CSU Northridge Global Hispanic Serving Institution Equity Innovation Hub

Initial Study – Mitigated Negative Declaration

prepared by

California State University, Northridge
Facilities Planning, Design & Construction
18111 Nordhoff Street
Northridge, California 91330-8219

prepared with the assistance of

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April 2022

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Initial Study

1. Project Title

Global Hispanic Serving Institution Equity Innovation Hub

2. Lead Agency Name and Address

California State University, Northridge
Facilities Planning, Design & Construction
18111 Nordhoff Street
Northridge, California 91330-8219

3. Contact Person

Mary Clare Smithson, P.E., Capital Programs Manager
(818) 677-2561

4. Project Sponsor's Name and Address

Facilities Planning, Design & Construction
California State University, Northridge
18111 Nordhoff Street
Northridge, California 91330-8219

5. Project Location

The project site is part of the California State University, Northridge (CSUN) campus, located at 18111 Nordhoff Street in the Northridge community of the City of Los Angeles.

The site is bounded by Lindley Avenue/East University Drive to the east, a parking lot to the north, the Jacaranda Hall academic building to the west, and Jacaranda Walk to the south. Figure 1 shows the regional location and Figure 2 shows the project location and an aerial view of the project site. The proposed building would occupy a project site in the central portion of the campus (Assessor's Parcel Number [APN] 2764-014-906). Currently, the project site is developed as a parking lot adjacent to Jacaranda Hall.

6. Surrounding Land Uses and Setting

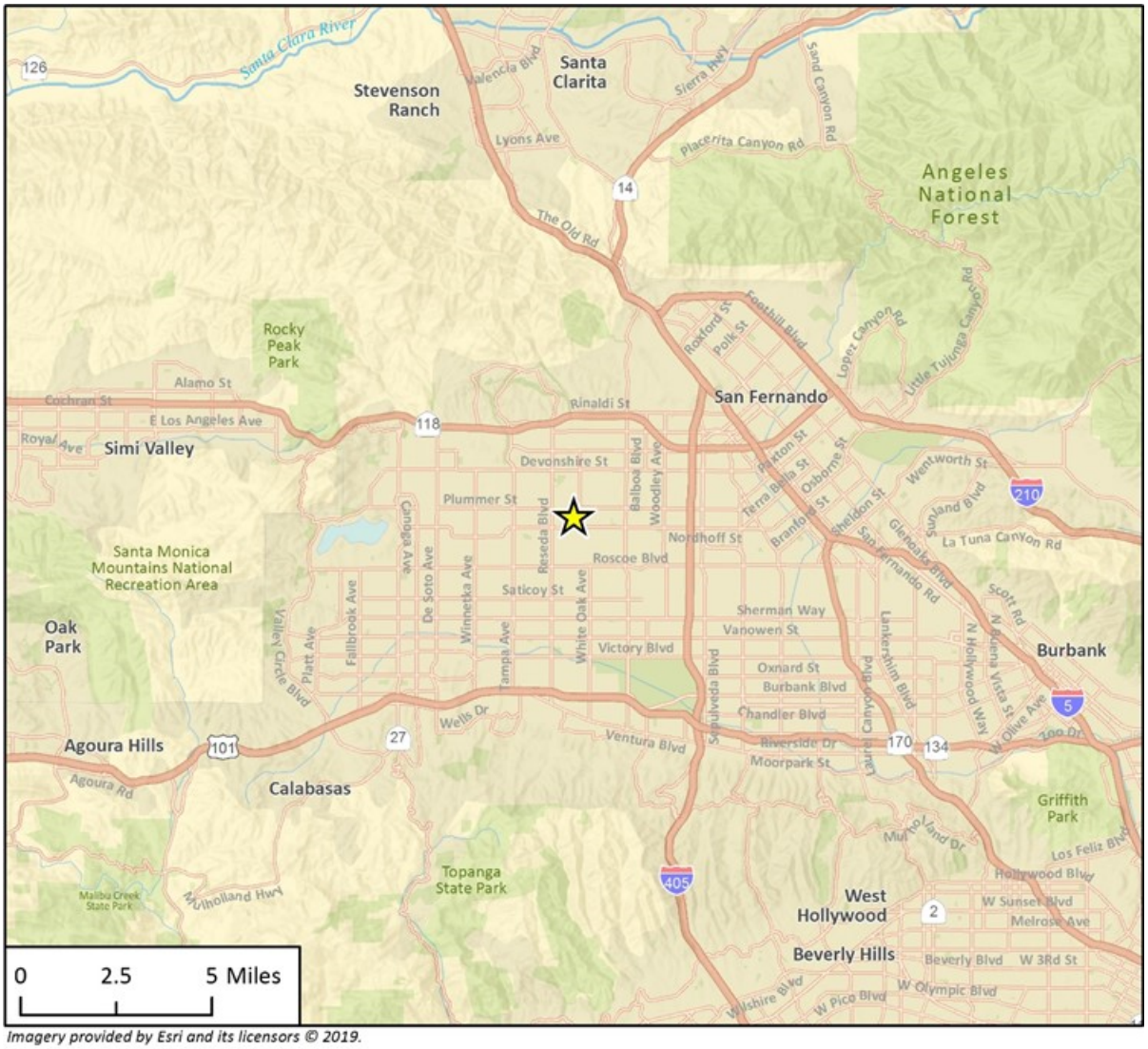
The entire CSUN campus comprises 353 acres located between Darby Avenue to the west, Zelzah Avenue to the east, Nordhoff Street to the south and Devonshire Street to the north. The project site is surrounded by other CSUN campus buildings and parking lots. Redwood Hall, which houses the Matadome, the Activity Center, Kinesiology studies, and other indoor athletic facilities, is located across Lindley Avenue/East University Drive to the east. An existing surface parking lot is located north of the project. Sequoia Hall College of Health and Human Development is located to

