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	823	1870	1585	1067	1098	655	500	3554	1585	548	2287	1153
Grp Volume(v), veh/h	173	180	132	78	0	594	42	860	169	134	581	545
Grp Sat Flow(s),veh/h/ln	823	1870	1585	1067	0	1752	500	1777	1585	548	1777	1663
Q Serve(g_s), s	20.9	5.5	4.7	4.5	0.0	26.7	7.6	17.9	6.7	23.9	27.2	27.3
Cycle Q Clear(g_c), s	47.6	5.5	4.7	10.1	0.0	26.7	34.9	17.9	6.7	41.8	27.2	27.3
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	248	898	761	525	0	841	155	1564	697	215	782	732
V/C Ratio(X)	0.70	0.20	0.17	0.15	0.00	0.71	0.27	0.55	0.24	0.62	0.74	0.75
Avail Cap(c_a), veh/h	248	898	761	525	0	841	155	1564	697	215	782	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	15.0	14.7	17.9	0.0	20.5	37.9	20.7	17.6	36.1	23.3	23.3
Incr Delay (d2), s/veh	8.4	0.1	0.1	0.1	0.0	2.7	4.2	1.4	0.8	12.8	6.3	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	2.3	1.7	1.1	0.0	11.0	1.1	7.5	2.6	3.9	12.3	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	15.1	14.9	18.0	0.0	23.2	42.1	22.1	18.4	49.0	29.6	30.1
LnGrp LOS	D	B	B	B	A	C	D	C	B	D	C	C
Approach Vol, veh/h		485			672			1071			1260	
Approach Delay, s/veh		26.6			22.6			22.3			31.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		48.0		52.0		48.0		52.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		44.0		48.0		44.0		48.0				
Max Q Clear Time (g_c+I1), s		36.9		49.6		43.8		28.7				
Green Ext Time (p_c), s		3.8		0.0		0.2		4.4				
Intersection Summary												
HCM 6th Ctrl Delay				26.4								
HCM 6th LOS				C								























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

2023 No Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	14	7	47	15	49	7	509	52	47	332	7
Future Volume (veh/h)	9	14	7	47	15	49	7	509	52	47	332	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	18	9	60	19	63	9	653	67	60	426	9
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	124	49	132	38	83	57	2458	250	301	2101	45
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	322	1029	405	548	318	691	12	3168	322	312	2707	58
Grp Volume(v), veh/h	39	0	0	142	0	0	387	0	342	232	0	263
Grp Sat Flow(s),veh/h/ln	1756	0	0	1557	0	0	1858	0	1644	1385	0	1692
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	4.6	0.0	0.0	3.2
Cycle Q Clear(g_c), s	1.5	0.0	0.0	6.8	0.0	0.0	4.5	0.0	4.6	2.5	0.0	3.2
Prop In Lane	0.31		0.23	0.42		0.44	0.02		0.20	0.26		0.03
Lane Grp Cap(c), veh/h	273	0	0	254	0	0	1490	0	1276	1134	0	1313
V/C Ratio(X)	0.14	0.00	0.00	0.56	0.00	0.00	0.26	0.00	0.27	0.20	0.00	0.20
Avail Cap(c_a), veh/h	741	0	0	700	0	0	1490	0	1276	1134	0	1313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	0.0	32.8	0.0	0.0	2.4	0.0	2.5	2.2	0.0	2.3
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.9	0.0	0.0	0.4	0.0	0.5	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.6	0.0	0.0	1.1	0.0	1.0	0.6	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	0.0	0.0	34.7	0.0	0.0	2.9	0.0	3.0	2.6	0.0	2.6
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		39			142			729			495	
Approach Delay, s/veh		30.8			34.7			2.9			2.6	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		64.0		13.3		64.0		13.3				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		60.0		32.0		60.0		32.0				
Max Q Clear Time (g_c+I1), s		6.6		3.5		5.2		8.8				
Green Ext Time (p_c), s		5.4		0.2		3.7		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				6.8								
HCM 6th LOS				A								


CDU Health Professions Building Traffic
2: 120th St & Compton Ave

2023 No Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	291	84	145	444	119	69	257	75	83	299	74
Future Volume (veh/h)	48	291	84	145	444	119	69	257	75	83	299	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	355	102	177	541	145	84	313	91	101	365	90
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	763	647	342	1132	302	479	1340	383	507	1391	339
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	756	1870	1585	934	2774	740	936	2727	780	981	2833	690
Grp Volume(v), veh/h	59	355	102	177	346	340	84	202	202	101	227	228
Grp Sat Flow(s),veh/h/ln	756	1870	1585	934	1777	1737	936	1777	1730	981	1777	1746
Q Serve(g_s), s	4.9	11.0	3.2	13.6	11.4	11.4	4.6	5.2	5.3	5.2	5.9	6.1
Cycle Q Clear(g_c), s	16.4	11.0	3.2	24.6	11.4	11.4	10.6	5.2	5.3	10.6	5.9	6.1
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.45	1.00		0.40
Lane Grp Cap(c), veh/h	290	763	647	342	725	709	479	873	850	507	873	858
V/C Ratio(X)	0.20	0.47	0.16	0.52	0.48	0.48	0.18	0.23	0.24	0.20	0.26	0.27
Avail Cap(c_a), veh/h	486	1249	1058	585	1186	1160	479	873	850	507	873	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	17.2	14.9	26.1	17.3	17.3	14.9	11.6	11.6	14.7	11.8	11.8
Incr Delay (d2), s/veh	0.3	0.4	0.1	1.2	0.5	0.5	0.8	0.6	0.7	0.9	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.5	1.1	3.0	4.5	4.4	1.0	2.0	2.1	1.2	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	17.6	15.0	27.4	17.8	17.8	15.7	12.2	12.3	15.6	12.5	12.6
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		516			863			488			556	
Approach Delay, s/veh		17.8			19.7			12.9			13.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.0		36.4		43.0		36.4				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		39.0		53.0		39.0		53.0				
Max Q Clear Time (g_c+I1), s		12.6		18.4		12.6		26.6				
Green Ext Time (p_c), s		3.0		3.2		3.4		5.8				
Intersection Summary												
HCM 6th Ctrl Delay				16.4								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

2023 No Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↑↑↑		↔	↔	
Traffic Volume (veh/h)	116	54	54	40	47	146	29	1059	89	141	584	35
Future Volume (veh/h)	116	54	54	40	47	146	29	1059	89	141	584	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	58	58	43	51	157	31	1139	96	152	628	38
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	89	70	196	210	363	45	2637	222	235	2017	122
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.55	0.55	0.07	0.59	0.59
Sat Flow, veh/h	578	387	306	564	916	1585	1781	4798	404	3456	3404	206
Grp Volume(v), veh/h	241	0	0	94	0	157	31	808	427	152	327	339
Grp Sat Flow(s),veh/h/ln	1271	0	0	1480	0	1585	1781	1702	1798	1728	1777	1833
Q Serve(g_s), s	11.0	0.0	0.0	0.0	0.0	6.6	1.4	11.0	11.0	3.4	7.2	7.2
Cycle Q Clear(g_c), s	14.5	0.0	0.0	3.5	0.0	6.6	1.4	11.0	11.0	3.4	7.2	7.2
Prop In Lane	0.52		0.24	0.46		1.00	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	361	0	0	406	0	363	45	1871	988	235	1053	1086
V/C Ratio(X)	0.67	0.00	0.00	0.23	0.00	0.43	0.69	0.43	0.43	0.65	0.31	0.31
Avail Cap(c_a), veh/h	663	0	0	743	0	709	182	1871	988	442	1053	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	0.0	24.5	0.0	25.8	37.8	10.4	10.4	35.5	8.0	8.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.3	0.0	0.8	17.6	0.7	1.4	3.0	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	0.0	1.4	0.0	2.5	0.8	3.8	4.2	1.5	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	0.0	0.0	24.8	0.0	26.6	55.4	11.1	11.8	38.5	8.7	8.7
LnGrp LOS	C	A	A	C	A	C	E	B	B	D	A	A
Approach Vol, veh/h		241			251			1266			818	
Approach Delay, s/veh		31.4			25.9			12.4			14.3	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	47.0		21.9	6.0	50.4		21.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	10.0	43.0		35.0	8.0	45.0		35.0				
Max Q Clear Time (g_c+I1), s	5.4	13.0		16.5	3.4	9.2		8.6				
Green Ext Time (p_c), s	0.2	10.3		1.4	0.0	4.6		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.1									
HCM 6th LOS			B									

CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

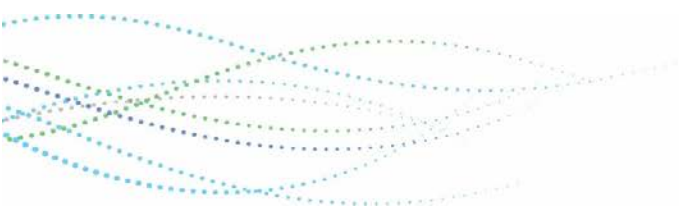
2023 No Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	315	318	196	97	155	144	79	766	85	84	518	48
Future Volume (veh/h)	315	318	196	97	155	144	79	766	85	84	518	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	358	361	223	110	176	164	90	870	97	95	589	55
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	461	928	786	386	442	412	306	1498	668	210	1385	129
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1040	1870	1585	831	891	830	786	3554	1585	581	3286	306
Grp Volume(v), veh/h	358	361	223	110	0	340	90	870	97	95	318	326
Grp Sat Flow(s),veh/h/ln	1040	1870	1585	831	0	1721	786	1777	1585	581	1777	1815
Q Serve(g_s), s	32.0	11.7	8.0	9.3	0.0	12.1	8.9	18.2	3.7	14.6	12.3	12.3
Cycle Q Clear(g_c), s	44.1	11.7	8.0	21.0	0.0	12.1	21.2	18.2	3.7	32.8	12.3	12.3
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	461	928	786	386	0	854	306	1498	668	210	749	765
V/C Ratio(X)	0.78	0.39	0.28	0.28	0.00	0.40	0.29	0.58	0.15	0.45	0.42	0.43
Avail Cap(c_a), veh/h	491	981	831	410	0	902	306	1498	668	210	749	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	15.3	14.4	21.8	0.0	15.4	27.3	21.5	17.3	34.1	19.8	19.8
Incr Delay (d2), s/veh	7.3	0.3	0.2	0.4	0.0	0.3	2.4	1.7	0.5	6.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	4.9	2.8	1.8	0.0	4.6	1.8	7.7	1.4	2.4	5.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	15.6	14.6	22.2	0.0	15.7	29.7	23.2	17.8	41.0	21.6	21.6
LnGrp LOS	D	B	B	C	A	B	C	C	B	D	C	C
Approach Vol, veh/h		942			450			1057			739	
Approach Delay, s/veh		23.3			17.3			23.3			24.1	
Approach LOS		C			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		45.0		52.3		45.0		52.3				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		41.0		51.0		41.0		51.0				
Max Q Clear Time (g_c+I1), s		23.2		46.1		34.8		23.0				
Green Ext Time (p_c), s		6.8		2.2		2.5		3.1				
Intersection Summary												
HCM 6th Ctrl Delay				22.6								
HCM 6th LOS				C								



















Charles Drew University HPEB Transportation Impact Analysis

Opening Year 2023 With Project LOS Calculation Sheets

























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

2023 With Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	62	38	67	18	52	9	508	102	61	572	5
Future Volume (veh/h)	41	62	38	67	18	52	9	508	102	61	572	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	79	49	86	23	67	12	651	131	78	733	6
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	128	69	161	43	85	59	2138	425	240	2150	17
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	373	844	452	622	286	558	17	2858	568	248	2873	23
Grp Volume(v), veh/h	181	0	0	176	0	0	425	0	369	379	0	438
Grp Sat Flow(s),veh/h/ln	1669	0	0	1466	0	0	1843	0	1600	1447	0	1698
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	6.1	0.0	0.0	7.0
Cycle Q Clear(g_c), s	8.1	0.0	0.0	9.2	0.0	0.0	5.9	0.0	6.1	5.1	0.0	7.0
Prop In Lane	0.29		0.27	0.49		0.38	0.03		0.35	0.21		0.01
Lane Grp Cap(c), veh/h	312	0	0	290	0	0	1425	0	1197	1137	0	1270
V/C Ratio(X)	0.58	0.00	0.00	0.61	0.00	0.00	0.30	0.00	0.31	0.33	0.00	0.34
Avail Cap(c_a), veh/h	705	0	0	644	0	0	1425	0	1197	1137	0	1270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	0.0	32.6	0.0	0.0	3.3	0.0	3.3	3.2	0.0	3.4
Incr Delay (d2), s/veh	1.7	0.0	0.0	2.1	0.0	0.0	0.5	0.0	0.7	0.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	3.4	0.0	0.0	1.7	0.0	1.5	1.5	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	0.0	34.7	0.0	0.0	3.8	0.0	4.0	4.0	0.0	4.2
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		181			176			794			817	
Approach Delay, s/veh		33.9			34.7			3.9			4.1	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		64.0		16.2		64.0		16.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		60.0		32.0		60.0		32.0				
Max Q Clear Time (g_c+I1), s		8.1		10.1		9.0		11.2				
Green Ext Time (p_c), s		6.2		1.0		6.9		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				9.5								
HCM 6th LOS				A								




















CDU Health Professions Building Traffic
2: 120th St & Compton Ave

2023 With Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	494	93	93	488	170	112	315	90	137	327	124
Future Volume (veh/h)	139	494	93	93	488	170	112	315	90	137	327	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	602	113	113	595	207	137	384	110	167	399	151
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	888	752	246	1228	426	362	1192	337	390	1103	412
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	678	1870	1585	736	2587	898	858	2734	774	903	2531	946
Grp Volume(v), veh/h	170	602	113	113	408	394	137	248	246	167	279	271
Grp Sat Flow(s),veh/h/ln	678	1870	1585	736	1777	1709	858	1777	1731	903	1777	1700
Q Serve(g_s), s	20.4	22.3	3.6	12.6	14.0	14.1	11.4	8.2	8.4	13.3	9.4	9.6
Cycle Q Clear(g_c), s	34.5	22.3	3.6	34.9	14.0	14.1	21.0	8.2	8.4	21.7	9.4	9.6
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.45	1.00		0.56
Lane Grp Cap(c), veh/h	296	888	752	246	843	811	362	775	755	390	775	741
V/C Ratio(X)	0.57	0.68	0.15	0.46	0.48	0.49	0.38	0.32	0.33	0.43	0.36	0.37
Avail Cap(c_a), veh/h	376	1108	939	333	1053	1012	362	775	755	390	775	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	18.2	13.3	31.7	16.0	16.0	24.0	16.5	16.6	23.7	16.9	16.9
Incr Delay (d2), s/veh	1.8	1.2	0.1	1.3	0.4	0.5	3.0	1.1	1.1	3.4	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	9.3	1.3	2.3	5.5	5.3	2.5	3.4	3.4	3.1	4.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	19.4	13.4	33.0	16.5	16.5	27.0	17.6	17.7	27.1	18.2	18.3
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		885			915			631			717	
Approach Delay, s/veh		20.6			18.5			19.7			20.3	
Approach LOS		C			B			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.0		46.5		43.0		46.5				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		39.0		53.0		39.0		53.0				
Max Q Clear Time (g_c+I1), s		23.0		36.5		23.7		36.9				
Green Ext Time (p_c), s		3.5		5.5		3.9		5.6				
Intersection Summary												
HCM 6th Ctrl Delay				19.8								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

2023 With Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	19	86	21	41	60	139	895	64	98	997	182
Future Volume (veh/h)	65	19	86	21	41	60	139	895	64	98	997	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	20	92	23	44	65	149	962	69	105	1072	196
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	39	110	112	188	242	184	3246	232	168	1839	335
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.10	0.67	0.67	0.05	0.61	0.61
Sat Flow, veh/h	451	254	720	390	1232	1585	1781	4864	348	3456	3001	547
Grp Volume(v), veh/h	182	0	0	67	0	65	149	673	358	105	633	635
Grp Sat Flow(s),veh/h/ln	1425	0	0	1623	0	1585	1781	1702	1808	1728	1777	1772
Q Serve(g_s), s	8.6	0.0	0.0	0.0	0.0	3.3	7.5	7.5	7.5	2.7	19.6	19.8
Cycle Q Clear(g_c), s	11.4	0.0	0.0	2.9	0.0	3.3	7.5	7.5	7.5	2.7	19.6	19.8
Prop In Lane	0.38		0.51	0.34		1.00	1.00		0.19	1.00		0.31
Lane Grp Cap(c), veh/h	272	0	0	300	0	242	184	2272	1207	168	1089	1086
V/C Ratio(X)	0.67	0.00	0.00	0.22	0.00	0.27	0.81	0.30	0.30	0.62	0.58	0.58
Avail Cap(c_a), veh/h	370	0	0	408	0	347	312	2272	1207	265	1089	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	0.0	0.0	34.0	0.0	34.2	40.1	6.3	6.3	42.7	10.6	10.7
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.4	0.0	0.6	8.2	0.3	0.6	3.8	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	1.3	0.0	1.3	3.7	2.4	2.7	1.2	7.5	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	0.0	0.0	34.4	0.0	34.8	48.3	6.6	6.9	46.4	12.9	13.0
LnGrp LOS	D	A	A	C	A	C	D	A	A	D	B	B
Approach Vol, veh/h		182			132			1180			1373	
Approach Delay, s/veh		40.6			34.6			12.0			15.5	
Approach LOS		D			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	65.0		17.9	13.4	60.0		17.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	61.0		20.0	16.0	52.0		20.0				
Max Q Clear Time (g_c+I1), s	4.7	9.5		13.4	9.5	21.8		5.3				
Green Ext Time (p_c), s	0.1	8.9		0.5	0.2	10.9		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

















CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

2023 With Project
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	158	116	69	327	195	37	759	149	118	659	333
Future Volume (veh/h)	152	158	116	69	327	195	37	759	149	118	659	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	173	180	132	78	372	222	42	862	169	134	749	378
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	898	761	525	527	314	155	1564	697	215	1007	507
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	823	1870	1585	1067	1098	655	500	3554	1585	547	2288	1152
Grp Volume(v), veh/h	173	180	132	78	0	594	42	862	169	134	581	546
Grp Sat Flow(s),veh/h/ln	823	1870	1585	1067	0	1752	500	1777	1585	547	1777	1663
Q Serve(g_s), s	20.9	5.5	4.7	4.5	0.0	26.7	7.6	17.9	6.7	24.0	27.2	27.3
Cycle Q Clear(g_c), s	47.6	5.5	4.7	10.1	0.0	26.7	35.0	17.9	6.7	41.9	27.2	27.3
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	248	898	761	525	0	841	155	1564	697	215	782	732
V/C Ratio(X)	0.70	0.20	0.17	0.15	0.00	0.71	0.27	0.55	0.24	0.62	0.74	0.75
Avail Cap(c_a), veh/h	248	898	761	525	0	841	155	1564	697	215	782	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	15.0	14.7	17.9	0.0	20.5	37.9	20.7	17.6	36.2	23.3	23.3
Incr Delay (d2), s/veh	8.4	0.1	0.1	0.1	0.0	2.7	4.2	1.4	0.8	13.0	6.3	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	2.3	1.7	1.1	0.0	11.0	1.1	7.5	2.6	3.9	12.3	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	15.1	14.9	18.0	0.0	23.2	42.2	22.1	18.4	49.1	29.6	30.1
LnGrp LOS	D	B	B	B	A	C	D	C	B	D	C	C
Approach Vol, veh/h		485			672			1073			1261	
Approach Delay, s/veh		26.6			22.6			22.3			31.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		48.0		52.0		48.0		52.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		44.0		48.0		44.0		48.0				
Max Q Clear Time (g_c+I1), s		37.0		49.6		43.9		28.7				
Green Ext Time (p_c), s		3.8		0.0		0.1		4.4				
Intersection Summary												
HCM 6th Ctrl Delay				26.4								
HCM 6th LOS				C								























CDU Health Professions Building Traffic
1: 118th St & Compton Ave

2023 With Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	14	7	57	15	50	7	509	57	47	332	7
Future Volume (veh/h)	9	14	7	57	15	50	7	509	57	47	332	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	18	9	73	19	64	9	653	73	60	426	9
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	134	53	150	38	83	57	2401	266	296	2069	44
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	334	1019	406	623	288	634	12	3139	347	311	2706	58
Grp Volume(v), veh/h	39	0	0	156	0	0	390	0	345	232	0	263
Grp Sat Flow(s),veh/h/ln	1759	0	0	1546	0	0	1859	0	1640	1383	0	1692
Q Serve(g_s), s	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	3.3
Cycle Q Clear(g_c), s	1.5	0.0	0.0	7.4	0.0	0.0	4.8	0.0	4.8	2.6	0.0	3.3
Prop In Lane	0.31		0.23	0.47		0.41	0.02		0.21	0.26		0.03
Lane Grp Cap(c), veh/h	292	0	0	272	0	0	1469	0	1254	1116	0	1294
V/C Ratio(X)	0.13	0.00	0.00	0.57	0.00	0.00	0.27	0.00	0.27	0.21	0.00	0.20
Avail Cap(c_a), veh/h	765	0	0	719	0	0	1469	0	1254	1116	0	1294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	0.0	32.2	0.0	0.0	2.7	0.0	2.7	2.4	0.0	2.5
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.9	0.0	0.0	0.4	0.0	0.5	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.9	0.0	0.0	1.2	0.0	1.1	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	0.0	34.1	0.0	0.0	3.1	0.0	3.2	2.9	0.0	2.9
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		39			156			735			495	
Approach Delay, s/veh		29.9			34.1			3.2			2.9	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		63.0		14.1		63.0		14.1				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		59.0		33.0		59.0		33.0				
Max Q Clear Time (g_c+I1), s		6.8		3.5		5.3		9.4				
Green Ext Time (p_c), s		5.5		0.2		3.7		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				7.2								
HCM 6th LOS				A								




