the south. Directly west of the project site is the four-story Jacaranda Hall, which houses a mix of classrooms, labs, and an auditorium serving the engineering, instruction, computer science, and health services programs per the CSU website. Figure 2 provides the Project Location Map and Photographs 1-5 show the project site and surrounding uses.

7. Project Characteristics

The project proposes a new approximately 35,000 gross square foot (gsf) (21,000 assignable-square-foot [asf]) two-story building to replace a portion of surface parking lot E5 on the east side of the existing Jacaranda Hall. The project would house the Global Hispanic Serving Institution (HSI) Equity Innovation Hub on the California State University, Northridge Campus. Additional planned site improvements include outdoor gathering and seating areas. The Global HSI Equity Innovation Hub (EIH) would be located on what is currently the E5 Parking Lot along Lindley Avenue/East University Drive. The project site is approximately 60,000 sf and the new two-story building would be less than 50 feet tall. The primary building entry would be located off of Jacaranda Walk, near its intersection with East University Drive/Lindley Avenue. Figure 3 shows the proposed conceptual site plan.

Figure 1 Regional Location



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Project Location

N

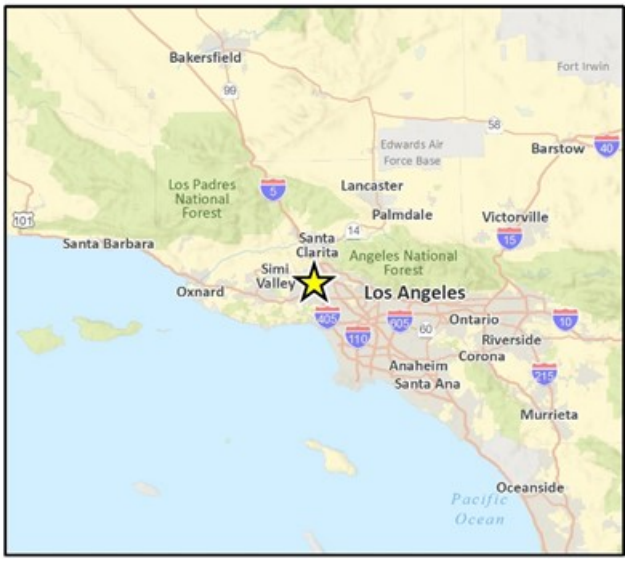
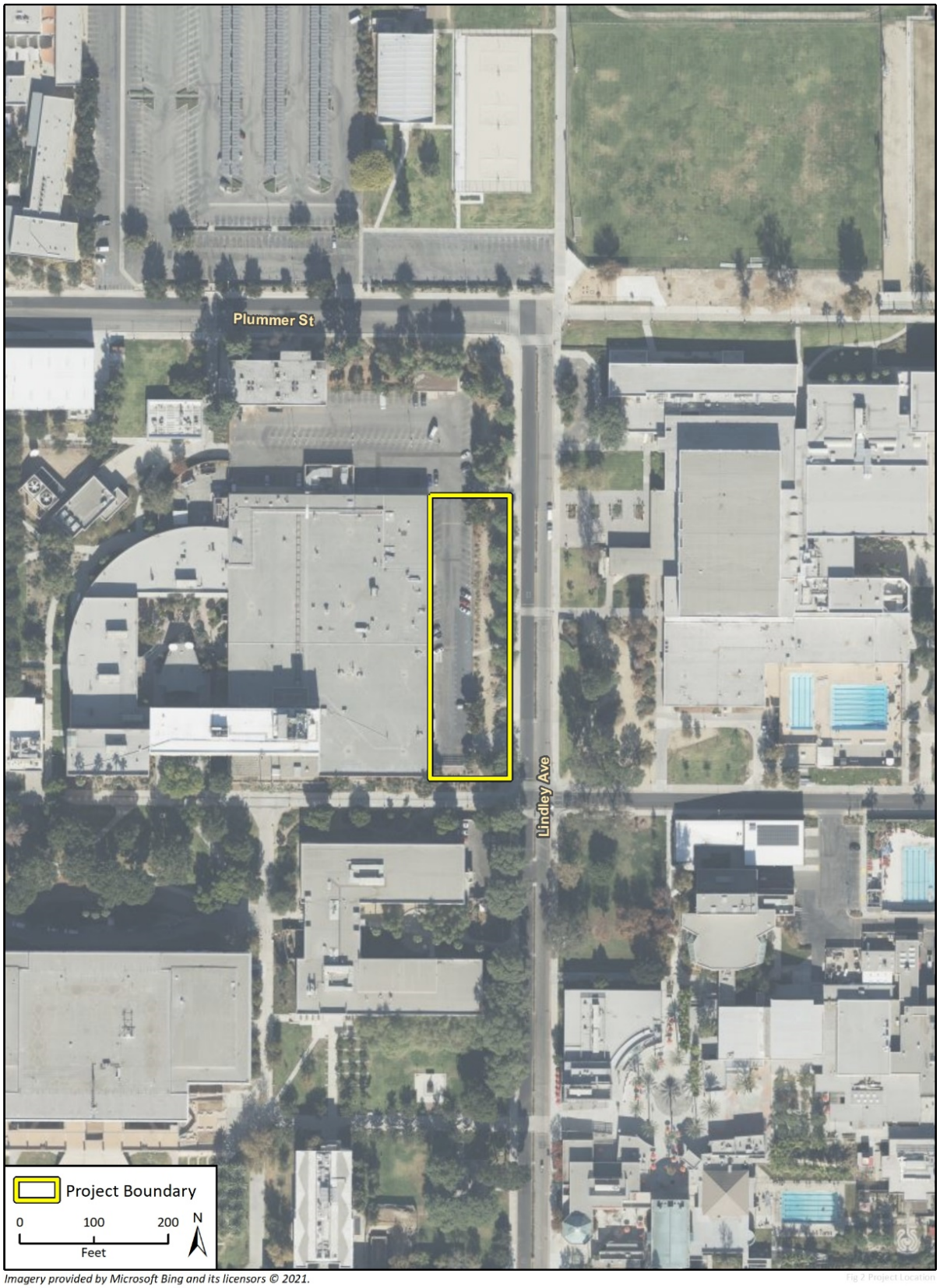


Figure 2 Project Location



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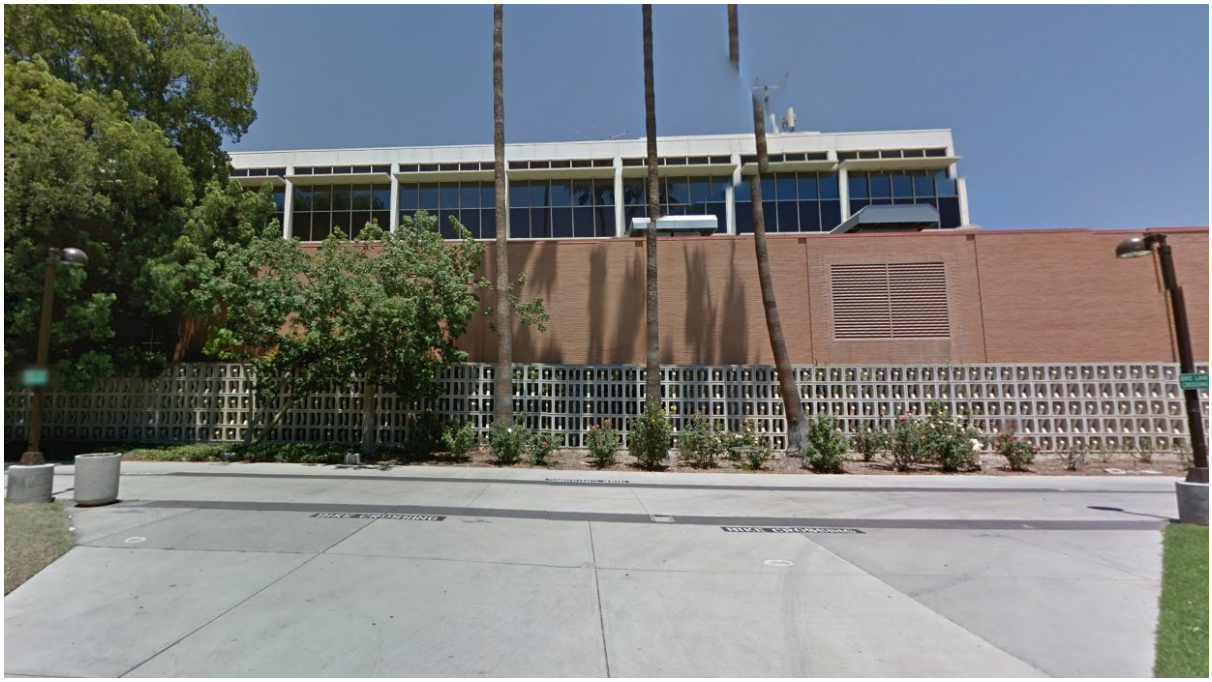
Photograph 1 Project site (Parking Lot E5) looking west from East University Drive/ Lindley Avenue

Photograph 2 Jacaranda Hall located directly west of the project site



Photograph 3 Jacaranda Walk located directly south of the project site

Photograph 4 Existing Parking Lot E-5 located directly north of the project site

Photograph 5 Redwood Hall directly east of the project site across East University Drive/Lindley Avenue