CDU Health Professions Building Traffic
2: 120th St & Compton Ave

2023 With Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	291	84	145	444	119	69	257	75	83	300	82
Future Volume (veh/h)	52	291	84	145	444	119	69	257	75	83	300	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	355	102	177	541	145	84	313	91	101	366	100
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	763	647	342	1132	302	473	1340	383	507	1359	367
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	756	1870	1585	934	2774	740	927	2727	780	981	2766	746
Grp Volume(v), veh/h	63	355	102	177	346	340	84	202	202	101	233	233
Grp Sat Flow(s),veh/h/ln	756	1870	1585	934	1777	1737	927	1777	1730	981	1777	1736
Q Serve(g_s), s	5.3	11.0	3.2	13.6	11.4	11.4	4.6	5.2	5.3	5.2	6.1	6.2
Cycle Q Clear(g_c), s	16.8	11.0	3.2	24.6	11.4	11.4	10.9	5.2	5.3	10.6	6.1	6.2
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.45	1.00		0.43
Lane Grp Cap(c), veh/h	290	763	647	342	725	709	473	873	850	507	873	853
V/C Ratio(X)	0.22	0.47	0.16	0.52	0.48	0.48	0.18	0.23	0.24	0.20	0.27	0.27
Avail Cap(c_a), veh/h	486	1249	1058	585	1186	1160	473	873	850	507	873	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	17.2	14.9	26.1	17.3	17.3	15.1	11.6	11.6	14.7	11.8	11.9
Incr Delay (d2), s/veh	0.4	0.4	0.1	1.2	0.5	0.5	0.8	0.6	0.7	0.9	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.5	1.1	3.0	4.5	4.4	1.0	2.0	2.1	1.2	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	17.6	15.0	27.4	17.8	17.8	15.9	12.2	12.3	15.6	12.6	12.7
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		520			863			488			567	
Approach Delay, s/veh		17.9			19.7			12.9			13.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.0		36.4		43.0		36.4				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		39.0		53.0		39.0		53.0				
Max Q Clear Time (g_c+I1), s		12.9		18.8		12.6		26.6				
Green Ext Time (p_c), s		3.0		3.2		3.5		5.8				
Intersection Summary												
HCM 6th Ctrl Delay				16.4								
HCM 6th LOS				B								
























CDU Health Professions Building Traffic
3: 118th St & Wilmington Ave

2023 With Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	54	56	40	47	146	30	1059	89	141	584	38
Future Volume (veh/h)	123	54	56	40	47	146	30	1059	89	141	584	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	58	60	43	51	157	32	1139	96	152	628	41
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	87	72	201	215	376	45	2608	220	235	1984	129
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.54	0.54	0.07	0.59	0.59
Sat Flow, veh/h	592	368	303	567	908	1585	1781	4798	404	3456	3387	221
Grp Volume(v), veh/h	250	0	0	94	0	157	32	808	427	152	329	340
Grp Sat Flow(s),veh/h/ln	1264	0	0	1475	0	1585	1781	1702	1798	1728	1777	1831
Q Serve(g_s), s	11.8	0.0	0.0	0.0	0.0	6.6	1.4	11.2	11.3	3.4	7.4	7.5
Cycle Q Clear(g_c), s	15.3	0.0	0.0	3.5	0.0	6.6	1.4	11.2	11.3	3.4	7.4	7.5
Prop In Lane	0.53		0.24	0.46		1.00	1.00		0.22	1.00		0.12
Lane Grp Cap(c), veh/h	369	0	0	416	0	376	45	1850	977	235	1041	1072
V/C Ratio(X)	0.68	0.00	0.00	0.23	0.00	0.42	0.70	0.44	0.44	0.65	0.32	0.32
Avail Cap(c_a), veh/h	652	0	0	732	0	701	180	1850	977	437	1041	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	0.0	24.3	0.0	25.6	38.2	10.8	10.8	36.0	8.3	8.3
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.3	0.0	0.7	17.9	0.8	1.4	3.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	1.4	0.0	2.5	0.8	4.0	4.4	1.5	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	0.0	0.0	24.6	0.0	26.3	56.1	11.6	12.2	38.9	9.1	9.1
LnGrp LOS	C	A	A	C	A	C	E	B	B	D	A	A
Approach Vol, veh/h		250			251			1267			821	
Approach Delay, s/veh		31.6			25.7			12.9			14.6	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	47.0		22.7	6.0	50.3		22.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	10.0	43.0		35.0	8.0	45.0		35.0				
Max Q Clear Time (g_c+I1), s	5.4	13.3		17.3	3.4	9.5		8.6				
Green Ext Time (p_c), s	0.2	10.2		1.5	0.0	4.7		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

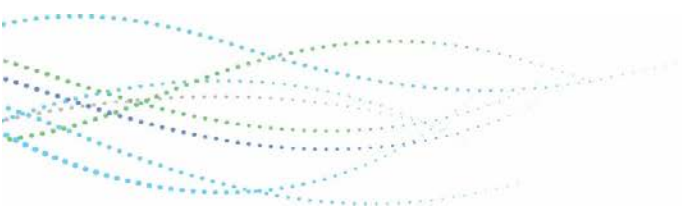
CDU Health Professions Building Traffic
4: Wilmington Ave & 120th St/119th St

2023 With Project
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	315	318	196	97	155	144	79	767	85	84	520	48
Future Volume (veh/h)	315	318	196	97	155	144	79	767	85	84	520	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	358	361	223	110	176	164	90	872	97	95	591	55
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	461	928	786	386	442	412	305	1498	668	209	1386	129
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1040	1870	1585	831	891	830	785	3554	1585	580	3287	305
Grp Volume(v), veh/h	358	361	223	110	0	340	90	872	97	95	319	327
Grp Sat Flow(s),veh/h/ln	1040	1870	1585	831	0	1721	785	1777	1585	580	1777	1815
Q Serve(g_s), s	32.0	11.7	8.0	9.3	0.0	12.1	8.9	18.3	3.7	14.6	12.3	12.4
Cycle Q Clear(g_c), s	44.1	11.7	8.0	21.0	0.0	12.1	21.3	18.3	3.7	32.9	12.3	12.4
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	461	928	786	386	0	854	305	1498	668	209	749	765
V/C Ratio(X)	0.78	0.39	0.28	0.28	0.00	0.40	0.30	0.58	0.15	0.45	0.43	0.43
Avail Cap(c_a), veh/h	491	981	831	410	0	902	305	1498	668	209	749	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	15.3	14.4	21.8	0.0	15.4	27.3	21.6	17.3	34.2	19.8	19.8
Incr Delay (d2), s/veh	7.3	0.3	0.2	0.4	0.0	0.3	2.5	1.7	0.5	6.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	4.9	2.8	1.8	0.0	4.6	1.9	7.7	1.4	2.4	5.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	15.6	14.6	22.2	0.0	15.7	29.8	23.2	17.8	41.1	21.6	21.6
LnGrp LOS	D	B	B	C	A	B	C	C	B	D	C	C
Approach Vol, veh/h		942			450			1059			741	
Approach Delay, s/veh		23.3			17.3			23.3			24.1	
Approach LOS		C			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		45.0		52.3		45.0		52.3				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		41.0		51.0		41.0		51.0				
Max Q Clear Time (g_c+I1), s		23.3		46.1		34.9		23.0				
Green Ext Time (p_c), s		6.8		2.2		2.5		3.1				
Intersection Summary												
HCM 6th Ctrl Delay				22.6								
HCM 6th LOS				C								



APPENDIX C – OPENING YEAR 2023 TRAFFIC VOLUMES



2023 Without Project AM Peak Hour Volumes

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Compton Avenue / 118th Street	9	508	91	60	572	5	41	62	38	64	18	52
2	Compton / 120th Street	112	314	90	137	327	122	129	494	93	93	488	170
3	Wilmington Avenue / 118th Street	137	895	64	98	997	174	63	19	85	21	41	60
4	Wilmington Avenue / 120th Street	37	757	149	118	658	333	152	158	116	69	327	195

Annual Growth: 0.5% <--- from SCAG model
 2021 Base year
 2023 Opening year

2023 Without Project PM Peak Hour Volumes

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Compton Avenue / 118th Street	7	509	52	47	332	7	9	14	7	47	15	49
2	Compton / 120th Street	69	257	75	83	299	74	48	291	84	145	444	119
3	Wilmington Avenue / 118th Street	29	1,059	89	141	584	35	116	54	54	40	47	146
4	Wilmington Avenue / 120th Street	79	766	85	84	518	48	315	318	196	97	155	144

2023 With Project AM Peak Hour Volumes

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Compton Avenue / 118th Street	9	508	102	61	572	5	41	62	38	67	18	52
2	Compton / 120th Street	112	315	90	137	327	124	139	494	93	93	488	170
3	Wilmington Avenue / 118th Street	139	895	64	98	997	182	65	19	86	21	41	60
4	Wilmington Avenue / 120th Street	37	759	149	118	659	333	152	158	116	69	327	195

2023 With Project PM Peak Hour Volumes

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Compton Avenue / 118th Street	7	509	57	47	332	7	9	14	7	57	15	50
2	Compton / 120th Street	69	257	75	83	300	82	52	291	84	145	444	119
3	Wilmington Avenue / 118th Street	30	1,059	89	141	584	38	123	54	56	40	47	146
4	Wilmington Avenue / 120th Street	79	767	85	84	520	48	315	318	196	97	155	144

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT NO. 2021-002060-(2) / ENV NO. RPPL2022002289						
#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
HM-1	Hazards & Hazardous Materials	The applicant shall prepare and complete a Soil Management Plan prior to initiating soil disturbance and removal activities. To be protective of worker health and safety and potential public exposures to VOC vapors, the Soil Management Plan shall include soil vapor monitoring, including methane monitoring, during soil disturbance activities. The measures contained within the Soil Management Plan shall be implemented during all activities that involve soil disturbance. The Soil Management Plan shall be submitted to the Los Angeles County Fire Department Health Hazardous Materials Division (HHMD) for review and approval during the building permit application phase. The applicant shall also incorporate any necessary features to meet applicable standards, to the satisfaction of HHMD. HHMD shall oversee the implementation of the Soil Management Plan at the project site.	Submittal of Soil Management Plan.	Prior to initiating soil disturbance and/or removal.	Owner/applicant	Los Angeles County Fire Department Health Hazardous Materials Division (HHMD)
HW-1	Hydrology & Water Quality	The applicant shall implement stormwater quality control measures that are consistent with the County's LID standards (County of Los Angeles Code of Ordinance Title 12, Chapter 12.84) to reduce stormwater runoff. The measures shall be reviewed and approved by the Los Angeles County Public Works Department during the building permit application phase.	Submittal of LID measures.	Prior to issuance of building permit.	Owner/applicant	Los Angeles County Department of Public Works (DPW)
HW-2	Hydrology & Water Quality	The applicant shall prepare a hydrology study to show that the proposed development will not increase stormwater runoff from existing conditions. The hydrology study shall be submitted to the Los Angeles County Public Works Department for review and approval during the building permit application phase.	Submittal of Hydrology Study.	Prior to issuance of building permit.	Owner/applicant	Los Angeles County Department of Public Works (DPW)

COMMENTS AND RESPONSES

California Environmental Quality Act (CEQA) Guidelines Section 15074(b) requires the decision-making body of the lead agency to consider comments received during the public review process of an Initial Study/Mitigated Negative Declaration (IS/MND). The IS/MND for the Charles R. Drew University of Medicine and Science Health Professions Education Building (proposed project) at 1731 East 120th Street circulated for a 30-day public review period from October 13, 2022 to November 11, 2022. The County of Los Angeles received two written comments on the IS/MND. **Table 1** identifies the comment letters along with the page numbers on which the responses to the comment letters appear. The comments are summarized and responded to below. Copies of the comment letters are attached after the responses.

TABLE 1: COMMENTS ON THE IS/MND			
Comment No.	Agency/Individual	Date	Response Page No.
1	California Department of Transportation	November 10, 2022	2
2	Coalition for Responsible Equitable Economic Development Los Angeles c/o Adams Broadwell Joseph & Cardozo	November 17, 2022	4

Comment Letter No. 1

Miya Edmonson, LDR/CEQA Branch Chief
California Department of Transportation District 7
100 South Main Street, MS 16
Los Angeles, CA 90012

Response 1-1

The introductory comment identifies the project location and summarizes the project description. The comment does not address the adequacy or accuracy of the Draft EIR. No further response is required.

Response 1-2

The comment identifies the mission of Caltrans and states that Caltrans encourages Lead Agencies to implement Transportation Demand Management (TDM) strategies that reduce vehicle miles traveled (VMT) and Greenhouse Gas (GHG) emissions. The comment provides strategies that the Lead Agency may want to consider integrating into the proposed project to further reduce VMT.

A detailed VMT analysis is included on Page 73 of the IS/MND. The analysis included that the proposed project would not generate significant VMT. The proposed project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b). In addition, as discussed in Response to Checklist Question 8.a of the IS/MND, construction of the proposed project would produce approximately 1,260.3 MTCO₂e or 42.0 MTCO₂e annually over a 30-year period. The total annual operating emissions would be approximately 767.2 MTCO₂e per year after accounting for amortized construction emissions. This mass rate is substantially below the most applicable quantitative draft interim threshold of 3,000 MTCO₂e per year recommended by SCAQMD. GHG emissions would not result in a significant impact and there is no nexus for requiring VMT reduction measures.

Response 1-3

The comment acknowledges the challenges that the region faces in identifying viable solutions to alleviating congestion on state and local facilities. The comment states that with limited room to expand vehicular capacity, all future developments should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. The comment further states that prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

A detailed analysis of the transportation network is included in Section 17 (Transportation) of the IS/MND. The proposed project would not conflict with policies and plans addressing the circulation system, including those that involve alternative transportation modes. The existing sidewalks along 120th Street and 118th Street; bus stops in proximity to the project site along Compton Avenue, Wilmington Avenue, and 120th Street; and Class II bike lane along 120th Street currently serve the project site and would continue to serve the project site with implementation of the proposed project. The proposed project does not include components that would alter or limit access to these transportation facilities.

Response 1-4

The comment is a reminder that a Caltrans transportation permit is required for the transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways. The comment also recommends that the proposed project limit construction traffic to off-peak periods to minimize the potential impact on State facilities. If construction traffic is expected to cause issues on any state facilities, a construction traffic control plan detailing these issues should be submitted to Caltrans for review.

The County acknowledged the permitting requirement related to oversized-transport vehicles on State highways. The IS/MND does not identify potential significant impacts to the transportation system from

construction activities. No action is required related to limiting truck travel to certain times of day or preparing a construction traffic control plan.

Comment Letter No. 2

Kelilah D. Federman
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Response 2-1

This introductory comment provides a summary of the proposed project, and states that the IS/MND does not accurately disclose the extent of the proposed project's potentially significant impacts on air quality, public health, hazards, and noise. It states that the County may not approve the proposed project until an Environmental Impact Report (EIR) is prepared. The comment also refers to additional comments that are attached to the comment letter.

Individual responses to the comments raised in the comment letter and its attachments are provided in the responses below. As discussed below, none of the issues identified in the comment letter and attachments change the conclusions of the IS/MND and, therefore, an Environmental Impact Report (EIR) is not required. Impacts remain less than significant with implementation of mitigation measures.

Response 2-2

This comment identifies individuals and labor organizations that are part of the Coalition for Responsible Equitable Economic Development Los Angeles (CREED LA) and the association's interest in enforcing environmental laws. The comment also states that CREED LA supports the development of commercial, mixed use, and educational projects that are properly analyzed and carefully planned to minimize impacts on public health, climate change, and the environment. The projects should avoid adverse impacts to air quality, public health, climate change, noise, and traffic, and must incorporate all feasible mitigation to ensure that any remaining adverse impacts are reduced to the maximum extent feasible.

The County acknowledges the individuals and organizations that are part of CREED LA. The comment does not address the adequacy or accuracy of the Draft EIR. No further response is required.

Response 2-3

The comment summarizes the purpose, goal, and requirements of CEQA, as well as when an EIR is required. The comment explains the fair argument standard with regards to the preparation of an EIR and an MND. The comment also states that the IS/MND for the proposed project does not satisfy the basic purposes of CEQA; does not adequately disclose, investigate, and analyze the proposed project's potentially significant impacts; and does not provide substantial evidence to conclude that impacts would be mitigated to a less than significant level. The comment states that substantial evidence shows that the proposed project may result in potentially significant impacts and that a fair argument can be made that the Project may cause significant impacts requiring the preparation of an EIR.

The IS/MND evaluates the proposed project's potential environmental impacts associated with 21 environmental factors identified in Appendix G of the State's CEQA Guidelines along with the environmental topic areas that the County of Los Angeles typically requires for individual projects within its jurisdiction. The County will consider the analysis in the IS/MND prior to making a decision on whether to adopt the MND and approve the project and, thus, the IS/MND meets the purpose and goal of CEQA.

The IS/MND identifies, discusses, and summarizes the documents and databases that were used to substantiate the analysis and conclusions of the environmental impacts, along with the models that were used in the environmental analysis. The documents and programs that were used to support the no impact and less-than-significant impacts (with and without mitigation measures) are from applicable regulatory agencies associated with the environmental factors that were discussed in the IS/MND, including the South Coast Air Quality Management District, California Department of Transportation, California Department of Fish and Wildlife, South central Information Center, California Geological Survey, California Environmental

Protection Agency Climate Action Team, County of Los Angeles (Department of Regional Planning, Department of Public Works, and Sanitation Districts), California Department of Forestry and Fire Protection, Federal Emergency Management Agency, California Department of Water Resources, U.S. Environmental Protection Agency, Southern California Association of Governments, Native American Heritage Commission, Central Basin Municipal Water District, and CalRecycle. Site-specific evaluations were also conducted (such as air quality, greenhouse gas [GHG], noise, Phase II Subsurface Investigation Report, and Transportation Impact Analysis) to determine whether the proposed project would result in any potentially significant impacts. As analyzed throughout the IS/MND, the proposed project would either result in no impact or less-than-significant impacts (with and without mitigation measures). Thus, there is substantial evidence that the proposed project would not have a significant effect on the environment with implementation of mitigation measures.

Response 2-4

The comment suggests that an EIR is required since substantial evidence supports a fair argument that the proposed project may result in significant air quality and health risk impacts. The comment describes when an EIR must be prepared and provides a definition for “significant effect on the environment.”

The County of Los Angeles, not the city, is the Lead Agency for the proposed project. As discussed in the responses below, supporting evidence substantiates the less-than-significant impact with regards to air quality and health risks. Therefore, an EIR is not required.

Response 2-5

The comment states that the MND does not provide a site-specific health risk assessment (HRA), particularly diesel particulate matter (DPM) during construction and operation of the proposed project. The comment states that construction of the proposed project may result in significant health risk impacts at sensitive receptors due to toxic air contaminants. The comment references the air quality analysis in Attachment A of the IS/MND from Dr. Clark stating that diesel exhaust from construction of the proposed project may pose a serious public health risk for residents in the vicinity of the project site and that nearby sensitive receptors may be exposed to toxic air contaminants and cancer risks without quantifying the risk. The comment also describes the health effects associated with toxic air contaminants, including DPM.

The comment’s initial claim suggesting that CEQA requires that a project’s health risks “must be ‘clearly identified’ and the discussion must include ‘relevant specifics’ about the environmental changes attributable to the project and their associated health outcomes” reflects a superficially broad interpretation of CEQA Guidelines Section 15126.2 (Consideration and Discussion of Significant Environmental Impacts). There is no explicit requirement to conduct an HRA for all projects under CEQA stated anywhere in the CEQA Guidelines. The comment’s assertion that CEQA requires, “a site-specific health risk analysis (“HRA”) to disclose the extent of the Project’s construction and operational health impacts” is not accurate. The potential for adverse health outcomes resulting from exposure to emissions of air pollutants generated by construction and operation of the project are adequately considered by addressing the CEQA Guidelines Appendix G Environmental Checklist criteria pertaining to Air Quality and the SCAQMD localized significance thresholds. Furthermore, as the CEQA Guidelines delegate the establishment of significance thresholds to the regional air districts, SCAQMD does not have any officially adopted guidance requiring the preparation of health risk assessments (HRAs) for short-term construction projects.

The comment goes on to suggest that “substantial evidence supports a fair argument that construction of the Project may result in significant impacts associated with health risk impacts to sensitive receptors from toxic air contaminants,” without providing any substantive evidence indicating this to be the case. Diesel particulate matter (diesel PM or DPM) has been studied sufficiently to determine its carcinogenicity; however, there is no short-term health comparison value for emissions or concentrations of DPM. The California Office of Environmental Health Hazard Assessment (OEHHA) has published guidelines describing the appropriate process for evaluating potential health risks from exposure to toxic emissions from various types of sources. Within the OEHHA guidance, the cancer potency factors used in HRAs were derived based on sustained exposures over periods of up to 70 years. Recent OEHHA guidance recommends that long-term exposures for residents be analyzed over a period of 30 years. The two-year

construction period for the proposed project would represent only seven percent of a standard residential exposure duration for carcinogenic risk assessment and does not warrant such a robust analysis of possible health risks, as the likelihood is extremely low. Impacts from DPM and other air toxics emissions during construction of the proposed project would remain less than significant, and there is no potential for excess cancer risks at nearby sensitive receptors to exceed the applicable SCAQMD thresholds for air toxics exposure.

Lastly, the environmental analysis for the proposed project did not identify any potentially significant environmental impacts related to air quality. Therefore, no mitigation measures are required to reduce potentially significant impacts. The County is taking a proactive approach to community health protection and is requiring the use of off-road construction equipment with engines over 25 horsepower (hp) that comply with Tier 4 Final emissions standards and are registered in the California Air Resources Board (CARB) off-road registration inventory. In addition, if not already supplied a factory-equipped diesel particulate filter (DPF), all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the CARB. Any emissions control device used by the Contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. By implementing this project design feature, the County will ensure that construction of the proposed project will not emit disproportionate quantities of diesel PM and other air toxics that could pose potentially significant impacts related to sensitive receptor exposure to toxic pollution. This demonstrates a commitment to minimize exhaust emissions from construction equipment to the benefit of adjacent sensitive land uses.

Response 2-6

The comment states that mitigation measures are required to reduce health risk impacts to less than significant levels.

As described in the Response 2-5, the proposed project would not result in a significant impact related to health risk. Regardless, the County is requiring the use of Tier 4 equipment and BACT DPFs as a project design feature to ensure community health protection. This demonstrates a commitment to minimize exhaust emissions from construction equipment to the benefit of adjacent sensitive land uses. Furthermore, Dr. Clark's conclusion regarding the potential significance of health risks is not supported by an evaluation of project-specific emissions and instead relies on general information about exposure to air toxics.

Response 2-7

The comment states that Tier 4 final construction equipment should be required.

The environmental analysis prepared to support the proposed project did not identify a potentially significant air quality impact that would warrant a mitigation measure to require Tier 4 equipment. The emissions analysis was completed in accordance with guidance established by the SCAQMD, which has regional jurisdiction over sources of air pollutant emissions. Emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod was created by the California Air Pollution Control Officers Association to estimate emissions from land use development projects. This model is universally utilized by lead agencies throughout the state, including those located in Los Angeles County, to develop emissions inventories from construction activities associates with land use development.

As disclosed in Section 3 (Air Quality) of the IS/MND, the proposed project would not result in significant impacts related to air pollutant emissions and mitigation measures are not required to reduce potential impacts. The CalEEMod default emissions inventory for the proposed project included Tier 3 equipment, which is a more conservative analysis than assessing emissions from Tier 4 equipment. In addition, Response 2-5 demonstrates that a quantitative HRA is not necessary to reasonably conclude that the proposed project would not result in a significant health risk. Tier 4 equipment is not necessary to reduce potential impacts. Regardless, the County is requiring the use of Tier 4 equipment and BACT DPFs as a Project Design Feature. This demonstrates a commitment to minimize exhaust emissions from construction equipment to the benefit of adjacent sensitive land uses.

Response 2-8

The comment states that the MND does not have mitigation measures to ensure that residents near the project site would not be adversely affected by DPM emissions from the use of an on-site generator during operations of the proposed project. The comment further states that an EIR must be prepared to analyze and mitigate DPM emissions and related health risk from the generator, as well as from idling vehicles during construction and operations.

The comment erroneously states that the proposed project includes a new permanent emergency generator. The generator that is acknowledged in the comment is currently located on the project site. Therefore, the presence of the generator is accounted for within the existing conditions to which the proposed project's impacts should be compared. Implementation of the proposed project would not introduce a new generator to the project site. Additionally, the operational discussion under Response to Checklist Question 9.c of the IS/MND accurately states that, "The proposed project does not include an industrial component that would constitute a new substantial stationary source of operational air pollutant emissions (e.g., emergency diesel generator) and does not include a land use that would generate a substantial number of heavy-duty truck trips within the region." Comment 2-8 reflects a misunderstanding of the existing conditions on the project site and the extent of the improvements that would take place with implementation of the proposed project. There is no evidence presented to suggest that proposed project operations would result in potential additional emergency generator use relative to existing conditions. Therefore, Comment 2-8 is not pertinent to the environmental analysis.

Response 2-9

The comment states that the MND does not include adequate mitigation measures for the idling of construction equipment. The comment refers to the analysis in the comment letter's attachment that reducing idling time from five minutes to three minutes would reduce emissions by 40 percent. The commentor wants this measure to be added to the MND to address the potentially significant health risk impacts from particulate matter emissions during construction and operation.

The proposed project does not require a mitigation measure to reduce idling emissions. The emissions analysis was completed in accordance with guidance established by the SCAQMD. Emissions were modeled using CalEEMod, which was created by the California Air Pollution Control Officers Association to estimate emissions from land use development projects. This model is universally utilized by lead agencies throughout the state, including those located in Los Angeles County, to develop emissions inventories from construction activities associated with land use development. As disclosed in Section 3 (Air Quality) of the IS/MND, the proposed project would not result in significant impacts related to air pollutant emissions and mitigation measures are not required to reduce potential impacts. In addition, the proposed project is legally mandated to comply with the California Air Resources Board's In-Use Off Road Diesel-Fueled Fleets Regulation, which includes Airborne Toxic Control Measure (ATCM) 2485 that limits idling of heavy-duty diesel engines in nearly all applications. The policy prohibits construction equipment from idling for more than five minutes.

Response 2-10

The comment suggests that an EIR and a Mitigated Monitoring and Reporting Program should be prepared to disclose and reduce the potential health risks associated with DPM emissions during construction and operation of the proposed project.

As described in prior responses, the proposed project would not result in a significant health risk related to construction or operational emissions. No mitigation measures are required to reduce potential significant impacts. In addition, the County is requiring the use of Tier 4 equipment and BACT DPFs as a project design feature to be proactive in community health protection. This demonstrates a commitment to minimize exhaust emissions from construction equipment to the benefit of adjacent sensitive land uses.

Response 2-11

The comment suggests that a negative declaration is improper and cites sections of CEQA and the CEQA Guidelines, as well as court cases, with regards to when an EIR must be prepared.

The comment does not specifically explain why the IS/MND for the proposed project is improper. As discussed in the responses for Comment Letter No. 2, supporting evidence substantiates the no impacts and less-than-significant impacts (with and without mitigation measures) identified in the IS/MND. Therefore, an EIR is not required.

Response 2-12

The comment suggests that the proposed project relies on speculative measures to reduce construction and operational greenhouse gas (GHG) emissions and that the IS/MND does not provide evidence that the sustainable elements will be implemented and will effectively reduce the proposed project's GHG emissions. The comment states that without mitigation measures, proposed project's GHG emissions would be potentially significant and unmitigated.

The comment incorrectly concludes that the GHG emissions analysis relied on sustainability elements to reduce emissions. The sustainability elements were used to support the analysis of potential environmental impacts related to GHG emissions but were not used to quantitatively reduce emissions. As discussed in Response to Checklist Question 8.a of the IS/MND, GHG emissions that would be generated by the proposed project were estimated using CalEEMod, as recommended by SCAQMD. CalEEMod quantifies GHG emissions from construction activities and future operation of projects. Sources of GHG emissions during proposed project construction would include heavy duty off-road diesel equipment and vehicular travel to and from the project site. Sources of GHG emissions during proposed project operation would include vehicular travel, energy demand, water use, and waste generation. In accordance with SCAQMD methodology, the total amount of GHG emissions that would be generated by construction of the proposed project was amortized over a 30-year operational period to represent long-term impacts. Table 4 in the IS/MND presents the estimated GHG emissions that would be released to the atmosphere on an annual basis by the proposed project. Construction of the proposed project would produce approximately 1,260.3 MTCO₂e or 42.0 MTCO₂e annually over a 30-year amortization period in accordance with SCAQMD guidance. The total annual operating emissions would be approximately 767.2 MTCO₂e per year after accounting for amortized construction emissions. This mass rate is substantially below the most applicable quantitative draft interim threshold of 3,000 MTCO₂e per year recommended by SCAQMD to capture 90 percent of CEQA projects within its jurisdiction. Therefore, impacts would be less than significant, and no mitigation measures are required to reduce GHG emissions.

Response 2-13

The comment summarizes the 2020 Los Angeles County Community Climate Action Plan and the 2045 Climate Action Plan (CAP). The comment states that the proposed project does not further the goals laid out in the County's CAP and contravenes the CAP. The comment suggests that GHG impacts are potentially significant and that there is a lack of substantial evidence to support adoption of an IS/MND. The comment specifically states that the proposed project does not include any electric vehicle (EV) charging stations and that the CAP identifies the installation of EV charging stations. The comment suggests that an EIR be prepared to include a GHG analysis that supports the goals laid out in the 2045 CAP and include 20 percent EV charging stations. The comment also lists measures in the 2045 CAP that should be implemented by the proposed project.

The County has not adopted the 2045 CAP. Therefore, the County is under no obligation to assess the proposed project against this document. The analysis in Response to Checklist Question 9.b of the IS/MND demonstrates that the proposed project would not conflict with applicable plans, policies, and regulations associated with the reduction of GHG emissions. The proposed project would be consistent with the CAP GHG reduction strategies by achieving Leadership in Energy and Environmental Design (LEED) Gold equivalent level, complying with the California Building Code (Title 24), including CalGreen, and complying with the County's Stormwater and Runoff Pollution Control Ordinance. Sustainable elements may

potentially include, but are not limited to, photovoltaic panels on the roof, below-grade filtration tanks to collect and treat stormwater runoff and wastewater, building systems that employ a mix of passive and energy-efficient active strategies, locally sourced structural and finish materials that may include recycled content, and classrooms that take advantage of natural light and daylighting strategies to promote energy-efficiency.

CalGreen lays out minimum requirements for newly constructed buildings in California, which would reduce GHG emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors. By complying with Title 24, the proposed project would also be consistent with the Air Quality Element of the Los Angeles County General Plan 2035. In addition, project-specific sustainable elements may potentially include, but are not limited to, photovoltaic panels on the roof, below-grade filtration tanks to collect and treat stormwater runoff and wastewater, building systems that employ a mix of passive and energy-efficient active strategies, locally sourced structural and finish materials that may include recycled content, and classrooms that take advantage of natural light and daylighting strategies to promote energy-efficiency. Therefore, a less-than-significant impact is expected. No mitigation measures are required to reduce a potential impact, including additional EV charging stations.

Response 2-14

The comment suggests that an EIR is required since substantial evidence supports a fair argument that the proposed project would result in significant noise impacts. It further states that a quantitative noise analysis is required by CEQA and that the lead agency must consider both the increase in noise level and the absolute noise level associated with the proposed project.

Section 13 of the IS/MND includes detailed quantitative analyses for construction and operational noise. The analyses consider both the increases in noise levels from existing conditions and the absolute noise level associated with the proposed project. The incremental noise level increase from project activities is disclosed in Table 11 (Construction Noise Levels), Table 13 (Operational Noise-HVAC Equipment Noise Level), Table 14 (Operational Noise-Outdoor Conversational Noise Level), and Table 15 (Operational Noise-Parking Activity). The County utilizes the absolute noise level limits listed in Noise Ordinance (Chapter 12.08 of the Los Angeles County Municipal Code) to determine the potential for impacts under CEQA. These standards were appropriately applied to the IS/MND for the proposed project. Additional detailed comments related to noise and vibration are addressed below. As discussed in the responses below, supporting evidence substantiates the less-than-significant noise. Therefore, an EIR is not required.

Response 2-15

The comment suggests that substantial evidence supports a fair argument that demolition and grading noise would exceed the County noise limits at the King Drew Magnet High School of Medicine and Science, that the MND does not adequately analyze this exceedance or adequately mitigate this impact. The commenter's noise consultant was referenced when stating that the temporary noise barrier that would be erected during construction would not reduce noise impacts at the upper levels of the King Drew Magnet High School of Medicine and Science or other multi-story buildings. The commenter recommends that the County implement additional enforceable mitigation measures in an EIR to mitigate all potentially significant noise impacts associated with proposed project construction.

The incremental noise level increase disclosed in the IS/MND and noted in the comment is acknowledged by the County. The County utilizes the absolute noise level limits listed in Noise Ordinance (Chapter 12.08 of the Los Angeles County Municipal Code) to determine the potential for impacts under CEQA. These standards were appropriately applied to the IS/MND for the proposed project.

The noise analysis conservatively assessed noise at the nearest building façade of King Drew Magnet High School noted as approximately 50 feet to the west of the proposed project site in the IS/MND for the noise construction phase (demolition with a noise level of 84.2 dBA). The campus site plan indicates that the uses on the 2nd and 3rd floor adjacent to the proposed project site are gym and locker facilities, which are not

noise sensitive uses. According to the campus map, the nearest classroom uses are located approximately 200 feet to the southwest along 120th Street. Construction noise levels at this distance would be approximately 72.2 dBA, Leq. Mitigated noise levels with only implementation of equipment mufflers would result in a mitigated noise level of 67.2 dBA, Leq, which would be below the 70 dBA County threshold. Furthermore, the Applicant has an ongoing cooperative relationship with the High School Administration and is committed to limited classroom disruptions. It is noteworthy that the High School did not submit a comment letter expressing vibration or noise concerns. No additional mitigation measures are needed to reduce potentially significant noise levels.

Response 2-16

The comment states that the proposed project did not analyze the proposed project's significant vibration impacts as the vibration analysis focuses on construction equipment. The comment cites Los Angeles County Code Section 12.08.560 with regards to the County's vibration perception threshold and states that the vibration calculations for the proposed project would result in vibration levels that exceed the County's vibration annoyance limits. The comment further mentions that the King Drew Magnet High School of Medicine and Science likely has vibration-sensitive equipment that may be damaged or destroyed due to vibration from proposed project construction. The comment states that substantial evidence supports a fair argument that the noise and vibration impacts from the proposed project may be significant and an EIR must be circulated to adequately analyze and mitigate the proposed project's noise and vibration impacts.

Regarding operations, the proposed project does not include a significant source of operational vibration (e.g., industrial equipment). Regarding construction activities, equipment used during construction would be most similar to a large bulldozer, which generates a vibration level of 0.089 inches per second at 25 feet (Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018). This source of information includes vibration levels for selected pieces of common construction equipment. Importantly, the proposed project would not include pile driving or a similar source of significant vibration and a large bulldozer reasonably represents the possible vibration source from construction activities. The County perception standard is not designed to prohibit temporary construction activities. The primary intent of the County vibration thresholds is to assess operational vibration impacts. It would not be possible for any project to be constructed in an urban environment if the vibration limit were 0.01 in/sec. This is acknowledged in on Page 3.9.20 in Section 3.9.3 of the Willowbrook TOD Specific Plan Programmatic EIR. This discussion of vibration significance criteria states, "The CEQA Guidelines also do not define the levels at which groundborne vibration or groundborne noises are considered "excessive." The thresholds for vibration impacts causing human annoyance and structural damage were obtained from the Los Angeles County General. Plan EIR. Construction activities would cause significant human annoyance impacts if groundborne vibration exceeds 0.032 in/sec PPV (78 VdB) and would cause significant impacts due to structural damage to timber and masonry buildings if groundborne vibration exceeds 0.2 in/sec PPV."

Construction activities at the property line of the project site would be approximately 50 feet from the King Drew Magnet High School of Medicine and Science. At this distance, the vibration generated by a large bulldozer or similar mobile equipment would be 0.031 in/sec PPV, which would be lower than the significance criteria used in the Willowbrook TOD Specific Plan Programmatic EIR for both damage and annoyance. It is acknowledged that King Drew Magnet High School of Medicine and Science may have sensitive scientific equipment in classrooms near the project site. The King Drew Magnet High School indicates that the closest uses to the property line of the project site are the weight room, gym facilities, and lobby/concession stand uses, which do not contain vibration sensitive equipment. Furthermore, the Applicant has an ongoing cooperative relationship with the High School Administration and is committed to limited classroom disruptions. It is noteworthy that the High School did not submit a comment letter expressing vibration or noise concerns. In addition, according to the campus map, the nearest classroom uses are located approximately 200 feet to the southwest along 120th Street. At this distance, the vibration generated by a large bulldozer or similar mobile equipment would be 0.004 in/sec PPV. Based on the above assessment, construction-related vibration would not significantly impact scientific equipment used at the High School.

Response 2-17

The comment summarizes CEQA requirements for analyzing cumulative impacts. The comment further states that the analysis requires the identification of other projects that will be constructed and/or operating over the same time period as the proposed project and the analysis of these projects together with the proposed project. The comment states that the IS/MND fails to analyze the impact the proposed project would have when considered with other projects within the vicinity that are planned, have been completed, or are under construction.

No recently approved or new discretionary projects are located within 0.25 mile of the project site, and two affordable housing development have recently been constructed within this area (a 61-unit affordable housing project at 117th Street/Holmes Avenue and a 100-unit affordable housing development at 1854 East 118th Street).

As stated in Response to Checklist Item 21.b of the IS/MND, “the proposed project would have less-than-significant impacts (with and without incorporation of mitigation measures) or no impacts. The environmental topic areas that were found to have no impact are not expected to cause the proposed project to make any contributions to potential cumulative impacts because a no impact conclusion means that the proposed project would have no contribution to that particular environmental topic area. Similarly, the environmental topic areas that were found to have a less-than-significant impact are not expected to cause the proposed project to significantly contribute to cumulative impacts since the proposed project’s contribution to that particular environmental topic area is not large enough to contribute to significant cumulative impacts.”

The cumulative impact discussion focuses on Hazardous Materials and Hydrology and Water Quality as these two environmental topic areas were found to have less-than-significant impacts with incorporation of mitigation measures and, thus, would have a greater potential to contribute to cumulative impacts than the environmental topic areas that were found to have no impacts or less-than-significant impacts.

Hazardous materials are regulated at the federal, state, and local levels. Various regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos and lead have been adopted for demolition activities and would apply to all new development in the vicinity of the project site. Any demolition activities that could result in the release of lead and/or asbestos are required to be conducted in accordance with Cal/OSHA standards. In addition, all uses that handle or transport hazardous materials are required to comply with the provisions of federal, state, and local regulations for hazardous wastes. Uses that handle more than a specified amount of hazardous materials on-site are required to submit a Hazardous Materials Business Plan. Compliance with applicable regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos containing materials, lead based paint, and other hazardous materials would ensure that the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction and operational activities. As with the proposed project, the two recently constructed affordable housing development are required to comply with all applicable federal, state, and local regulations related to hazardous materials and, given the development consist of affordable housing units, are not expected to involve activities that would result in the use or discharge of unregulated hazardous materials and/or substances, or create significant hazards to the public or the environment. As discussed in Response to Checklist Question 9b of the IS/MND, Mitigation Measure HM-1 requires that the proposed project prepare a Soil Management Plan prior to soil disturbance activities. The Soil Management Plan is required to include measures, such as soil vapor monitoring and methane monitoring, that must be implemented during soil disturbance activities. The mitigation measure would ensure that the proposed project would not create a significant hazard to the on-site workers during construction, public or the environment. Therefore, with implementation of Mitigation Measure HW-1, the proposed project would not make a cumulatively considerable contribution related to hazardous materials.

With regards to Hydrology and Water Quality, all future development, including the proposed project, in the unincorporated communities of the County of Los Angeles are required to comply with the County’s Low Impact Development (LID) standards to reduce the effects of stormwater runoff from development and to reduce erosion. Cities in the vicinity of the project site are also required to comply with the individual cities’ LID requirements. Additionally, the proposed project and all projects in the vicinity of the project site are

required to comply with all federal, state, and local regulations related to water quality standards and wastewater discharges. The Hydrology and Water Quality mitigation measures for the proposed project (HW-1 and HW-2) would ensure that the proposed project would not increase stormwater runoff from existing conditions. Therefore, with implementation of Mitigation Measures HH-1 and HH-2, the proposed project would not make a cumulatively considerable contribution related to hydrology and water quality.

Response 2-18

The comment summarizes CEQA requirements with regards to the deferral of mitigation measures. It also states that the IS/MND fails to analyze and mitigate the proposed project's potentially significant hazards impacts, does not lay out specific performance criteria for the Soil Management Plan that is required by Mitigation Measure HM-1, and that the County must prepare an EIR that adequately analyzes and mitigates the proposed project's potentially significant hazards impacts before the proposed project can be approved.

As discussed in Response to Checklist Question 9.b of the IS/MND, potentially significant impacts with regards to hazardous materials are expected since the Phase II Subsurface Investigation Report identifies lead and methane in the soils on the project site. With the exception of lead, the collected soil samples detected Title 22 heavy metals that were below 10 times the soluble threshold limit concentration and below 20 times the toxicity characteristic leaching procedure levels. Since one sample on the project site has lead concentrations greater than 100 mg/kg, an SCAQMD Rule 1466 permit would be required prior to excavation or soil disturbance activities on the project site. The permit requires SCAQMD notification prior to soil disturbance and that dust levels be monitored at all times during disturbance.