8. CSUN Master Plan Designation

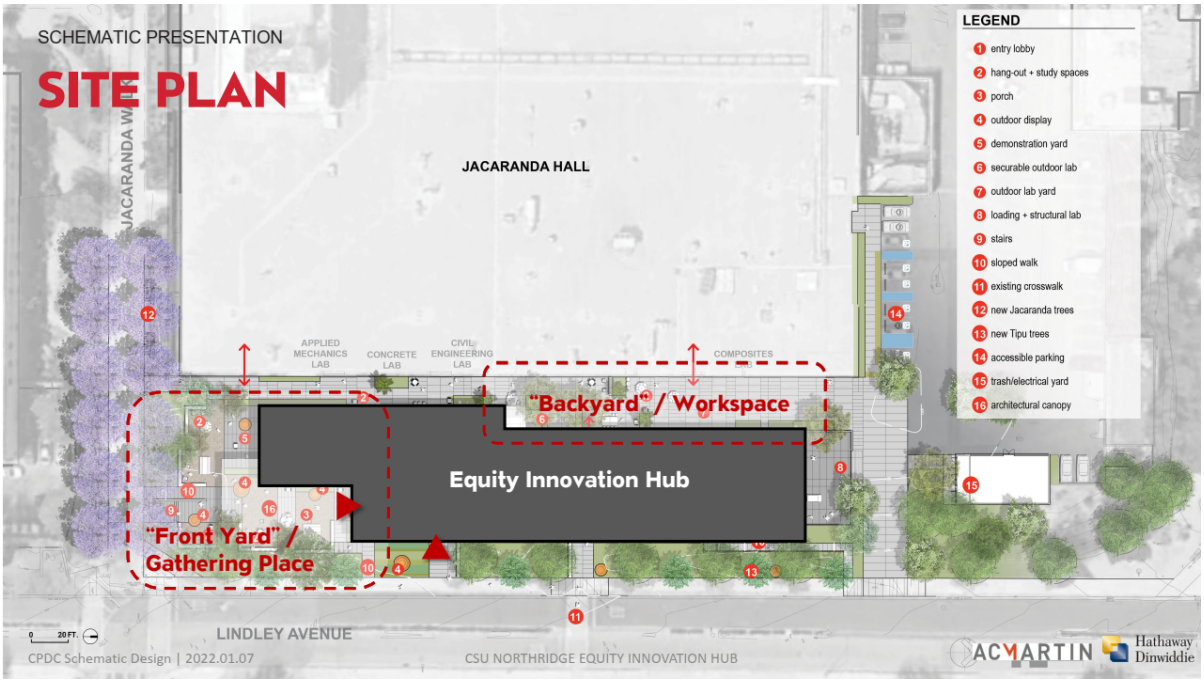
L-E5: Academic Core Parking Lot

9. Description of Project

The project would provide a new campus building on the site of an existing surface parking lot on the east side of Jacaranda Hall. The buildable site area is approximately 60,000 sf and the new two-story building would be less than 50 feet tall. The primary building entry would be located along Jacaranda Walk, near its intersection with East University Drive/Lindley Avenue (Figure 3).

The architectural style for the Global HSI EIH building would be consistent with Campus Building Guidelines. These Guidelines strive to maintain and enhance the campus as an attractive, accessible, safe and functional environment for learning, living, culture and recreation for students, faculty, and staff (CSUN 2005a). The CSUN Master Plan Design Guidelines call for locating buildings of similar functions into one area, focusing on common open space areas and accessible circulation for pedestrian and well as vehicles. Designed as a "foreground" building in the CSUN campus Academic Core, the proposed project will be consistent with the principles in the CSUN Master Plan Design Guidelines. The proposed building form and massing would be consistent with development requirements for Foreground buildings on campus, such that its size, massing, color, architectural features and building materials can serve as a point of reference to Jacaranda Hall.

Figure 3 Conceptual Site Plan



In addition, the project would include site improvements such as outdoor gathering and seating areas, shade trees and landscaping. Outdoor areas would consist of a "front yard/gathering place" that include an architectural canopy, porch, and outdoor display as well as a "backyard/workspace" that will include hang-out/study spaces and an outdoor lab yard. The project would provide the necessary accessible paths of travel to the new facility as well as maintain or improve access to existing adjacent buildings, parking areas, open spaces, and public edges. The entire site would use Universal Design to allow for all campus visitors to move through, inhabit and use the outdoor spaces with ease.

10. Landscaping and Site Design

The exterior of the proposed project would allow the new building to provide a prominent east façade in comparison to the current east facing façade of Jacaranda Hall, which is an unassuming plain brick wall.