The Phase II recommends that a Soil Management Plan be completed prior to initiating soil disturbance and removal activities, which would protect worker health and safety during construction. To ensure that the recommendations in the Phase II are implemented, Mitigation Measure HM-1 was provided. The mitigation measure identifies the monitoring requirements for the Soil Management Plan and that it must be reviewed and approved by the Los Angeles County Fire Department Health Hazardous Materials Division (HHMD) during the building permit application phase. The HHMD could also require the Soil Management Plan to include a health and safety plan (HASP) in accordance with California Code of Regulations (CCR) Title 8, Section 5192 to ensure the implementation of additional site-specific safety measures. Furthermore, the mitigation measure requires that HHMD oversee the implementation of the Soil Management Plan for the project site. The Los Angeles County Fire Department HHMD has environmental oversight of the assessment and cleanup of contaminated soil at the project site, as well as other contaminated sites in the County of Los Angeles. As site cleanup must meet HHMD standards and requirements, soil cleanup on the project site is not expected to result in significant hazards impacts with implementation of Mitigation Measure HM-1. Therefore, the preparation of an EIR is not required.

Response 2-19

The comment states that the proposed project does not conform with the Drew Educational Specific Plan Zone of the Willowbrook TOD Specific Plan since the proposed project would have a floor area ratio (FAR) that exceeds the 1.5 FAR for the Drew Educational Specific Plan Zone. The comment states that an EIR must be prepared to reflect the proposed project's potentially significant impacts to visual character and scenic quality resulting from nonconformance with the FAR requirement under the Drew Educational Specific Plan Zone of the Willowbrook TOD Specific Plan area.

The proposed project is located on a property that is owned by the County of Los Angeles and, according to Los Angeles County Code Chapter 22.248, the County can deviate from specific standards if the overall standards are consistent with the County's General Plan. The IS/MND explains that, although the proposed project would exceed the 1.5 FAR for the Drew Educational Specific Plan Zone, the proposed project would be consistent with the visual character and quality of the project site and its surrounding as the proposed project would be similar in height and massing as the surrounding uses, such as the four-story King Drew Magnet High School of Medicine and Science to the west and the five- and six-story buildings on the Martin Luther King, Jr. Medical Campus. As the proposed project would be consistent with the visual character and quality of the project site and its surrounding, the proposed project would meet the Drew Educational Specific Plan Zone goal of preserving the character of the Willowbrook community, which includes

facilitating the expansion of the Charles Drew University campus that is compatible and sensitive to the surrounding neighborhoods (Policy 1.5) and coordination with Charles Drew University to integrate the planned growth of the University's campus with the surrounding community (Policy 1.6). Additionally, the Willowbrook TOD Specific Plan states that the Specific Plan strategy for the CDU Campus Subarea include planned buildings that are four to six stories in height. The proposed six story Health Professions Education Building would be consistent with the Specific Plan's strategy for the CDU Campus Subarea.

The proposed project is subject to the review and approval of the Los Angeles County Board of Supervisors as part of the discretionary review process. The County Board of Supervisors has the authority to deny the proposed project if the Board of Supervisors believes that the proposed project's FAR would result in visual character and quality that is incompatible with the surrounding area. The design of the proposed project must be approved by the County prior to its development. The County's regulatory procedure ensures that the proposed project is reviewed for its consistency and compatibility with the surrounding uses. The regulatory procedures provide the County with assurances for review and opportunities to incorporate conditions to ensure that the proposed project would improve the visual character and scenic quality of the proposed project.

Based on the Los Angeles County Code Chapter 22.248, the Specific Plan's goal and strategy for the CDU Campus Subarea, and the County's regulatory procedure with regards to reviewing and approving the proposed project, the proposed project would result in less-than-significant impact on visual character and scenic quality. Thus, the preparation of an EIR is not required for the proposed project.

Response 2-20

The comment is a concluding remark that indicates the MND is inadequate as an environmental document because it does not fully disclose and mitigate the Project's potentially significant impacts on air quality, climate change, fire, explosive release of gases, wildfire, and cumulative impacts, and fails to describe or remedy the Project's inconsistency with local zoning and general plan designations. The comment further states that the County lacks substantial evidence to support its reliance on an MND, and there is a fair argument that an EIR must be prepared for the Project. The County cannot approve the Project until it prepares an EIR that resolves these issues and fully complies with CEQA's requirements. The commentor requests that the comment letter is included in the record of proceedings for the proposed project.

As discussed in the above responses for Comment Letter No. 2, the MND fully disclosed and mitigate potentially significant impacts to less than significant levels and that substantial evidence were used to support the analysis and conclusions of the Initial Study. Therefore, the preparation of an EIR is not required for the proposed project. This comment is noted for the record and will be forwarded to the decisionmakers for their review and consideration.

Response 2-21

The introductory comment summarizes the location and description of the project site, as well as a description of the proposed project and the elements that would be implemented during construction.

The comment does not address the adequacy or accuracy of the Draft EIR. No further response is required.

Response 2-22

The comment suggests that an EIR is required since health risks from construction emissions were not analyzed for the proposed project.

The responses provided below demonstrate that the proposed project would not result in significant and unavoidable impacts. The County maintains that the MND is the appropriate CEQA approval document for the proposed project.

Response 2-23

The comment states that the air quality analysis allows the use of construction equipment with engines that are lower than Tier 4, which would produce more PM₁₀ and PM_{2.5} emissions than what was accounted for in the CalEEMOD analysis. It states that the air quality analysis must address the use of Tier 3, Tier 4 interim, and Tier 4 final certified equipment and the impacts that it will have on adjacent communities in an EIR.

The proposed project does not require a mitigation measure for Tier 4 equipment. See Response 2-6 and 2-7, above.

Response 2-24

The comment recommends that the County restrict idle time of construction equipment to three minutes to ensure that emissions are de minimis during the construction phase.

See Response 2-9.

Response 2-25

The comment states that the County did not conduct a numerical HRA for the proposed project. The comment provides a background of and health risks associated with toxic air contaminants and diesel exhaust. The comment states that the IS/MND does not quantify the potential health impacts from DPM during construction and operational activities on sensitive receptors, which may place the residents of the adjacent structures at risk.

See Response 2-5. The CEQA Guidelines does not have explicit requirements to conduct HRAs for exposure to pollution generated by short-term construction projects. Carcinogenic risks are typically evaluated over several decades (i.e., 30-year residential exposures to long-term operational emissions) under standard practice. SCAQMD has regional jurisdiction over controlling emissions of air pollutants from various types of sources and has not established a requirement for preparing HRAs corresponding to construction of CEQA projects. Furthermore, the County is voluntarily implementing a project design feature involving a compliance requirement for the selected construction contractor to utilize an off-road construction equipment fleet outfitted with engines meeting Tier 4 Final emissions standards for those over 25 horsepower, and BACT DPFs meeting Level 3 reductions for those units that are not subject to the Tier 4 engine requirement. Application of this project design feature will be ensured through the provision of the following information by the ultimately selected contractor:

- A certified statement that all construction equipment to be used conform to the requirements specified above;
- A list of all the equipment to be used with CARB-issued Equipment Identification Numbers (EINs); and
- A copy of the contractor's certified EPA rating and applicable paperwork issued either by CARB or SCAQMD.

Implementation of this voluntary project design feature on behalf of the County will eliminate the possibility of substantial TAC concentrations reaching nearby sensitive receptors in the vicinity of the project site during construction activities.

Response 2-26

The comment identifies a back-up generator on the CDU campus and on the Martin Luther King Jr. Medical Campus and that DPM associated with these back-up generators must be assessed in an EIR. The comment states that the planned emissions for these sources, as well as the increase in operational emissions from these sources, should be included in the air quality analysis. The comment states that DPM concentrations from these sources are not accounted for in the air quality analysis and an EIR should include an analysis of the emissions from these generators.

See Response 2-8. The back-up generator referenced in this comment is an existing baseline condition. It is not part of the proposed project and CEQA does not require this facility to be assessed as part of the proposed project.

Response 2-27

The comment is a concluding remark stating that the proposed project could result in significant unmitigated impacts and that the County re-evaluate the significant impacts identified in the comment letter and require the preparation of an EIR.

As demonstrated in the above responses for Comment Letter No. 2 (including the attachments to the comment letter), the proposed project would not result in significant and unavoidable impacts. The IS/MND fully disclosed and mitigated potentially significant impacts to less than significant levels. The County maintains that the MND is the appropriate CEQA approval document for the proposed project, and the preparation of an EIR is not required for the proposed project.

Response 2-28

This comment is the resume for the author of the letter, James J. J. Clark, that includes his education and professional experience. The comment does not address the adequacy or accuracy of the Draft EIR. No further response is required.

Response 2-29

The introductory comment provides a brief description of the proposed project and the surrounding noise sensitive uses. The comment does not address the adequacy or accuracy of the Draft EIR. No further response is required.

Response 2-30

This comment states that the noise measurements that documents existing conditions should include measurements during different times over several days. The comment also states that an EIR should be prepared to include an updated baseline analysis that incorporates noise measurements taken at key locations over a multi-day period, and to provide supporting information to validate the results.

There is no universally accepted methodology for monitoring existing noise levels to assess potential impacts in accordance with CEQA for a land use development project. The County maintains that the noise monitoring presented in the IS/MND reasonably establishes the existing ambient noise setting. Noise levels also may vary day by day and different time of day measurements would also be susceptible to this variability in noise sources. It is accepted industry practice and for methodologies approved by other agencies which deal with noise issues such as the California Department of Transportation to take typical representative noise measurements during off-peak traffic periods. Measured noise levels are within the reasonable range of what is typical for urban environments. The comment has not provided evidence to the contrary. It is acknowledged that the daytime noise monitoring typically results in a lower noise level than noise monitoring completed during traffic peak hour period. This results in a more conservative analysis related to the incremental change from project noise to the existing condition. Under conditions with higher noise levels the incremental change associated with construction equipment would be partially washed out by elevated traffic noise during these times. The noise levels were monitored during the quietest hours construction would typically occur and establishes a conservative baseline.

Response 2-31

The comment identifies the interior noise level from the 2021 California Collaborative for High Performance Schools (CHPS) version 2.0. The comment states that the analysis must show that on-going noise from construction activities would not exceed 55 dBA exterior/40 dBA interior at nearby school buildings.

The County, as the Lead Agency under CEQA, has no obligation to utilize a significance threshold established by another agency or group. Construction activities would not exceed the County standards

established in the Noise Ordinance. The Applicant has consistently communicated with King Drew Magnet High School during the planning process. This communication will be maintained during the construction process to ensure that school operations are not adversely affected. The County and the Applicant or committed to minimizing classroom disruptions caused by the proposed project.

Response 2-32

The comment states that the noise analysis must provide a baseline Ldn or CNEL to show how the proposed project could increase noise at neighboring noise sensitive projects and potentially affect their land use compatibility.

Page 3.9.26 in Section 3.9.5 of the Willowbrook TOD Specific Plan Programmatic EIR states that, "From a community noise perspective, the 24-hour average noise levels within and surrounding the Specific Plan area are influenced primarily by traffic on local roadways." The existing CNELs associated with traffic noise listed in Table 17 of the IS/MND were modeled using the Traffic Noise Model and traffic data obtained from Transportation Impact Analysis prepared for the proposed project. This is a similar methodology as completed for the Willowbrook TOD Specific Plan Programmatic EIR, which is the document referenced by the commentor. Table 3.9-2 on Page 3.9-7 of the EIR shows existing CNELs associated with traffic, which were computer modeled and not monitored using a sound level meter. The IS/MND was completed using a comparable methodology as the Willowbrook TOD Specific Plan Programmatic EIR. For the proposed project, roadway geometry was created by using aerial maps and inputting the design into the model. Importantly, the traffic analysis compares the exiting mobile source noise levels to that of the proposed project at build out for eight roadway segments. For each segment, the roadway geometry was the same in the existing and project condition to directly compare the effects of project traffic on each particular segment. In addition, Table 17 of the IS/MND shows that the maximum incremental change associated with the 299 net daily trips would be 0.3 decibels on the local roadway network. This is not an audible change in noise levels. Regardless of the methodology, there is simply no potential for this typical land use development project with a limited number of operational vehicle trips to significantly change the 24-hour mobile source noise environment.

Response 2-33

The comment cites Los Angeles County Code Section 12.08.5604 with regards to the vibration perception threshold. The comment states that the analysis in the IS/MND exceeds the County vibration annoyance limit of 0.01 PPV and would result in a significant impact to sensitive receptors.

See Response 2-16. As discussed, construction-related vibration would not result in significant impacts to sensitive receptors, including the adjacent King Drew Magnet High School of Medicine and Science may have sensitive scientific equipment in classrooms near the project site. The King Drew Magnet High.

Response 2-34

The comment states that the construction noise analysis has a few errors, one of which is that the sound levels are based on a fifteen-minute sample. This amount of time may not be representative of the loudest times of day.

As noted on page 3-12 of the 2013 California Department of Transportation (Caltrans) Technical Noise Supplement to the Traffic Noise Analysis Protocol, "A noise measurement representing an hourly Leq does not need to last the entire hour. As long as noise levels do not change significantly, a shorter time period will usually be sufficient to represent the entire hour of interest." Caltrans recommended measurement durations depend on anticipated fluctuations in noise and range from 10 minutes to 30 minutes depending on the typical vehicle volume. A 15-minute measurement duration falls within the recommended duration for medium volume roadways (500 to 1,000 vehicles per hour). The County maintains that the noise monitoring presented in the IS/MND reasonably establishes the existing ambient noise setting. The comment has not provided evidence to the contrary. It is acknowledged that the daytime noise monitoring typically results in a lower noise level than noise monitoring completed during traffic peak hour period. This results in a more conservative analysis related to the incremental change from project noise to the existing

condition. Under conditions with higher noise levels the incremental change associated with construction equipment would be partially washed out by elevated traffic noise during these times. The noise levels were monitored during the quietest hours construction would typically occur and establishes a conservative baseline.

Response 2-35

The comment states that the MND cites an EPA document that is over 50 years old with regards to the use of noise shielding and muffling devices on power construction equipment. The comment states that most of the mufflers and recommendations have been become commonly used in standard construction practices, or that these measures are no longer relevant with newer generations of equipment.

The same U.S. EPA document referenced in this comment and the IS/MND is also used to describe construction noise levels in Table 3.9-12 of Page 3.9-23 of the Willowbrook TOD Specific Plan Programmatic EIR. This document is recent as it was completed in 2017. Therefore, it is reasonable to conclude that the U.S. EPA document is an accepted source of noise for construction equipment for completing CEQA analyses. It should also be noted that the reference noise levels included within the Federal Highway Administration Roadway Construction Noise Model are largely based on the U.S EPA document and are therefore likely more conservative than modern equipment reference noise levels. It is possible that construction equipment would arrive with pre-installed mufflers. This cannot be known with certainty during the advanced planning stage for the proposed project. If this is the case, the analysis presented in Table 11 of the IS/MND overestimates construction noise. Construction noise would not be greater than shown in Table 11

Response 2-35

The comment states that the effectiveness of the sound barrier that would be used during construction would be reduced at higher elevations that can see over the barrier. The comment provides a sample calculation of how construction noise level at the 3rd floor of King Drew Magnet High School, which would have a direct line-of-sight into the construction site over a 10-foot sound barrier, would increase noise levels by more than 10 dBA. The comment recommends a 25-foot sound barrier or hanging a sound barrier blanket at a height of 25 feet to make the construction noise analysis in the IS/MND more accurate.

See Response 2-15.

Response 2-36

The comment states that existing CNELs listed in Table 17 of the IS/MND should be cited. The comment further states that the noise analysis does not mention where the existing traffic comes from or that the noise model was validated based on existing conditions to show that the geometry of the model was built correctly.

The County is not required to follow methodologies established by the FHWA. The noise levels were modeled to predict the potential for increase in noise levels from existing to future with project along each roadway. The existing CNELs listed in Table 17 were modeled using the Traffic Noise Model and traffic data obtained from Transportation Impact Analysis prepared for the proposed project. Roadway geometry was created by using aerial maps and inputting the design into the model. Importantly, the traffic analysis compares the exiting mobile source noise levels to that of the proposed project at build out for eight roadway segments. For each segment, the roadway geometry was the same in the existing and project condition to directly compare the effects of project traffic on each particular segment. The modeling methodology fulfills the requirements of CEQA to compare the existing environment to the future environment with the project. Table 17 shows that the maximum incremental change associated with the 299 net daily trips would be 0.3 decibels on the local roadway network. This is not an audible change in noise levels. Regardless of the methodology, there is simply no potential for this typical land use development project to significantly change the 24-hour mobile source noise environment.

Response 2-38

The comment is a concluding remark that indicates that the noise analysis in the IS/MND has several errors and omissions. The comment states that correcting these errors and omissions would potentially identify several significant impacts which require mitigation.

As discussed above in Responses 2-30 through 2-37, the proposed project would not result in any potentially significant impacts. Impacts would remain less than significant for noise and vibration.

Response 2-39

The comment consists of the resume for the author of the letter, Jack Meighan, that includes his education and professional experience. This comment does not address the adequacy or accuracy of the IS/MND. No further response is required.

WRITTEN COMMENT LETTERS

COMMENT LETTER NO. 1

California Department of Transportation

COMMENT LETTER NO. 1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

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*Making Conservation
a California Way of Life*

November 10, 2022

Alice Wong
Los Angeles County
Department of Regional Planning
320 W. Temple Street, 13th Floor
Los Angeles, CA 90012

RE: Charles R. Drew University of Medicine
and Science Health Education Building
Mitigated Negative Declaration (MND)
SCH # 2022100357
Vic. LA-105/PM: R9.583
GTS # 07-LA-2022-04097

Dear Alice Wong:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. The project site is located at the southwesterly end of the Charles R. Drew University campus at 1731 East 120th Street in the unincorporated Willowbrook community of Los Angeles County. The project site is an irregularly shaped 46,650-square foot parcel and currently has two one-story modular buildings that are used for offices, maintenance, facilities support, security, and other administration support for the university. One of the modular buildings is 4,400 square feet, and the second modular building is 5,228 square feet. The proposed project involves demolishing the existing two modular buildings, removing the existing landscaping, and the construction of a five-story, 92,618 square-foot Health Professions Education Building (HPEB) on the project site. Approximately three feet of fill material would be replaced on-site. The Los Angeles County Department of Regional Planning is the Lead Agency under the California Environmental Quality Act (CEQA).

1-1

The project site is approximately less than half a mile from Interstate 105 (I-105). After reviewing the MND, the Initial Study states that transportation impacts would be less than significant and the project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). The following information is included for your consideration.

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Furthermore, Caltrans encourages Lead Agencies to implement Transportation Demand Management (TDM) strategies that reduce VMT and Greenhouse Gas (GHG) emissions. For TDM strategies that the Lead

1-2

Agency may want to consider integrating into this project to further reduce VMT, please refer to:

- The 2010 Quantifying Greenhouse Gas Mitigation Measures report by the California Air Pollution Control Officers Association (CAPCOA), available at <http://www.capcoa.org/wpcontent/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>, and/or
- Integrating Demand Management into the Transportation Planning Process: A Desk Reference (Chapter 8) by the Federal Highway Administration (FHWA), available at <https://ops.fhwa.dot.gov/publications/fhwahop12035/index.htm>

1-2
(cont.)

Caltrans is also aware of challenges that the region faces in identifying viable solutions to alleviating congestion on State and Local facilities. With limited room to expand vehicular capacity, all future developments should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

1-3

As a reminder, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. Caltrans recommends that the Project limit construction traffic to off-peak periods to minimize the potential impact on State facilities. If construction traffic is expected to cause issues on any State facilities, please submit a construction traffic control plan detailing these issues for Caltrans' review.

1-4

If you have any questions, please feel free to contact Karen Herrera, the project coordinator, at Karen.Herrera@dot.ca.gov and refer to GTS # 07-LA-2022-04097.

Sincerely,



MIYA EDMONSON
LDR/CEQA Branch Chief

cc: State Clearinghouse

COMMENT NO. 2

Adams Broadwell Joseph & Cardozo

COMMENT LETTER NO. 2

ADAMS BROADWELL JOSEPH & CARDOZO

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November 17, 2022

Via Email and Overnight Mail

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Amy Bodek, Regional Planning Director
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**Re: Comments on Mitigated Negative Declaration for Charles R.
Drew University of Medicine and Science Health Professions
Education Building Project (Project No. PRJ2021-002060, Permit
No. RPPL2022002289)**

Dear Mr. Moller and Ms. Bodek:

On behalf of the Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA"), we submit these comments on the Mitigated Negative Declaration¹ prepared pursuant to the California Environmental Quality Act ("CEQA")² by the County of Los Angeles ("the County") for the Charles R. Drew University of Medicine and Science Health Professions Education Building Project (Project No. PRJ2021-002060, Permit No. RPPL2022002289) ("Project") proposed by Charles Drew University ("Applicant").

The Project proposes to demolish two existing modular buildings, remove existing landscaping, and construct a five-story, 92,618-square-foot Health Professions Education Building ("HPEB") on the Project site. The proposed building

¹ County of Los Angeles, Charles R. Drew University of Medicine and Science Health Professions Education Building, Initial Study/Mitigated Negative Declaration (October 2022), <https://files.ceqanet.opr.ca.gov/282163-1/attachment/HoVCQ8SViGhDtmz2sCoIJwqNTiTxDNDIMS5x8ud6iyXxhVcHYe5wSgozyez-277FqdumybhgXsepSNvgno> (hereinafter "MND").

² Public Resources Code ("PRC") § 21000 *et seq.*; 14 Cal. Code Regs. ("C.C.R.") §§ 15000 *et seq.*

would have classrooms, a lecture hall, auditorium/meeting room, a café, facilities support space (e.g., shipping/receiving, janitorial, electrical, and data rooms), study rooms, staff and faculty offices, conference rooms, virtual anatomy and virtual skills rooms, simulation rooms (e.g., hospital and exam room simulation), student lounge, lockers rooms, showers, restrooms/changing rooms, and outdoor terraces. Outdoor terraces are proposed on the 5th floor at the north and east sides of the building.³

The Project site is located at 1731 East 120th Street, Los Angeles, CA 90059 (APN: 6149-028-919).⁴ The Project site is in the Drew Educational Specific Plan Zone of the Willowbrook Transit Oriented District (“TOD”) Specific Plan area, which allows a maximum floor area ratio (“FAR”) of 1.5.⁵ The proposed building would have a maximum height of 75 feet and an FAR of 2.15.⁶ Construction of the Project will last 24 months.⁷ Sensitive receptors within 500 feet of the Project site include:

- King Drew Magnet High School located approximately 50 feet to the west of the proposed HPEB;
- Residences located approximately 50 feet to the northeast of the proposed parking structure on 118th Street;
- Residences located approximately 120 feet to the east of the proposed parking structure on 118th Street;
- Residences approximately 120 feet to the northwest of the proposed HPEB;
- Residences approximately 220 feet to the northeast of the proposed parking structure on 118th Street;
- Residences approximately 280 feet to the east of the proposed parking structure on 118th Street;
- Augustus F. Hawkins Mental Health Center approximately 300 feet to the southeast of the proposed HPEB; and
- Martin Luther King, Jr. Community Hospital approximately 400 feet to the south of the proposed HPEB.⁸

Our review of the MND demonstrates that the MND fails to comply with CEQA. As explained more fully below, the MND fails to accurately disclose the extent of the Project’s potentially significant impacts on air quality, public health, hazards, and noise. There is more than a fair argument that the Project will result

³ MND, p. 5/88.

⁴ *Id.*

⁵ *Id.* at 15/88.

⁶ *Id.*

⁷ *Id.* at 23/88.

⁸ *Id.* at 55-56/58.

in significant, unmitigated impacts in each of these areas. The County may not approve the Project until the County prepares an Environmental Impact Report (“EIR”) that adequately analyzes the Project’s potentially significant impacts and incorporates all feasible mitigation measures to avoid or minimize these impacts. As a result of these deficiencies, the County also cannot make the requisite findings to approve the Project under the County’s municipal codes.⁹

We prepared these comments with the assistance of environmental health, air quality, and greenhouse gas (“GHG”) expert Dr. James Clark, Ph.D., of Clark and Associates, and acoustics and vibration expert Jack Meighan of Wilson Ihrig. Dr. Clark’s technical comments and curricula vitae are attached as **Attachment A**.¹⁰ Mr. Meighan’s technical comments and curricula vitae are attached as **Attachment B**.¹¹ The attached expert comments require separate responses under CEQA.¹²

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(cont.)

For the reasons discussed herein, and in the attached expert comments, CREED LA urges the County to remedy the deficiencies in the MND by preparing a legally adequate EIR and circulating it for public review and comment.¹³ We reserve the right to supplement these comments at later hearings and proceedings related to the Project.¹⁴

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations formed to ensure that the construction of major urban projects in the Los Angeles region proceed in a manner that minimizes public and worker

2-2

⁹ PRC § 21081; *Covington v. Great Basin Unified Air Pollution Control Dist.* (2019) 43 Cal.App.5th 867, 883.

¹⁰ **Attachment A:** Letter from J. Clark re *Comments On Initial Study/Mitigated Negative Declaration (IS/MND) For Charles R. Drew University of Medicine and Science Health Professions Education Building, located at 1731 East 120th Street, Los Angeles, California* (November 9, 2022) (“Clark Comments”).

¹¹ **Attachment B:** Letter from Jack Meighan Wilson Ihrig re *Comments on Charles R. Drew University of Medicine and Science Health Professions Education Building Noise Analysis* (November 14, 2022) (“Wilson Ihrig Comments”).

¹² 14 CCR § 15088(a), (c).

¹³ We reserve the right to supplement these comments at later hearings on this Project. Gov. Code § 65009(b); PRC § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199–1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

¹⁴ Gov. Code § 65009(b); PRC § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

health and safety risks, avoids or mitigates environmental and public service impacts, and fosters long-term sustainable construction and development opportunities. The association includes the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the Los Angeles region.

Individual members of CREED LA include Juan Rios, Jesse Ramirez, and Bryan Rodriguez. These individuals live in the County of Los Angeles in the vicinity of the Project, and work, recreate, and raise their families in the County and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health, and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

CREED LA supports the development of commercial, mixed use, and educational projects where properly analyzed and carefully planned to minimize impacts on public health, climate change, and the environment. These projects should avoid adverse impacts to air quality, public health, climate change, noise, and traffic, and must incorporate all feasible mitigation to ensure that any remaining adverse impacts are reduced to the maximum extent feasible. Only by maintaining the highest standards can commercial development truly be sustainable.

II. LEGAL BACKGROUND

CEQA is designed to inform decision-makers and the public about the potential, significant environmental effects of a project.¹⁵ "CEQA's fundamental goal [is] fostering informed decision-making."¹⁶ "The purpose of CEQA is not to

¹⁵ 14 Cal. Code Regs. ("CEQA Guidelines") § 15002, subd. (a)(1).

¹⁶ *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 402.

generate paper, but to compel government at all levels to make decisions with environmental consequences in mind.”¹⁷

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR, except in certain limited circumstances.¹⁸ The EIR is the very heart of CEQA.¹⁹ The EIR acts like an “environmental ‘alarm bell’ whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return.”²⁰ The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project’s significant environmental effects through implementing feasible mitigation measures.²¹ The EIR also serves “to demonstrate to an apprehensive citizenry that the [agency] has analyzed and considered the ecological implications of its action.”²² Thus, an EIR “protects not only the environment but also informed self-government.”²³

An EIR is required if “there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment.”²⁴ The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project’s significant environmental effects through implementing feasible mitigation measures.²⁵ In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement indicating that a project will have no significant impact. Because “[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process” by allowing the agency to dispense with the duty to prepare an EIR, negative declarations are allowed only in cases where there is not even a “fair argument” that the project will have a significant environmental effect.²⁶

Under the fair argument standard, a lead agency “shall” prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair

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(cont.)

¹⁷ *Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283.

¹⁸ See, e.g., Pub. Resources Code, § 21100.

¹⁹ *Dunn-Edwards v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th 644, 652.

²⁰ *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1220.

²¹ Pub. Resources Code § 21002.1(a); CEQA Guidelines § 15002(a), (f).

²² *No Oil, Inc. v. City of Richmond* (1974) 13 Cal.3d 68, 86.

²³ *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.

²⁴ Pub. Resources Code, § 21080, subd. (d) (emphasis added); CEQA Guidelines, § 15064; see also *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927; *Mejia v. City of Richmond* (2005) 13 Cal.App.4th 322.

²⁵ Pub. Resources Code, § 21002.1, subd. (a); CEQA Guidelines, § 15002, subd. (a) & (f).

²⁶ *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440; Pub. Resources Code, §§ 21100, 21064.

argument that a project may have a significant effect on the environment.²⁷ The phrase “significant effect on the environment” is defined as “a substantial, or potentially substantial, adverse change in the environment.”²⁸ In certain circumstances, a project with potentially significant impacts can be modified by the adoption of mitigation measures to reduce the impacts to a level of insignificance. In such cases, an agency may satisfy its CEQA obligation by preparing a mitigated negative declaration.²⁹ A mitigated negative declaration, however, is also subject to the fair argument standard. Thus, an MND is also inadequate, and an EIR is required, whenever substantial evidence in the record supports a “fair argument” that significant impacts may occur, even with the imposition of mitigation measures.

The “fair argument” standard is an exceptionally “low threshold” favoring environmental review in an EIR rather than a negative declaration.³⁰ The “fair argument” standard requires the preparation of an EIR if any substantial evidence in the record indicates that a project may have an adverse environmental effect.³¹ As a matter of law, substantial evidence includes both expert and lay opinion.³² Even if other substantial evidence supports the opposite conclusion, the agency nevertheless must prepare an EIR.³³ Under the “fair argument,” CEQA always resolves the benefit of the doubt in favor of the public and the environment.

With respect to this Project, the MND fails to satisfy the basic purposes of CEQA. The MND fails to adequately disclose, investigate, and analyze the Project’s potentially significant impacts, and fails to provide substantial evidence to conclude that impacts will be mitigated to a less than significant level. Because the MND lacks basic information regarding the Project’s potentially significant impacts, the MND’s conclusion that the Project will have a less than significant impact on the environment is unsupported.³⁴ Moreover, substantial evidence shows that the

2-3
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²⁷ Pub. Res. Code §§21080(d), 21082.2(d); 14 Cal. Code Reg. §§ 15002(k)(3), 15064(f)(1), (h)(1); *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Richmond* (1974) 13 Cal.3d 68, 75, 82; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-1602.

²⁸ Pub. Resources Code, § 21068.

²⁹ Pub. Resources Code, § 21064.5; CEQA Guidelines, § 15064, subd. (f)(2).

³⁰ *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.

³¹ CEQA Guidelines, § 15064, subd. (f)(1); *Pocket Protectors v. City of Sacramento*, *supra*, 124 Cal.App.4th at 931.

³² Pub. Resources Code, § 21080, subd. (e)(1); CEQA Guidelines, § 15064, subd. (f)(5).

³³ *Arviv Enterprises v. South Valley Area Planning Comm.* (2002) 101 Cal.App.4th 1333, 1346; *Stanislaus Audubon v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597.

³⁴ PRC § 21064.5.

Project may result in potentially significant impacts. Therefore, a fair argument can be made that the Project may cause significant impacts requiring the preparation of an EIR.

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(cont.)

III. THE CITY LACKS SUBSTANTIAL EVIDENCE TO SUPPORT ITS RELIANCE ON AN MND AND SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT AIR QUALITY AND HEALTH RISK IMPACTS REQUIRING AN EIR

A negative declaration is improper, and an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.³⁵ “[S]ignificant effect on the environment” is defined as “a substantial, or potentially substantial, adverse change in the environment.”³⁶ An effect on the environment need not be “momentous” to meet the CEQA test for significance; it is enough that the impacts are “not trivial.”³⁷ Substantial evidence, for purposes of the fair argument standard, includes “fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”³⁸

2-4

A. The MND Lacks Analysis of the Project’s Health Risk Impacts

CEQA requires the lead agency to support its findings of a project’s potential environmental impacts with concrete evidence, and with “sufficient information to foster informed public participation and to enable the decision makers to consider the environmental factors necessary to make a reasoned decision.”³⁹ In particular, CEQA requires that a project’s health risks “must be ‘clearly identified’ and the discussion must include ‘relevant specifics’ about the environmental changes attributable to the Project and their associated health outcomes.”⁴⁰ Courts have held that an environmental review document must disclose a project’s potential health risks to a degree of specificity that would allow the public to make the correlation between the project’s impacts and adverse effects to human health.⁴¹

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³⁵ Pub. Resources Code § 21151; CEQA Guidelines § 15064(f); *Citizens for Responsible Equitable Env’tl Dev. v. City of Chula Vista* (“*CREED*”) (2011) 197 Cal.App.4th 327, 330-31; *Communities for a Better Env’t v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319 (“*CBE v. SCAQMD*”).

³⁶ Pub. Resources Code § 21068; CEQA Guidelines § 15382; *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1581.

³⁷ *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.

³⁸ Pub. Resources Code § 21080(e)(1) (emphasis added); *CREED*, 197 Cal.App.4th at 331.

³⁹ *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 516.

⁴⁰ *Id.* at 518.

⁴¹ *Id.* at 518–520; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184.

The MND fails to meet this standard because it omits a meaningful, detailed, or quantitative analysis of the Project's health risk. In particular, the MND does not include a site-specific health risk analysis ("HRA") to disclose the extent of the Project's construction and operational health impacts, as required by CEQA. Instead, the MND concludes, absent substantial evidence, that the Project would have a less than significant impact related to exposure of sensitive receptors to substantial pollutant concentrations. Because it failed to conduct an HRA, the MND lacks any analysis of the cancer risk posed by exposure to toxic air contaminants ("TACs"), in particular diesel particulate matter ("DPM"), which will be released during Project construction and operation.

Substantial evidence supports a fair argument that construction of the Project may result in significant impacts associated with health risk impacts to sensitive receptors from toxic air contaminants. Dr. Clark determined that diesel exhaust from construction of the Project may "pose a serious public health risk for residents in the vicinity of the Project."⁴² TACs, including DPM, contribute to a host of respiratory impacts and may lead to the development of various cancers. Failing to quantify those impacts places the community at risk for unwanted adverse health impacts.⁴³ Even brief exposures to the TACs could lead to the development of adverse health impacts over the life of an individual.⁴⁴

TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness).⁴⁵ TACs include both organic and inorganic chemical substances.⁴⁶ The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.⁴⁷

Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death. Fine DPM is deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death. Exposure to DPM increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung tissue, thickening of the alveolar walls,

2-5
(cont.)

⁴² Clark Comments, p. 7.

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ Clark Comments, p. 7

⁴⁶ *Id.*

⁴⁷ *Id.*

immunological allergic reactions, and airway constriction. DPM is a TAC that is recognized by state and federal agencies as causing severe health risk because it contains toxic materials, unlike PM2.5 and PM10.

2-5
(cont.)

The MND fails to analyze the Project's potentially significant health impacts from DPM generated by construction activities and operational activities from the Project on nearby sensitive receptors.⁴⁸ Absent a health risk analysis, Dr. Clark concludes that the County may be exposing nearby sensitive receptors to toxic air contaminants and cancer risk without sufficiently quantifying such a risk.

B. The MND Lacks Adequate Mitigation Measures to Reduce the Project's Significant Air Quality and Health Risk to Less than Significant Levels

Mitigation is required to reduce the Project's health risk impacts to less than significant levels. For the all phases of the Project, the County has a duty to disclose all the mitigation factors to be utilized and to compare unmitigated emissions to the applicable significance thresholds before applying mitigation measures.⁴⁹ The use of 'performance standards' to achieve emissions reductions, e.g., assuming that a more energy-efficient and cleaner-burning construction vehicle fleet mix would produce reductions of emissions *a priori*, fails to accurately describe the Project's unmitigated emissions, and impermissibly compresses the analysis of impacts and mitigation measures into a single issue, in violation of CEQA.⁵⁰ The MND's failure to ensure that the best available emission control technology will be utilized on all diesel-powered equipment used during the construction phase of the Project fails comply with CEQA's requirement to fully mitigate the Project's potentially significant construction emissions.⁵¹ As a result, Dr. Clark concludes that the Project's emissions and potential health risk remain significant.

2-6

The United States Environmental Protection Agency ("U.S. EPA") has slowly adopted more stringent standards to lower the emissions from off-road construction equipment since 1994. Since that time, Tier 1, Tier 2, Tier 3, Tier 4 Interim, and Tier 4 Final construction equipment has been phased in overtime. Tier 4 Final

2-7

⁴⁸ Clark Comments, p. 8.

⁴⁹ PRC §§ 21002.1(a)(b), 21100(b)(3). Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. 14 CCR § 15126.4(a)(1)(B).

⁵⁰ *Lotus v. Dept. of Transportation* (2013) 223 Cal.App.4th 650.

⁵¹ Clark Comments, pp. 10-11.

represents the cleanest-burning equipment and therefore has the lowest emissions compared to all other tiers, including Tier 4 Interim equipment.⁵²

The MND only provides that Tier III screening thresholds were used in the analysis.⁵³ The MND's air quality analysis and mitigation plan do not specify what level of emission control would be used on-site for the Project's construction fleet. Requiring the use of Tier 4 final or equivalent control technology for all equipment would provide the residents adjacent to the Project site the greatest level of protection possible.⁵⁴ Absent a binding mitigation measure requiring the use of Tier 4 Final construction equipment, the County lacks substantial evidence to support its conclusion that the Project's construction-related health risk will be less than significant.

2-7

For the operational phase of the Project, the MND lacks mitigation measures to ensure that residents near the Project are not adversely affected by the potentially significant DPM emissions from the generator to be installed onsite. As a result, the City lacks substantial evidence to conclude that operational health risk is less than significant, and substantial evidence demonstrates that those impacts may be significant and unmitigated.

Dr. Clark explains that emissions from combustion engines for stationary uses, including diesel generators, are generally regulated by the U.S. EPA and the California Air Resources Board ("CARB").⁵⁵ Engine emission standards are promulgated in a tiered system (I through IV final) that designates maximum pollutant emissions. Unlike Off-Road Diesel-Powered Engines for Mobile Sources (currently utilizing Tier 4 Interim and Final technology which reduces PM_{2.5} emissions by 90% and more), Dr. Clark explains that diesel back-up generators generally have U.S. EPA Tier II ratings and need to be outfitted with diesel particulate filters to achieve additional PM_{2.5} reductions.⁵⁶ In addition, diesel-powered generator engines should be fueled using ultra-low sulfur diesel fuel with a maximum sulfur content of 15 parts per million (ppm). Dr. Clark concludes that, if higher-rated diesel generators are available for use, in order to effectively mitigate health risk, the County must require that the Applicant purchase and maintain the

2-8

⁵² "San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects." August 2015, *available at*: https://www.sfdph.org/dph/files/EHSDocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6; Clark Comments, p. 11.

⁵³ MND, p. 37/88.

⁵⁴ Clark Comments, p. 12.

⁵⁵ *Id.*

⁵⁶ Clark Comments, p. 12.

generator that will achieve the highest amount of DPM reduction.⁵⁷ The MND lacks a detailed analysis of this impact, and fails to require best available emissions controls for Project generators as a mitigation measure. As a result, operational DPM emissions remain significant and unmitigated.

2-8
(cont.)

The County must prepare an EIR to analyze the full extent of DPM emissions and related health risk from the Project's generators. The EIR must include mitigation measures that ensure that sensitive receptors near the Project are not adversely impacted by potentially significant DPM emissions generated while vehicles are idling on the Project site during construction and operation.

The MND fails to include adequate mitigation because the MND requires only that construction equipment "be turned off when not in use for more than five minutes, except for equipment that requires idling to maintain performance."⁵⁸ But research shows that "[c]ontinuous idling for more than three minutes emits more PM than a restart. Emissions after a restart contain less carbon monoxide, nitrogen oxides, and other pollutants than if the [equipment] idled continuously over a 10-minute period."⁵⁹ The Project's emissions from excessive idling therefore constitute a potentially significant impact under CEQA. PM emissions would be significantly reduced if the Project prohibited idling more than three minutes in any one hour. James Clark calculates that reducing idling times from five minutes to three minutes would reduce emissions by 40%.⁶⁰ This measure must be added to the MND to adequately address the Project's potentially significant health risk impacts from PM emissions from construction and operation.

2-9

The County should prepare an EIR which accurately discloses the extent of the Project's health risk from construction and operational DPM emissions, and which includes a Mitigation Monitoring and Reporting Program with enforceable mitigation measures to reduce the Project's health risk to the greatest extent feasible.

2-10

⁵⁷ *Id.* at 13.

⁵⁸ MND, p. 8/88.

⁵⁹ EPA, School Bus Idling Reduction (June 10, 2022), <https://www.epa.gov/dera/school-bus-idle-reduction>.

⁶⁰ Clark Comments, p. 7.

IV. THE CITY LACKS SUBSTANTIAL EVIDENCE TO SUPPORT ITS RELIANCE ON AN MND AND SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT GREENHOUSE GAS EMISSIONS IMPACTS REQUIRING AN EIR

A negative declaration is improper, and an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.⁶¹ “[S]ignificant effect on the environment” is defined as “a substantial, or potentially substantial, adverse change in the environment.”⁶² An effect on the environment need not be “momentous” to meet the CEQA test for significance; it is enough that the impacts are “not trivial.”⁶³ Substantial evidence, for purposes of the fair argument standard, includes “fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”⁶⁴

2-11

The Project relies on speculative measures to reduce construction and operational greenhouse gas emissions. The MND states, “Sustainable elements may potentially include, but are not limited to, photovoltaic panels on the roof, below-grade filtration tanks to collect and treat stormwater runoff and wastewater, building systems that employ a mix of passive and energy-efficient active strategies, locally sourced structural and finish materials that may include recycled content, and classrooms that take advantage of natural light and daylighting strategies to promote energy-efficiency.”⁶⁵ The MND provides no evidence that these measures will be implemented and will effectively reduce the Project’s greenhouse gas emissions. Absent legally enforceable mitigation measures to reduce the Project’s GHG emissions, the Project’s GHG emissions remain potentially significant and unmitigated.

2-12

The County adopted a 2020 CCAP to reduce the impacts of climate change by reducing GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020.⁶⁶ The County issued the Draft 2045 Los Angeles County Climate Action Plan (“Plan”), which includes:

2-13

⁶¹ Pub. Resources Code § 21151; CEQA Guidelines § 15064(f); *Citizens for Responsible Equitable Env’tl Dev. v. City of Chula Vista* (“*CREED*”) (2011) 197 Cal.App.4th 327, 330-31; *Communities for a Better Env’t v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319 (“*CBE v. SCAQMD*”).

⁶² Pub. Resources Code § 21068; CEQA Guidelines § 15382; *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1581.

⁶³ *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.

⁶⁴ Pub. Resources Code § 21080(e)(1) (emphasis added); *CREED*, 197 Cal.App.4th at 331.

⁶⁵ MND, p. 30/88.

⁶⁶ *Id.* at 39/88.

- A GHG emissions inventory from community-wide activities in unincorporated Los Angeles County in 2018, along with a baseline inventory for 2015.
- Projections of future emissions for 2030, 2035, and 2045.
- GHG reduction targets for 2030 and 2035.
- A long-term aspirational goal for carbon neutrality by 2045.
- Climate strategies, measures, and actions to reduce GHG emissions from major sectors.
- Implementation and monitoring measures to ensure successful climate action.⁶⁷

This Project does not further the goals laid out in the County's climate action plan and rather contravenes the Plan. As a result, the Project's GHG impacts remain potentially significant, and the City lacks substantial evidence to support adoption of an MND. In particular, the Project's failure to include any electric vehicle charging stations contravenes the spirit of the Plan which provides that "LA County will also endeavor to install EV charging stations (EVCSs) at LA County properties and in the public right-of-way, require new development to install EVCSs, and develop incentives and requirements for existing buildings to install EVCSs."⁶⁸ Additionally, the 2045 Climate Action Plan "aims to reduce emissions from diesel- and gasoline- powered off-road equipment, including construction, landscaping, recreational, and commercial and industrial equipment. This strategy increases the use of electric-powered equipment by establishing a goal such that a portion of all equipment is electric-powered."⁶⁹

The County must prepare an EIR which includes a rigorous GHG analysis which support its own goals as laid out in the 2045 Climate Action Plan and include 20 percent electric vehicle charging stations in its 73-parking space lot.⁷⁰ The inclusion of 14 electric vehicle charging stations would reduce greenhouse gas emissions associated with the Project and support the County's goal of reducing greenhouse gas emissions by 2045.

The Project should implement the following measures laid out in the Draft 2045 Climate Action Plan including:

⁶⁷ County of Los Angeles, Draft 2045 Climate Action Plan (April 2022), https://planning.lacounty.gov/site/climate/wp-content/uploads/2022/04/LA_County_2045_CAP_Public_Draft_April_2022.pdf.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

- T6.2—Install EVCSs at existing buildings and right-of-way infrastructure (e.g., lamp poles) throughout unincorporated Los Angeles County.
- T6.3—Require all new development to install EVCSs through a condition of approval/ordinance. Nonresidential development must install EVCSs at a percentage of total parking spaces.
- T6.4—Install EVCSs at LA County facilities and properties for public, employee, and fleet use, prioritizing locations in BIPOC and disadvantaged communities. Complete an assessment of EV charging locations, identifying gaps in publicly accessible stations for BIPOC and disadvantaged communities.
- T6.5—Continue to pilot vehicle-grid integration applications at workplaces to maximize the benefits that daytime charging for plug-in electric vehicles (PEVs) can have on the grid, including demand response to reduce peak loads and energy storage during periods of renewable overproduction.
- T6.6—Expand electric options for active transportation, such as electric scooters and e-bikes.
- T6.7—Increase the use of green hydrogen vehicles. Use biomethane and biogas created from organic waste as a "bridge fuel" to achieve 100 percent green hydrogen and electric vehicles.

2-13
(cont.)

These measures should be included as binding mitigation in an EIR before the Project can be approved.

V. THE CITY LACKS SUBSTANTIAL EVIDENCE TO SUPPORT ITS RELIANCE ON AN MND AND SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT NOISE IMPACTS REQUIRING AN EIR

Substantial evidence supports a fair argument that the Project may have significant impacts associated with onsite noise. CEQA requires the lead agency to perform a quantitative analysis of a project's noise impacts.⁷¹ The lead agency must consider both the increase in noise level and the absolute noise level associated with a project.⁷² Here, the MND itself provides substantial evidence supporting a fair argument that noise and vibration impacts from Project construction may result in a significant impact under CEQA.

2-14

⁷¹ *King and Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814.

⁷² *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714.

A. Substantial Evidence Supports a Fair Argument that the Project May Have Potentially Significant, Unmitigated Noise Impacts

Substantial evidence supports a fair argument that noise from demolition and grading for construction of the Project will result in an exceedance of the Noise Limit for the King Drew Magnet High School of Medicine and Science.⁷³ The exceedance will be 11 dBA over the County noise limit for demolition and 10 dBA over the County noise limit for grading, respectively.⁷⁴ The MND does not adequately analyze this exceedance or adequately mitigate this impact.

The mitigation provided in the MND including noise shielding and muffling devices on power construction equipment would not adequately reduce construction noise impacts from demolition and grading on sensitive receptors at the King Drew Magnet High School of Medicine and Science.⁷⁵ Additionally, Commenters' expert noise consultant from Wilson Ihrig concludes that the noise barrier proposed in the MND would not adequately reduce noise impacts on sensitive receptors.⁷⁶ The MND provides that during construction, "[t]emporary noise barriers (e.g., plywood structures or flexible sound control curtains) extending eight feet in height would be erected around the northern and western perimeter of the construction area."⁷⁷ Wilson Ihrig concludes that this measure will not reduce impacts on sensitive receptors on upper levels of the King Drew Magnet High School of Medicine and Science or other multistory buildings.⁷⁸

The County should implement additional enforceable mitigation measures in an EIR to adequately mitigate all potentially significant noise impacts associated with Project construction.

B. The MND Fails to Analyze the Project's Significant Vibration Impacts

The MND fails to adequately analyze vibration impacts from the Project's construction and operation. The MND relies solely on analysis of construction equipment including Large Bulldozer, Loaded Trucks, Small Bulldozer in analyzing vibration impacts to vibration-sensitive receptors.⁷⁹ Nearby vibration-sensitive

⁷³ Wilson Ihrig Comments, p. 3.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ MND, Appendix B, pdf p. 163/283.

receptors include buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes.⁸⁰

The County has adopted the following provision of Section 12.08.560 of the LACC that governs impacts from vibration:

the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way *is prohibited*. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.⁸¹

2-16
(cont.)

The MND's Noise and Vibrations Calculations in Appendix B provide that a large bulldozer alone produces 0.089 in/sec PPV at 25 feet, and thus produces 0.031 in/sec PPV at 50 feet, the site of the closest receiver, the King Drew Magnet High School of Medicine and Science.⁸² This exceeds the county vibration annoyance limits of 0.01 PPV, and results in a significant impact to vibration-sensitive receptors.⁸³ The King Drew Magnet High School of Medicine and Science likely has vibration-sensitive equipment which may be damaged or destroyed due to a significant unmitigated vibration impact from Project construction. Substantial evidence thus supports a fair argument that the noise and vibration impacts from the Project may be significant. An EIR must be circulated which adequately analyzes and mitigates the Project's noise and vibration impacts.

VI. THE MND FAILS TO ANALYZE CUMULATIVE IMPACTS

CEQA requires an evaluation of cumulative impacts, defined as "two or more individual effects which, when considered together, are considerable."⁸⁴ Such impacts may "result from individually minor but collectively significant projects taking place over a period of time."⁸⁵ Lead agencies must consider whether a

2-17

⁸⁰ Willowbrook Transit Oriented District Specific Plan, Final Environmental Impact Report, Noise and Vibration, https://planning.lacounty.gov/assets/upl/project/willowbrook_feir_3-9-noise-and-vibration.pdf.

⁸¹ Los Angeles County Code of Ordinances § 12.08.560 (emphasis added).

⁸² MND, Appendix B, pdf p. 159/283; Wilson Ihrig Comments, p. 2-3.

⁸³ Wilson Ihrig Comments, p. 3.

⁸⁴ 14 C.C.R. § 15355.

⁸⁵ 14 C.C.R. § 15355(b).

project's potential impacts, although individually limited, are cumulatively considerable.⁸⁶ "Cumulatively considerable" under CEQA means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."⁸⁷

CEQA Guidelines section 15130(b)(1) provides two options for analyzing cumulative impacts: (A) list "past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or" (B) summarize "projection contained in an adopted local, regional or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect."⁸⁸ "When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable."⁸⁹

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(cont.)

This analysis necessarily requires the identification of other projects that will be constructed and/or operating over the same time period as the subject project and the analysis of these projects together with the project being reviewed. The MND fails to analyze the impacts the Project will have when considered with other projects within the vicinity that are planned, have been completed, or are under construction.

VII. THE MND FAILS TO ANALYZE AND MITIGATE THE PROJECT'S POTENTIALLY SIGNIFICANT HAZARDS IMPACTS

The MND provides that a soil management plan will be prepared after Project approval, thus deferring the City's of soil contamination impacts until after Project approval, in violation of CEQA.

2-18

CEQA prohibits the deferral of study and disclosure a project's environmental impacts.⁹⁰ Furthermore, deferring formulation of mitigation measures to post-

⁸⁶ PRC § 21083(b); 14 C.C.R. §§ 15064(h)(1), 15065(a)(3).

⁸⁷ CEQA Guidelines §15064(h)(1).

⁸⁸ 14 C.C.R. § 15130(b)(1).

⁸⁹ *Id.*; *see id.* § 15130(a) (stating that the lead agency shall describe its basis for concluding that an incremental effect is not cumulatively considerable).

⁹⁰ 14 CCR §§ 14 CCR § 15126.2(a); 15143, 15151, 15162.2(a); *Madera Oversight Coalition*, 199 Cal.App.4th at 1370-71.

approval studies is generally impermissible.⁹¹ Mitigation measures adopted after Project approval deny the public the opportunity to comment on the Project as modified to mitigate impacts.⁹² If identification of specific mitigation measures is impractical until a later stage in the Project, specific performance criteria must be articulated and further approvals must be made contingent upon meeting these performance criteria.⁹³ Courts have held that simply requiring a project applicant to obtain a future report and then comply with the report's recommendations is insufficient to meet the standard for properly deferred mitigation.⁹⁴

The MND does not lay out specific performance criteria and requires only that:

The applicant shall prepare and complete a Soil Management Plan prior to initiating soil disturbance and removal activities. To be protective of worker health and safety and potential public exposures to VOC vapors, the Soil Management Plan shall include soil vapor monitoring, including methane monitoring, during soil disturbance activities. The measures contained within the Soil Management Plan shall be implemented during all activities that involve soil disturbance. The Soil Management Plan shall be submitted to the Los Angeles County Fire Department Health Hazardous Materials Division (HHMD) for review and approval during the building permit application phase. The applicant shall also incorporate any necessary features to meet applicable standards, to the satisfaction of HHMD. HHMD shall oversee the implementation of the Soil Management Plan at the project site.⁹⁵

The MND's analysis and mitigation of hazards and hazardous materials impacts is deficient, and its conclusion that resulting hazardous materials impacts would be less than significant is unsupported. The County must prepare an EIR which adequately analyzes and mitigates the Project's potentially significant hazards impacts before the Project can be approved.

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(cont.)

⁹¹ *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309; Pub. Resources Code § 21061.

⁹² *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1393; *Quail Botanical*, *supra*, 29 Cal.App.4th at p. 1604, fn. 5.

⁹³ *Gentry*, 36 Cal.App.4th at 1393.

⁹⁴ *Id.*

⁹⁵ MND, p. 44/88.

VIII. THE MND FAILS TO ANALYZE OR MITIGATE THE PROJECT'S NONCONFORMANCE WITH LOCAL ZONING

A. The MND Fails to Disclose, Analyze, and Mitigate the Project's Nonconformance with the Drew Educational Zone Specific Plan Designation

Under CEQA, a significant environmental impact results if there is a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.⁹⁶ The Project's nonconformance with the Drew Educational Specific Plan Zone of the Willowbrook TOD Specific Plan results in a significant impact under CEQA.

The Project is subject to a maximum floor area ratio ("FAR") of 1.5 under the Drew Educational Zone.⁹⁷ The proposed Project would have a height of 75 feet and a FAR of 2.15.⁹⁸ The FAR for the proposed Project exceeds the allowable FAR for the Zoning district. The MND proposes that "Upon approval from the Los Angeles County Department of Regional Planning to increase its FAR from 1.5 to 2.15, the proposed project would not conflict with applicable regulations governing scenic quality. Therefore, with the Los Angeles County Department of Regional Planning approval of the proposed FAR increase, less-than significant impacts related to visual character and scenic quality are expected."⁹⁹ The MND concludes that the impact of the FAR exceedance on scenic quality will be less than significant, based on speculative future approvals. The MND is required to analyze the significance of issues at the time of drafting, not based on speculative future amendments to zoning. The MND's analysis regarding the impact of the Project on scenic quality is therefore not based on substantial evidence. "Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative..."¹⁰⁰

CEQA requires that the lead agency determine the appropriate form of CEQA review at the time the project application is submitted, not based on speculative future approvals.¹⁰¹ When viewed as a whole, there is no dispute that the Project exceeds applicable zoning under the Willowbrook TOD Specific Plan

⁹⁶ *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783–784 (Project's inconsistencies with local plans and policies constitute significant impacts under CEQA).

⁹⁷ Willowbrook TOD Specific Plan, p. 46,

https://www.municode.com/webcontent/16274/Revised_Willowbrook_TOD.pdf.

⁹⁸ MND, p. 15/88.

⁹⁹ MND, p. 15/88.

¹⁰⁰ PRC 21080(e)(2).

¹⁰¹ CEQA Guidelines, § 15063 (timing and process of initial study); Pub. Resources Code, §§ 21003.1 (early identification of environmental effects), 21006 (CEQA is integral to agency decision making).

Drew Educational Zone.¹⁰² By disregarding the Project's facial inconsistency with zoning requirements, the potentially significant impacts associated with those inconsistencies escape environmental review. As a result, the County fails to comply with its CEQA obligations to disclose the nature and severity of the Project's impacts. The County also lacks substantial evidence to support its determination that the FAR exceedance would not have a specific adverse impact upon visual character and scenic quality.¹⁰³

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(cont.)

The County must prepare an EIR which accurately reflects the Project's potentially significant impact to visual character and scenic quality resulting from nonconformance with the FAR requirement under the Drew Educational Specific Plan Zone of the Willowbrook TOD Specific Plan area.

IX. CONCLUSION

The MND is inadequate as an environmental document because it fails to fully disclose and mitigate the Project's potentially significant impacts on air quality, climate change, fire, explosive release of gases, wildfire, and cumulative impacts, and fails to describe or remedy the Project's inconsistency with local zoning and general plan designations. The City lacks substantial evidence to support its reliance on an MND, and there is a fair argument that an EIR must be prepared for the Project. The County cannot approve the Project until it prepares an EIR that resolves these issues and fully complies with CEQA's requirements.

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Thank you for your attention to these comments. Please include them in the record of proceedings for the Project.

Sincerely,



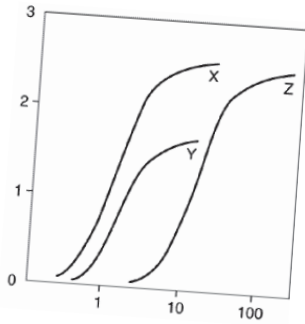
Kelilah D. Federman

Attachments
KDF:acp

¹⁰² MND, p. 15/88.

¹⁰³ Gov. Code, § 65589.5(d)(2); see also OPC, §§ 17.107.100.B; 17.107.095.A.1.

ATTACHMENT A



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November 9, 2022

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 940804

Attn: Ms. Kelilah Federman

Subject: Comments On Initial Study/Mitigated Negative Declaration (IS/MND) For Charles R. Drew University of Medicine and Science Health Professions Education Building, located at 1731 East 120th Street, Los Angeles, California

Dear Ms. Federman,

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the 2022 County of Los Angeles (the CoLA) IS/MND of the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan. If we do not comment on a specific item this does not constitute acceptance of the item.

The project site will be located at the southwest corner of the Charles R. Drew University of Medicine and Science (CDU) campus at 1731 East 120th Street in the unincorporated Willowbrook community of Los Angeles County. The project site is an irregularly shaped 46,650-square foot parcel that is currently being leased from the County of Los Angeles. The project site is relatively flat and currently has two one-story modular buildings that are used for offices, maintenance, facilities support, security, and other administration support for the university. One of the modular buildings is 4,400 square feet, and the second modular building is 5,228 square feet. An access road is located on the westerly portion of the project site and is shared between CDU, the

2-21

adjacent King Drew Magnet High School of Medicine and Science to the west of the project site, and the multi-family housing complex to the north of the project site. The access road provides fire department access from 120th Street to the multi-family housing complex and provides auxiliary access to the high school, which includes access to the school's mechanical equipment enclosure and a few accessory parking spaces. The project site is landscaped along the easterly and southernly boundary and has one driveway entrance along 120th Street. A signalized pedestrian crosswalk is located to the east of the project site at 120th Street and Healthy Way.

The proposed project involves demolishing the existing two modular buildings, removing the existing landscaping, and the construction of a five-story, 92,618-square-foot Health Professions Education Building (HPEB) on the project site. Approximately three feet of fill material would be replaced on-site. The proposed building would have a maximum height of 75 feet and a floor area ratio (FAR) of 2.15. The existing uses in the two modular buildings would be moved into other buildings on the CDU campus. The proposed building would be "L"-shaped and would have a landscaped student-oriented central courtyard, which would link to the proposed building to the existing CDU campus, specifically the CDU Student Center and Keck Building College of Science and Health. The proposed building would have classrooms, a lecture hall, auditorium/meeting room, a café, facilities support space (e.g., shipping/receiving, janitorial, electrical, and data rooms), study rooms, staff and faculty offices, conference rooms, virtual anatomy and virtual skills rooms, simulation rooms (e.g., hospital and exam room simulation), student lounge, lockers rooms, showers, restrooms/changing rooms, and outdoor terraces. Outdoor terraces are proposed on the 5th floor at the north and east sides of the building.

2-21
(cont.)



Source: TAHA, 2021.

FIGURE 1
PROJECT LOCATION

taha Charles R. Drew University of Medicine and Science Health Profession Education Building
Initial Study
COUNTY OF LOS ANGELES DEPARTMENT OF REGIONAL PLANNING
TAHA 2020-095

Figure 1: Project Site Location

According to the IS/MND, construction is expected to begin in 2023 and last 24 months, with occupancy expected in 2025. Construction activities include site clearing/demolition, excavation/grading, building construction, paving, architectural coating, and landscaping.

Construction would involve demolishing the existing two modular buildings, removing existing landscaping, and building a five-story, 92,618-square-foot HPEB on the project site. The following elements would be implemented during construction:

- Power construction equipment would be equipped with noise shielding and muffling devices (consistent with manufacturers' standards).
- All equipment would be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.
- Temporary noise barriers (e.g., plywood structures or flexible sound control curtains) extending eight feet in height would be erected around the northern and western perimeter of the construction area.
- *When possible, on-site electrical sources would be used to power equipment rather than diesel generators.*
- Equipment would be turned off when not in use for more than five minutes, except for equipment that requires idling to maintain performance.
- Construction staging areas would be located away from residences and King Drew Magnet High School.
- Construction activities whose specific location on the project site may be flexible (e.g., operation of compressors and generators) would be conducted as far away as possible from residences and King Drew Magnet High School.
- A "noise disturbance coordinator" would be established and would be responsible for responding to local complaints about construction noise. The noise disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residences within 500 feet of the construction site and all signs posted at the construction site would list the telephone number for the noise disturbance coordinator.

The project site is bounded by CDU buildings and a two-story multi-family housing complex to the north, a two-story APLA Health Clinic to the east, 120th Street to the south, and King Drew Magnet High School of Medicine and Science to the west. The Martin Luther King, Jr. Medical Campus is located across the street on 120th Street to the south. Single-family residential uses are located further south from the project site; commercial and a mix of single- and multi-family residential uses are located further west; Abraham Lincoln Elementary School (closed since 2017), a mix of single- and multi-family residential uses, and Interstate 105 (I-105) are located further north; and health clinics/medical offices, Drew Child Development Corporation, Los Angeles County Fire Station No. 41, and commercial uses are located further east of the project site. The Willowbrook/Rosa Parks Los Angeles Metropolitan Transportation Authority (Metro) Station for the Metro A (Blue) and C (Green) light rail lines is approximately 0.42 miles northeast of the project site.

2-21
(cont.)



Figure 2: Project Site Location and Surrounding Land Uses

The failure of CoLA to analyze the health risks from construction emissions associated with the project require CoLA to prepare an environmental impact report (EIR).

Specific Comments:

1. Air Quality Analysis Fails To Require The Use Of Tier 4 Final Technology For Off-Road Sources Of Diesel Exhaust On-Site.

The Project Air Quality Analysis fails to require mitigation measures to reduce construction related air quality emissions (particulate matter (PM₁₀ and PM_{2.5})) and fails to require the best emission technology level, Tier 4 Final, on construction equipment with a horsepower (hp) rating greater than 25 hp. Allowing the construction phase to use a lower tiered engine will produce more PM₁₀ and PM_{2.5} emissions than were accounted for in the CalEEMOD analysis.

The United States Environmental Protection Agency (U.S. EPA) and by agreement, CARB, have slowly adopted more stringent standards to lower the emissions from off-road construction equipment since 1994. Since 1994, Tier 1, Tier 2, Tier 3, Tier 4 Interim, and Tier 4 Final construction equipment have been phased in over time. Tier 4 Final represents the cleanest burning equipment and therefore has the lowest emissions compared to other tiers, including Tier 4 Interim equipment.¹

2-23

¹ “San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects.” August 2015, available at: https://www.sfdph.org/dph/files/EHSdocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6.

Maximum horsepower	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
25(hp)≤30							7.1/4.1/0.60			5.6/4.1/0.45				5.6/4.1/0.22					3.5/3.7/0.02		
30(hp)≤75										5.6/3.7/0.30				3.5/3.7/0.22 ^a					3.5/3.7/0.02 ^a		
75(hp)≤100								6.9/7/7						3.5/3.7/0.30					0.14/2.5/0.30/3.7/0.015 ^b	0.14/0.30/3.7/0.015	
100(hp)≤175										4.9/3.7/0.20				3.0/3.7/0.22							
175(hp)≤300										4.9/2.6/0.15											
300(hp)≤600						1.0/6.9/8.5/0.40				4.9/2.6/0.15				3.0/2.6/0.15 ^c				0.14/1.5/2.6/0.015 ^b	0.14/0.30/2.2/0.015		
600(hp)≤750																					
Mobile Machines > 750hp																					
750hp≤GEN ≤1200hp							1.0/6.9/8.5/0.40						4.9/2.6/0.15					0.30/2.6/2.6/0.07	0.14/2.6/0.015		
GEN>1200 hp																		0.30/0.50/2.6/0.07	0.14/0.30/2.6/0.015		

Source: derived from California Air Resources Board, http://www.arb.ca.gov/msprog/ordetst/documents/Off-Road_Diesel_Stdts.xls.

- a) When ARB and USEPA standards differ, the standards shown here represent the more stringent of the two.
b) Standards given for all sizes of Tier 1 engines are hydrocarbons/oxides of nitrogen (NOx)/carbon monoxide (CO)/particulate matter (PM) in grams per brakehorsepower per hour (g/bhp-hr).
c) Standards given for all sizes of Tier 2 and Tier 3 engines, and Tier 4 engines below 75 horsepower are non-methane hydrocarbons (NMHC+NOx/CO)/PM in g/bhp-hr.
d) Standards given for Tier 4 engines above 75 horsepower are NMHC/NOx/CO/PM in g/bhp-hr.
e) Engine families in this power category may alternately meet Tier 3 PM standards (0.30 g/bhp-hr) from 2008-2011 in exchange for introducing final PM standards in 2012.
f) The implementation schedule shown is the three-year alternate NOx approach. Other schedules are available.
g) Certain manufacturers have agreed to comply with these standards by 2005.



2-23
(cont.)

When Tier 3 equipment is compared to Tier 4 Interim and Tier 4 Final equipment it is clear that the use of Tier 3 equipment would put out substantially more particulate matter (PM₁₀ and PM_{2.5})². Tier 3 equipment puts out 80% to 89% more PM₁₀ than Tier 4 Interim equipment and 85% to 91% more PM₁₀ than Tier 4 Final equipment. Tier 3 equipment puts out 81% to 89% more PM_{2.5} than Tier 4 Interim equipment and 85% to 92% more PM_{2.5} than Tier 4 Final equipment. Allowing the use of Tier 3 or equivalent control technology for construction equipment as a mitigation measure does not provide the community with the greatest level of protection possible.

The CoLA must address the use of Tier 3, Tier 4 interim, and Tier 4 final certified equipment and the impacts that will have on the adjacent communities in an EIR for the Project.

² “San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects.” August 2015, available at: https://www.sfdph.org/dph/files/EHSdocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6.

2. CoLA's Idling Restrictions Fail To Address The Potential Reduction In Exposure To DPM As A Public Health Concern.

CoLA asserts that equipment would be turned off when not in use for more than five minutes, except for equipment that requires idling to maintain performance under the analysis of energy use and noise from the project. The 5 minute limit is to comply with the California Air Resources Board's (CARB) In-Use Off Road Diesel-Fueled Fleets Regulation. The CARB's policy states "Idling Limited to 5 Minutes – Fleets must limit their unnecessary idling to 5 minutes; there are exceptions for vehicles that need to idle to perform work (such as a crane providing hydraulic power to the boom), vehicles being serviced, or in a queue waiting for work." Idling off-road equipment is a significant source of diesel particulate matter (DPM), the primary toxic air contaminant (TAC) that will be released during the construction phase and operational phase of the Project. Restricting the idling time to no more than 3 minutes would reduce the potential emissions by approximately 40%. CoLA should implement this measure to ensure that emissions are *de minimis* across the construction phase of the Project.

2-24

3. CoLA's Air Quality Analysis Fails To Include A Quantitative Health Risk Analysis Of The Impacts Of Toxic Air Contaminants From The Construction Phase And Operational Phase Of The Project For The Nearest Sensitive Receptor(s)

CoLA has failed to conduct a numerical health risk analysis (HRA) for Project. The IS/MND states that, for the purposes of assessing pollution concentrations upon sensitive receptors, the SCAQMD has developed LSTs that are based on the number of pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts.³ The nearest sensitive receptors that could potentially be subject to localized air quality impacts associated with construction of the Proposed Project include the residential buildings to the west of the Project Site, King Drew Magnet High School, CDU, and the APLA Health Clinic currently being constructed. For the Criteria Pollutants assessed under CEQA, this is correct. For toxic air contaminants (TACs), there are no LSTs, nor levels of significance based on the pounds per day. Instead, the determination

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³ County of Los Angeles. 2022. IS/MND. Pg 22 of 88

of a significance threshold is based on a *quantitative risk analysis* that requires CoLA to perform a multistep, quantitative health risk analysis.

TACs, including diesel particulate matter (DPM)⁴, contribute to a host of respiratory impacts and may lead to the development of various cancers. Failing to quantify those impacts places the community at risk for unwanted adverse health impacts. *Even brief exposures to the TACs could lead to the development of adverse health impacts over the life of an individual.* CoLA’s analysis that⁵ “Construction of the proposed project would last for approximately 24 months, and daily emissions of diesel PM would fluctuate throughout the construction period. Short-term exposures to diesel PM would have to involve extremely high concentrations (such as through intensive, lengthy earthwork activities) in order for health risk impacts to occur on shorter timelines. Over the course of construction activities, average diesel PM emissions from on- site equipment would be approximately 0.4 pounds per day. It is unlikely that diesel PM concentrations would be of any public health concern during the 24-month construction period, and diesel PM emissions would cease upon completion of construction activities.”

Diesel exhaust contains nearly 40 toxic substances, including TACs and may pose a serious public health risk for residents in the vicinity of the facility. TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

⁴ Because DPM is a TAC, it is a different air pollutant than criteria particulate matter (PM) emissions such as PM10, PM2.5, and fugitive dust. DPM exposure causes acute health effects that are different from the effects of exposure to PM alone.

⁵ County of Los Angeles. 2022. IS/MND. Pg 23 of 88

Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death.^{6,7,8} Fine DPM is deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death.⁹ Exposure to DPM increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung tissue, thickening of the alveolar walls, immunological allergic reactions, and airway constriction.¹⁰ DPM is a TAC that is recognized by state and federal agencies as causing severe health risk because it contains toxic materials, unlike PM_{2.5} and PM₁₀.¹¹

The inherent toxicity of the TACs requires CoLA to first quantify the concentration released into the environment at each of the sensitive receptor locations through air dispersion modeling, calculate the dose of each TAC at that location, and quantify the cancer risk and hazard index for each of the chemicals of concern. Following that analysis, then CoLA can make a determination of the relative significance of the emissions.

No effort is made in the IS/MND to quantify the potential health impacts from DPM generated by construction activities or operational activities from the Project on these sensitive receptors. The CoLA's failure to perform such an analysis is clearly a major flaw in the IS/MND and may be placing the residents of the adjacent structures at risk from the construction and operational phases of the Project.

⁶ California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998; see also California Air Resources Board, Overview: Diesel Exhaust & Health, <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health#:~:text=Diesel%20Particulate%20Matter%20and%20Health&text=In%201998%2C%20CARB%20identified%20DPM,and%20other%20adverse%20health%20effects>.

⁷ U.S. EPA, Health Assessment Document for Diesel Engine Exhaust, Report EPA/600/8-90/057F, May 2002.

⁸ Environmental Defense Fund, Cleaner Diesel Handbook, Bring Cleaner Fuel and Diesel Retrofits into Your Neighborhood, April 2005; http://www.edf.org/documents/4941_cleanerdieselhandbook.pdf, accessed July 5, 2020.

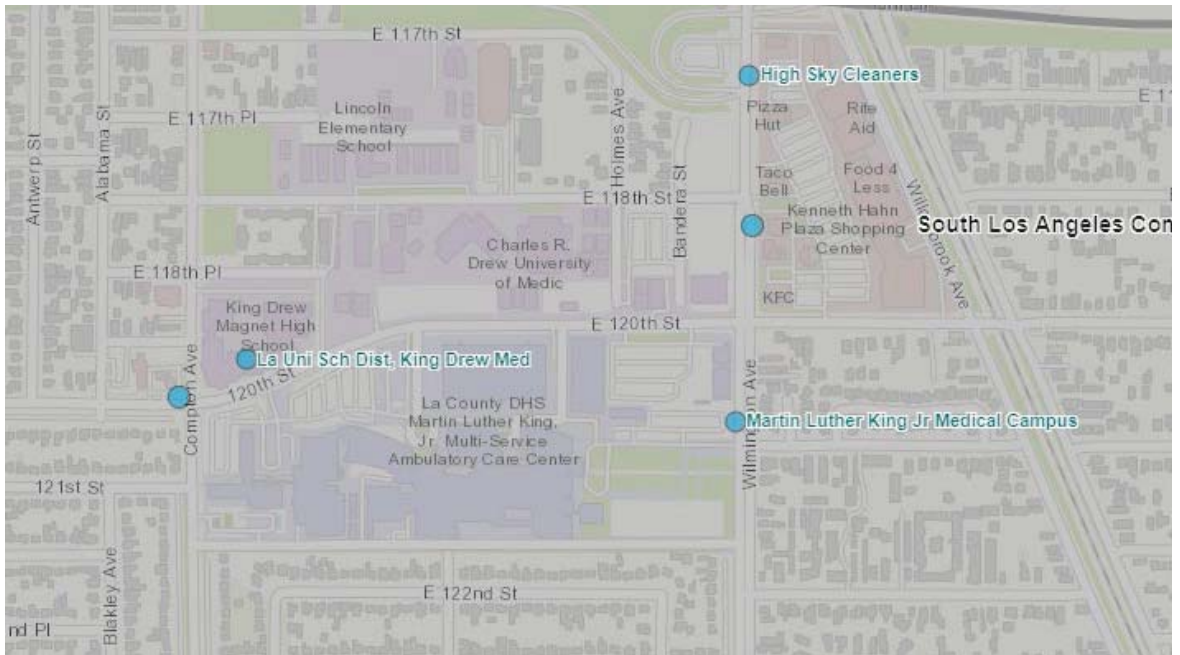
⁹ California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998.

¹⁰ Findings of the Scientific Review Panel on The Report on Diesel Exhaust as adopted at the Panel's April 22, 1998 Meeting.

¹¹ Health & Safety Code § 39655(a) (defining "toxic air contaminant" as air pollutants "which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.")

4. The Air Quality Analysis For The Project Fails To Accurately Assess The Impacts From The Emergency Generator That Is Currently Installed Onsite.

The Air Quality Analysis ignores the substantial potential impacts from the onsite 50 to 500 horse power (hp) back-up generator (BUG) located on the CDU campus and the BUG located on the Martin Luther King Jr Medical Campus, located across 120th Street (physical address is 12021 S Wilmington Ave, Los Angeles, CA 90059). The failure to assess the impacts of these significant sources of DPM in the immediate vicinity of the Project Site is a clear flaw in the air quality analysis that must be address by the CoLA in an EIR.



According to the South Coast Air Quality Management District's (SCAQMD's) Facility Information Detail (FIND) website, reported emissions from the Martin Luther King Jr Medical Campus District (SCAQMD) averaged 551.2 lbs of diesel particulate matter (DPM) over the last three reporting years. The amounts have been increasing substantially over that time.

Year	Pollutant	Lbs
2021	DPM	695.851
2020	DPM	661.015
2019	DPM	296.606

In addition to reporting the planned emissions of these sources in the air quality analysis the CoLA must include the substantial increase in operational emissions from BUGs in the Air Basin due to unscheduled events, including but not limited to Public Safety Power Shutoff (PSPS) events and extreme heat events. Extreme heat events are defined as periods where in the temperatures throughout California exceed 100 degrees Fahrenheit.¹² From January, 2019 through December, 2019, Southern California Edison reported 158 of their circuits underwent a PSP event¹³. In Los Angeles County two circuits had 4 PSPS events during that period lasting an average of 35 to 38 hours. The total duration of the PSPS events in Los Angeles lasted between 141 hours to 154 hours in 2019. In 2021, the Governor of California declared that during extreme heat events the use of stationary generators shall be deemed an emergency use under California Code of Regulations (CCR), title 17, section 93115.4 sub. (a) (30) (A)(2). The number of Extreme Heat Events is likely to increase in California with the continuing change in climate the State is currently undergoing.

Power produced during PSPS or extreme heat events is expected to come from engines regulated by CARB and California's 35 air pollution control and air quality management districts (air districts).¹⁴ Of particular concern are health effects related to emissions from diesel back-up engines. DPM has been identified as a toxic air contaminant, composed of carbon particles and numerous organic compounds, including over forty known cancer-causing organic substances. The majority of DPM is small enough to be inhaled deep into the lungs and make people more susceptible to further injury.

According to the California Public Utilities Commission (CPUC) de-energization report¹⁵ in October 2019, there were almost **806 PSPS events** (emphasis added) that impacted almost 973,000 customers (~7.5% of households in California) of which ~854,000 of them were residential customers. CARB's data also indicated that on average each of these customers had about 43 hours of power

¹² Governor of California. 2021. Proclamation of a state of emergency. June 17, 2021.

¹³ SCAQMD. 2020. Proposed Amendment To Rules (PARS) 1110.2, 1470, and 1472. Dated December 10, 2020. http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1110.2/1110-2_1470_1472/par1110-2_1470_wgm_121020.pdf?sfvrsn=6.

¹⁴ CARB. 2019. Use of Back-up Engines For Electricity Generation During Public Safety Power Shutoff Events. October 25, 2019.

¹⁵ <https://www.cpuc.ca.gov/deenergization/> as cited in CARB, 2020. Potential Emission Impact of Public Safety Power Shutoff (PSPS), Emission Impact: Additional Generator Usage associated With Power Outage..

outage in October 2019.¹⁶ Using the actual emission factors for each diesel BUG engines in the air district's stationary BUGs database, CARB staff calculated that the 1,810 additional stationary generators (like those proposed for the Project) running during a PSPS in October 2019 generated 126 tons of NOx, 8.3 tons or particulate matter, and 8.3 tons of DPM.

For every PSPS or Extreme Heat Event (EHE) triggered during the operational phase of the project, significant concentrations of DPM will be released that are not accounted for in the CoLA's analysis. In 2021, two EHEs were declared. For the June 17, 2021 EHE, stationary generator owners were allowed to use their BUGs for 48 hours. For the July 9, 2021 EHE, the stationary generator owners were allowed to use their BUGs for 72 hours. An EIR must be written for the Project that includes an analysis of the additional operation of the BUG that will occur at the project site that is not accounted for in the current air quality analysis.

2-26
(cont.)

Conclusion

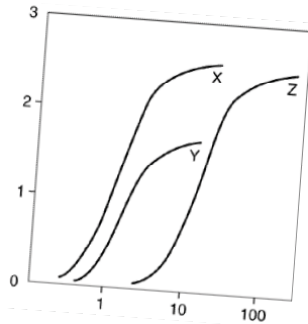
The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant unmitigated impacts if the IS/MND is approved. The CoLA must re-evaluate the significant impacts identified in this letter by requiring the preparation of a revised environmental impact report.

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Sincerely,



¹⁶ CARB, 2020. Potential Emission Impact of Public Safety Power Shutoff (PSPS), Emission Impact: Additional Generator Usage associated With Power Outage.



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James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is a well recognized toxicologist, air modeler, and health scientist. He has 20 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

Case: James Harold Caygle, et al, v. Drummond Company, Inc. Circuit Court for the Tenth Judicial Circuit, Jefferson County, Alabama. Civil Action. CV-2009

Client: Environmental Litigation Group, Birmingham, Alabama

Dr. Clark performed an air quality assessment of emissions from a coke factory located in Tarrant, Alabama. The assessment reviewed include a comprehensive review of air quality standards, measured concentrations of pollutants from factory, an inspection of the facility and detailed assessment of the impacts on the community. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Rose Roper V. Nissan North America, et al. Superior Court of the State Of California for the County Of Los Angeles – Central Civil West. Civil Action. NC041739

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to multiple chemicals, including benzene, who later developed a respiratory distress. A review of the individual's medical and occupational history was performed to prepare an exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to respiratory irritants. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: O'Neil V. Sherwin Williams, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to petroleum distillates who later developed a bladder cancer. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Summary judgment for defendants.

Case: Moore V., Shell Oil Company, et al. Superior Court of the State Of California for the County Of Los Angeles

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to chemicals while benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Raymond Saltonstall V. Fuller O'Brien, KILZ, and Zinsser, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Richard Boyer and Elizabeth Boyer, husband and wife, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-7G.

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: JoAnne R. Cook, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-9R

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of an individual exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Patrick Allen And Susan Allen, husband and wife, and Andrew Allen, a minor, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-W

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Michael Fahey, Susan Fahey V. Atlantic Richfield Company, et al. United States District Court Central District of California Civil Action Number CV-06 7109 JCL.

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Constance Acevedo, et al., V. California Spray-Chemical Company, et al., Superior Court of the State Of California, County Of Santa Cruz. Case No. CV 146344

Dr. Clark performed a comprehensive exposure assessment of community members exposed to toxic metals from a former lead arsenate manufacturing facility. The former manufacturing site had undergone a DTSC mandated removal action/remediation for the presence of the toxic metals at the site. Opinions were presented regarding the elevated levels of arsenic and lead (in attic dust and soils) found throughout the community and the potential for harm to the plaintiffs in question.

Case Result: Settlement in favor of defendant.

Case: Michael Nawrocki V. The Coastal Corporation, Kurk Fuel Company, Pautler Oil Service, State of New York Supreme Court, County of Erie, Index Number I2001-11247

Client: Richard G. Berger Attorney At Law, Buffalo, New York

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the

known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Judgement in favor of defendant.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client – Confidential

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

Client – Los Angeles Alliance for a New Economy (LAANE), Los Angeles, California

Dr. Clark is advising the LAANE on air quality issues related to current flight operations at the Los Angeles International Airport (LAX) operated by the Los Angeles World Airport (LAWA) Authority. He is working with the LAANE and LAX staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client – City of Santa Monica, Santa Monica, California

Dr. Clark is advising the City of Santa Monica on air quality issues related to current flight operations at the facility. He is working with the City staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client: Omnitrans, San Bernardino, California

Dr. Clark managed a public health survey of three communities near transit fueling facilities in San Bernardino and Montclair California in compliance with California Senate Bill 1927. The survey included an epidemiological survey of the effected communities, emission surveys of local businesses, dispersion modeling to determine potential emission concentrations within the communities, and a comprehensive risk assessment of each community. The results of the study were presented to the Governor as mandated by Senate Bill 1927.

Client: Confidential, San Francisco, California

Summarized cancer types associated with exposure to metals and smoking. Researched the specific types of cancers associated with exposure to metals and smoking. Provided causation analysis of the association between cancer types and exposure for use by non-public health professionals.

Client: Confidential, Minneapolis, Minnesota

Prepared human health risk assessment of workers exposed to VOCs from neighboring petroleum storage/transport facility. Reviewed the systems in place for distribution of petroleum hydrocarbons to identify chemicals of concern (COCs), prepared comprehensive toxicological summaries of COCs, and quantified potential risks from carcinogens and non-carcinogens to receptors at or adjacent to site. This evaluation was used in the support of litigation.

Client – United Kingdom Environmental Agency

Dr. Clark is part of team that performed comprehensive evaluation of soil vapor intrusion of VOCs from former landfill adjacent residences for the United Kingdom's Environment

Agency. The evaluation included collection of liquid and soil vapor samples at site, modeling of vapor migration using the Johnson Ettinger Vapor Intrusion model, and calculation of site-specific health based vapor thresholds for chlorinated solvents, aromatic hydrocarbons, and semi-volatile organic compounds. The evaluation also included a detailed evaluation of the use, chemical characteristics, fate and transport, and toxicology of chemicals of concern (COC). The results of the evaluation have been used as a briefing tool for public health professionals.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: Ameren Services, St. Louis, Missouri

Managed the preparation of a comprehensive human health risk assessment of workers and residents at or near an NPL site in Missouri. The former operations at the Property included the servicing and repair of electrical transformers, which resulted in soils and groundwater beneath the Property and adjacent land becoming impacted with PCB and chlorinated solvent compounds. The results were submitted to U.S. EPA for evaluation and will be used in the final ROD.

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark is managing the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Imminent and Substantial Endangerment Order. Dr. Clark is assisting the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of perchlorate in environment. Dr. Clark evaluated the production, use, chemical characteristics, fate and transport, toxicology, and remediation of perchlorate. Perchlorates form the basis of solid rocket fuels and have recently been detected in water supplies in the United States. The results of this research

were presented to the USEPA, National GroundWater, and ultimately published in a recent book entitled *Perchlorate in the Environment*.

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Confidential, San Francisco, California

Identified and analyzed fifty years of epidemiological literature on workplace exposures to heavy metals. This research resulted in a summary of the types of cancer and non-cancer diseases associated with occupational exposure to chromium as well as the mortality and morbidity rates.

Client: Confidential, San Francisco, California

Summarized major public health research in United States. Identified major public health research efforts within United States over last twenty years. Results were used as a briefing tool for non-public health professionals.

Client: Confidential, San Francisco, California

Quantified the potential multi-pathway dose received by humans from a pesticide applied indoors. Part of team that developed exposure model and evaluated exposure concentrations in a comprehensive report on the plausible range of doses received by a specific person. This evaluation was used in the support of litigation.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client – United Kingdom Environmental Agency

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (MtBE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MtBE. The results of the evaluation have been used as a briefing tool for public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of *tertiary* butyl alcohol (TBA) in municipal drinking water system. TBA is the primary breakdown product of MtBE, and is suspected to be the primary cause of MtBE toxicity. This evaluation will include available information on the production, use, chemical characteristics, fate and transport in the environment, absorption, distribution, routes of detoxification, metabolites, carcinogenic potential, and remediation of TBA. The results of the evaluation were used as a briefing tool for non-public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of methyl *tertiary* butyl ether (MTBE) in municipal drinking water system. MTBE is a chemical added to gasoline to increase the octane

rating and to meet Federally mandated emission criteria. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MTBE. The results of the evaluation have been used as a briefing tool for non-public health professionals.

Client – Ministry of Environment, Lands & Parks, British Columbia

Dr. Clark assisted in the development of water quality guidelines for methyl tertiary-butyl ether (MTBE) to protect water uses in British Columbia (BC). The water uses to be considered includes freshwater and marine life, wildlife, industrial, and agricultural (e.g., irrigation and livestock watering) water uses. Guidelines from other jurisdictions for the protection of drinking water, recreation and aesthetics were to be identified.

Client: Confidential, Los Angeles, California

Prepared physiologically based pharmacokinetic (PBPK) assessment of lead risk of receptors at middle school built over former industrial facility. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Client: Confidential, Atlanta, Georgia

Researched potential exposure and health risks to community members potentially exposed to creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin compounds used at a former wood treatment facility. Prepared a comprehensive toxicological summary of the chemicals of concern, including the chemical characteristics, absorption, distribution, and carcinogenic potential. Prepared risk characterization of the carcinogenic and non-carcinogenic chemicals based on the exposure assessment to quantify the potential risk to members of the surrounding community. This evaluation was used to help settle class-action tort.

Client: Confidential, Escondido, California

Prepared comprehensive Preliminary Endangerment Assessment (PEA) of dense non-aqueous liquid phase hydrocarbon (chlorinated solvents) contamination at a former printed circuit board manufacturing facility. This evaluation was used for litigation support and may be used as the basis for reaching closure of the site with the lead regulatory agency.

Client: Confidential, San Francisco, California

Summarized epidemiological evidence for connective tissue and autoimmune diseases for product liability litigation. Identified epidemiological research efforts on the health effects of medical prostheses. This research was used in a meta-analysis of the health effects and as a briefing tool for non-public health professionals.

Client: Confidential, Bogotá, Columbia

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of a 13.7 hectares plastic manufacturing facility in Bogotá, Colombia. The risk assessment was used as the basis for the remedial goals and closure of the site.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally cadmium) and VOCs from soil and soil vapor at 12-acre former crude oilfield and municipal landfill. The site is currently used as a middle school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and was used as the basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Managed remedial investigation (RI) of heavy metals and volatile organic chemicals (VOCs) for a 15-acre former manufacturing facility. The RI investigation of the site included over 800 different sampling locations and the collection of soil, soil gas, and groundwater samples. The site is currently used as a year round school housing approximately 3,000 children. The Remedial Investigation was performed in a manner

that did not interrupt school activities and met the time restrictions placed on the project by the overseeing regulatory agency. The RI Report identified the off-site source of metals that impacted groundwater beneath the site and the sources of VOCs in soil gas and groundwater. The RI included a numerical model of vapor intrusion into the buildings at the site from the vadose zone to determine exposure concentrations and an air dispersion model of VOCs from the proposed soil vapor treatment system. The Feasibility Study for the Site is currently being drafted and may be used as the basis for granting closure of the site by DTSC.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally lead), VOCs, SVOCs, and PCBs from soil, soil vapor, and groundwater at 15-acre former manufacturing facility. The site is currently used as a year round school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and will be basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of VOC vapor intrusion into classrooms of middle school that was former 15-acre industrial facility. Using the Johnson-Ettinger Vapor Intrusion model, the evaluation determined acceptable soil gas concentrations at the site that did not pose health threat to students, staff, and residents. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client –Dominguez Energy, Carson, California

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of 6-acre portion of a 500-acre oil and natural gas production facility in Carson, California. The risk assessment was used as the basis for closure of the site.

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Professional Associations

American Public Health Association (APHA)

Association for Environmental Health and Sciences (AEHS)

American Chemical Society (ACS)

California Redevelopment Association (CRA)

International Society of Environmental Forensics (ISEF)

Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

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- Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.
- Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.
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ATTACHMENT B



WI #22-005.32

November 13, 2022

Kelilah D. Federman
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

SUBJECT: Comments on Charles R. Drew University of Medicine and Science Health Professions Education Building Noise Analysis

Dear Ms. Federman,

Per your request, I have reviewed the subject matter document for the Charles R. Drew University of Medicine and Science Health Professions Education Building Project Mitigated Negative Declaration (MND) in Willowbrook, California in Los Angeles County. The proposed project involves the construction, use and maintenance of a five-story, 92,618-square-foot Health Professions Education Building (HPEB) on the project site. The Noise Impact Analysis is contained in Section 13.0 of the MND, with supplemental calculations in Appendix B.

2-29

The Project is surrounded by noise sensitive uses – King Drew Magnet High School located to the west of the project site, residences located to the north and the east, and the Augustus F. Hawkins Mental Health Center and Martin Luther King, Jr. Community Hospital to the south

Baseline Noise Level characterizations are Incomplete

The noise analysis relies on four short-term measurements of 15-minute duration, Friday, March 26, 2021, between 10:30 a.m. and 12:30p.m. (MND, Table 9). The manner in which the MND has determined the existing noise environment is poorly supported. The noise environment is an environment affected by transportation sources that can change from hour to hour and day to day, and best practices call for documentation of the existing condition with measurements at different times over several days.

Furthermore, the noise analysis relies on these short-term measurements without any discussion of how typical these data were for daytime conditions or how they would apply to evening or nighttime conditions. Environmental noise can vary widely throughout the day (perhaps +/-10 dBA or more for areas with intermittent local traffic) and relying on measurements that represent only 2% of the daytime hours (7 AM to 7 PM) leaves quite a lot for speculation.

2-30

The County should prepare an EIR to include an updated baseline analysis that incorporates noise measurements taken at key locations over a multi-day period, and to provide supporting information to validate the results.

Thresholds of Significance are Not Properly Developed

Specialized Noise Limits for Schools

The 2021 California Collaborative for High Performance Schools (CHPS)¹ version 2.0 identifies an interior on-going noise level 40 dBA or less from all noise sources. Typical construction with windows open for ventilation typically reduces sound by 15 dBA.² Thus, the analysis must show that on-going noise from Project construction activities, including increased truck activities off-site would not exceed 55 dBA exterior/40 dBA interior at nearby school buildings. King Drew Magnet High School is 50 feet away, and analysis should be done to determine how construction noise may affect these limits. See the Construction Noise section of this letter for a sample calculation.

2-31

Incomplete CNELs

Section 3.9.5 of the Willowbrook TOD Specific Plan's³ Noise and Vibration outlines an Impact Analysis based on an exceedance of established noise standards

The operational impact based on transportation noise section, outlined on page 3.9.26, states: "Based on the County's noise/land use compatibility matrix shown in Table 3.9-5, the County identifies normally acceptable exterior noise level limits in outdoor activity areas for various land uses. The normally acceptable compatibility standard for ... schools and hospitals uses is 70 dBA CNEL"

2-32

In order to conduct the CEQA analysis, the baseline Ldn or CNEL must be established, and Table 9 (MND must provide the Ldn or CNEL. Additionally, as the existing noise environment has a direct relationship to the significance thresholds, the lack of properly documented CNEL undermines any understanding of how the Project could increase noise at neighboring noise sensitive projects and potentially affect their land use compatibility.

Included Analysis Exceed Limits

Construction Vibration

The damage assessment figure included in the Construction Vibration section in the Noise and Vibration Calculations Appendix in the MND is above the Los Angeles County limit for vibration annoyance. LA County Code Section 12.08.560⁴ provides that:

the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is *prohibited*. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz

2-33

The associated analysis, provided in the document but also double checked and verified, states that a large bulldozer alone produces 0.089 in/sec PPV at 25 feet, and thus produces 0.031 in/sec PPV at

¹ 2014 version 1.03 CHPS required 45 dBA. https://chps.net/sites/default/files/file_attach/CA-CHPS_Criteria_2014_V1.03.pdf

² This is a base assumption of the California Title 24 code which requires multi-family residences to show that the building shell can reduce sound to achieve 45 dBA (Ldn) when the exterior environment exceeds 60 Ldn.

³ https://planning.lacounty.gov/assets/upl/project/willowbrook_feir_3-9-noise-and-vibration.pdf

⁴ http://lacounty-ca.elaws.us/code/coor_title12_ch12.08_pt4

50 feet, the site of the closest receiver, the King Drew Magnet High School. This exceeds the county vibration annoyance limits of 0.01 PPV, and results in a significant impact to sensitive receptors.

2-33
(cont.)

Impact Analyses are Incomplete

Construction Noise

There are a few errors with the construction noise analysis. The first is the that the sound levels are based on a fifteen-minute sample. This amount of time may not be representative of the loudest times of day, and thus the worst-case current noise environment.

2-34

First, the MND cites that “Specifically, the use of noise shielding and muffling devices on power construction equipment would reduce engine noise, causing noise generated by [this] equipment to be reduced by at least 5 dBA” The is cited in from EPA Document that is over 50 years old. Without further analysis, it could stand that most of these mufflers and recommendations have been become commonly used in standard construction practices, or that these measures are no longer relevant with newer generations of equipment.⁵

Next, the construction noise analysis also references the presence of a noise barrier in the construction noise model. While the MND is correct that this would provide up to 10 dBA of reduction for ground-floor receivers (it is worth noting that 10 dBA is on the high-end of expected reduction, but not unreasonable), the presence of multistory buildings may reduce the effectiveness of this sound barrier at higher elevations that can see over the barrier.

2-35

A sample calculation taken from Federal Highway Administration’s (FHWA) Roadway Construction Noise Model (RCNM) is presented below. Calculations were performed on the 3rd floor of the King Drew Magnet High School, which overlooks the construction site, 50 feet from the property line. The 83.2 dBA construction noise level the grading phase of the project was used, since the equipment for this will be required over the entire project site, as well as the worst-case 84.2 dBA level for demolition. Calculations were performed 20 feet back from the property line, at which 3rd floor receivers would have line-of-sight directly into the construction site over a 10 foot sound barrier.

Table 1: Modeled Construction Noise Levels at the 3rd Floor of the King Drew Magnet High School

Construction Phase	Source Level at 50 ft (dBA)	Calculated Noise Level at 76 ft (dBA)	County Noise Limit (dBA)	Amount over Noise Limit (dBA)	Impact?
Demolition	84	81	70	11	YES
Grading	83	80	70	10	YES

Based on the calculations above, a 10 dBA increase over the MND noise threshold would be present during construction. At such levels, more study in an EIR is required, and mitigation to reduce the impact is required.

⁵ USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, Page 3, PB 206717, 1971

A 25 ft tall sound barrier can be constructed, which would almost block complete line of sight for most of the sensitive locations into the construction site. This would make the construction noise analysis in the MND accurate, (except for the 5 dBA reduction achieved from mufflers, as previously mentioned) Hanging a sound barrier blanket at this height may be more feasible for the contractor

2-35
(cont.)

Traffic Noise Analysis Not Properly Cited and Validated

The 'Vehicle Noise Sources on Roadways' section of the MND outlines the analysis used for operational traffic noise. Table 17 lists existing CNELs that are used for the baseline levels. These numbers are not cited anywhere in the document and are not taken from measurements performed for this project. If they are taken from noise contours contained in a community plan, they should be cited as such.

Additionally, the analysis makes no mentioning the validating the model. The analysis used the FHWA Traffic Noise Model (TNM) program. The FHWA considers validation an important part of the noise model process⁶ for correct use of the software. Such a program requires traffic inputs in the model to obtain noise levels. While the traffic added by the project is cited and dealt with appropriately, there is no citation given on where the current baseline traffic levels come from. A typical approach is to build the model, match the measured levels to traffic counts obtained from a period as close as possible to the measurement date, and add the new traffic to the existing levels. Currently, there is no record of where the currently existing traffic comes from, or that the model was validated based on existing conditions. Without validation, there is no proof that the geometry of the model was built correctly.

2-36

Conclusions

There are several errors and omissions in the MND noise analysis. Correcting these would potentially identify several significant impacts which require mitigation.

Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG



Jack Meighan
Associate

Comments on Charles R. Drew University of Medicine and Science Health Professions Education Building Noise Analysis.docx

⁶ https://www.fhwa.dot.gov/Environment/noise/resources/reviewing_noise_analysis/#toc494123470, section 2.8



JACK MEIGHAN

Associate

Jack joined Wilson Ihrig in 2021 and is an experienced acoustics engineer with expertise in projects involving rail transit systems, highways, CEQA analysis, environmental noise reduction, mechanical drawing reviews, and construction noise and vibration mitigation. He has hands-on experience with project management, including client coordination and presentations, as well as in designing, developing, and testing MATLAB code used in acoustics applications. Additionally, his expertise includes taking field measurements, developing test plans and specifying, purchasing, setting up and repairing acoustic measurement equipment. He has experience in using Traffic Noise Model (TNM), CadnaA, EASE, Visual Basic, LabView, and CAD software.

Education

- B.S. in Mechanical Engineering, University of Southern California, Los Angeles, CA

Project Experience

Metro Regional Connector, Los Angeles CA

Planned, took, and processed measurements as part of a team to determine the effectiveness of floating slab trackwork for a new subway in downtown Los Angeles that travels below the Walt Disney Concert Hall and the Colburn School of Music.

Rodeo Credit Enterprise CEQA Analysis for New Construction, Palmdale, CA

Wrote an accepted proposal and executed it for a noise study project to determine noise mitigation requirements on a new housing development. Led all aspects of the project and managed the budget during all phases of project completion. Completed 5 separate projects of this type for this developer.

Blackhall Studios, Santa Clarita, CA

Led the vibration measurement effort for a new soundstage directly adjacent to an existing freight and commuter rail line. Tested equipment, processed data, and analyzed results to determine the vibration propagation through the soil to the proposed soundstage locations, and was part of the team that developed mitigation techniques for the office spaces directly next to the rail line.

Octavia Residential Condos CEQA Study, San Francisco, CA

Calculated the STC ratings for the proposed windows to meet Title 24 requirements, modeled the acoustic performance of floor and ceiling structures, researched noise codes, helped with a mechanical design review, and wrote a report summarizing the results for a new Condominium project being developed in San Francisco.

San Diego International Airport Terminal I Replacement, CA

Conducted interior noise and vibration measurements, analyzed measurement data to help determine project criteria, modeled the existing and future terminals in CadnaA, and was part of a team that did a complete HVAC analysis of the entire terminal, as part of a CEQA analysis where a new terminal for the airport is being designed.

Five Points Apartments Noise Study, Whittier, CA

Took measurements, researched sound data and solutions, and recommended mitigation for a new apartment complex that was located next to an existing car wash, as part of a CEQA review.

USC Ellison Vibration Survey, Los Angeles, CA

Conducted vibration measurements as part of a survey to determine the effectiveness of vibration isolation platforms that are used to insulate cell growth in a cancer research facility. Determined the effectiveness and presented this information to the client. Researched and recommended a permanent monitoring system so the client could view data in real time.

TEN50 Condos 'Popping' Noise Investigation, Los Angeles, CA

Was part of a team that investigated the noise source of an unwanted popping noise in luxury condos in Downtown Los Angeles. Helped isolate the noise source location with accelerometers to determine where vibrations were occurring first and used an acoustic camera to determine where in the condo the noise was coming from.

2000 University Project, Berkely, CA

Wrote a construction noise monitoring plan based on environmental noise calculations, wrote a report summarizing the results, and attending a meeting with the client to discuss options.

Bay Area Rapid Transit (BART) On-Track, CA, San Francisco Bay Area, CA*

Day to day project manager, responsible for meetings, presentations, and coordination with the client for an ongoing noise study on the BART system. Developed MATLAB code to process measurements and determine areas where high corrugation was present, contributing to excessively high in-car noise levels. Performed noise measurements inside both the right of way and the vehicle cabin, in addition to rail corrugation measurements.

California I-605/SR-60 Interchange Improvement, Los Angeles, CA*

Developed a noise model of the area that predicted sound levels for abatement design, in addition to conducting noise measurements and analysis. Led the Team in use of the FHWA Traffic Noise Model Software for the project, involving three major highways and two busy interchanges extending over 17 miles in southern California.

Sound Transit On-Track, Seattle, WA*

Took measurements, fixed equipment, and developed software in MATLAB to process Corrugation Analysis Trolley measurements as part of an ongoing noise study on the Sound Transit Link system. Tested vibration data to determine the best measurement and processing techniques to store the data in an online database for in-car measurements.

LA Metro CRRC Railcar Testing, Los Angeles, CA*

Led the effort to plan the measurements, determine measurement locations and finalize the test plan. Formulated a method to capture speed data directly from legacy train vehicles. Executed noise and vibration specification measurements for new rail cars delivered by CRRC.

City of Los Angeles, Pershing Square Station Rehabilitation Noise Monitoring, CA*

Built noise models, wrote a construction noise plan, and assisted in on-site construction noise issues as they arose for a renovation of the Pershing Square metro station in downtown Los

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* Work done prior to working for Wilson Ihrig

Angeles. Trained construction personnel in techniques for noise reduction and how to conduct noise monitoring measurements to meet project specifications.

City of Orange Metrolink Parking Garage Construction Monitoring, CA*

Wrote an adaptive management vibration monitoring plan, set up equipment to monitor live vibration levels, and generated weekly reports as part of an effort to build a new parking garage. Designed, planned, and completed measurements to predict and mitigate pile driving construction impacts at three historic building locations adjacent to the construction site. Coordinated with the client whenever an on-site problem arose.

LA Metro Westside Subway Construction, Los Angeles, CA*

Planned, organized, and processed noise measurements for the Purple Line extension construction. Implemented both long term microphones to measure noise levels and accelerometers to measure vibration levels in existing subway tunnels. Oversaw noise monitoring at sensitive construction sites for the project and worked with the contractor to find ways to reduce construction noise levels by approximately 10dB.

Montreal Réseau Express Métropolitain, Canada*

Conducted vibration propagation measurements used to create models to predict operational vibration levels for an under-construction transit line. Managed equipment, solved problems in the field, and wrote parts of the report summarizing the findings of the acoustic study.

NHCRP Barrier*

Took on-highway measurements and wrote, designed, developed, and tested MATLAB code to identify specific spectrograms to use for analyses for a project evaluating barrier reflected highway traffic noise differences in the presence of a single absorptive or reflective noise barrier.

Siemens Railcar Testing for Sound Transit, Seattle, WA*

Measured in-car noise and vibration for new rail cars delivered by Siemens. Developed new internal techniques for measurements based on the written specifications. Contributed to the team that helped identify issues that new cars had in meeting the Sound Transit specifications for noise and vibration. Participated in developing the test plan and specified then acquired new equipment for the measurement.

Toronto/Ontario Eglinton Crosstown Light Rail, Final Design, Canada*

Assisted in vibration propagation measurements, analysis, and recommendations for mitigation for a 12-mile light-rail line both on and under Eglinton Avenue. Set up and ran equipment for at-grade measurements with an impact hammer for underground measurements with an impact load cell that was used during pre-construction borehole drilling.

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** Work done prior to working for Wilson Ihrig*