The building massing and entry would create a campus-oriented court along Jacaranda Walk. Anticipated outdoor spaces would offer interactive programming as well as areas where students can study and lounge. The site improvements would also create outdoor spaces for visitors to connect and provide gathering spaces in a variety of sizes to accommodate individuals, small group activities and large group events. Outdoor spaces in both the "front yard/gathering place" as well as the "backyard/workspace" would be properly shaded to remain usable throughout the year. A courtyard would be created between Jacaranda Hall and the project in a shared outdoor space to be utilized by the occupants of both buildings. Highly reflective hardscape materials and a high reflectance roof would be specified to reduce the heat island effect on the site. Roll-up doors from the engineering labs and makerspace would provide direct access to this backyard/workspace, as well as access to existing labs in Jacaranda Hall. The planting design for the project site would be designed to be complementary to existing landscapes on campus. The Campus Master Plan divides

the campus landscape into formal and informal open space. Formal open spaces are intended to be located in quads, courtyards, and patios in order to support the enjoyment and functionality of these spaces. Informal open spaces reflect the backdrop of the campus environs. The project would incorporate both formal and informal open spaces.

New landscaping would be incorporated into the project and drought-tolerant and native plants would be planted. The plant palette would include low-water, low-maintenance and long- lived plant materials that thrive in the Southern California landscape, particularly the San Fernando Valley. Plant material would be chosen based on the published Campus Master Plan districts and green spaces would be designed such that there is access and flexibility of the outdoor spaces around the proposed project. Additionally, at least 25 percent of the total project site would include native or low water demand vegetations and a target of at least at least 50 percent outdoor water use reduction by native landscaping and efficient irrigation systems.

Although existing shade trees would be removed from the project site during construction, they would be replaced on or near the site with trees providing an equivalent foliage coverage. This would include new Tipu trees planted along Lindley Avenue and Jacaranda trees planted along Jacaranda Walk. A three-inch layer of mulch would be used in all planting areas so that there is ease of maintenance with weeds, soil temperature and optimum levels of soil moisture.

11. Site Access and Parking

The project site would be accessible from Jacaranda Walk, an on-campus pedestrian path adjacent to the southern boundary of the site. Jacaranda Walk would provide access between the project site and nearby Arbor Court, Sequoia Hall, University Library, the Michael D. Eisner College of Education, and the greater CSUN campus. The project's nearest vehicular parking would be provided in the northern portion of Parking Lot E5, north of the project site, which would remain accessible via the existing ingress/egress driveway off East University Drive/ Lindley Avenue (Figure 3). Additional parking would be provided in nearby parking structures and lots around the CSUN campus. The project does not include any new parking spaces, additional electric vehicle (EV) parking/charging stations, or additional bicycle parking spaces.

Since the project site would redevelop the southern portion of existing Parking Lot E5, parking spaces including accessible and EV charging spaces would be displaced. Multiple EV charging stations are currently located in other existing parking lots and structures, and additional electric power stations are being installed on campus. Although the project would displace approximately 70 parking spaces including 10 accessible spaces, existing and planned on campus parking would be sufficient for the proposed project. In addition, a new 1,500 stall parking structure, G6, was recently completed in 2021, adding 1,200 new campus parking spaces within 1000 feet of the project site. Multiple bicycle parking spaces exist on campus and in the vicinity of Jacaranda Hall and the proposed project site. These additional car and bicycle parking spaces would more than make up for the spaces displaced by this project. Furthermore, currently there are more accessible spots on campus than are required.

12. Drainage

The project site is an existing developed parking lot, which includes concrete walkways adjacent to a landscaped parkway along East University Drive/Lindley Avenue. The landscaped parkway contains a

swale and a moderate slope up to East University Drive/Lindley Avenue along the eastern edge of the site. The project site generally slopes from the northwest to the southeast.

Grading would be designed to meet existing conditions or provide accessible transition in hardscape and landscape. A paving and grading plan, horizontal control plan, paving and grading details including site sections at joining conditions, notes and specifications to adequately identify all site improvements would be prepared after project approval. Drainage would not be allowed to collect anywhere on the project site or flow uncontrolled over any descending slope. CSUN is a nontraditional Municipal Separate Storm Sewer System (MS4) Small Permittee. The General Permit for the Discharge of Storm Water from Small MS4s requires development and implementation of a Storm Water Management Program (SWMP) that describes best management practices (BMPs), measurable goals, a schedule for implementation, and assignment of responsibility for implementation. The CSUN campus has an existing SWMP, and development of the Equity Innovation Center project site would comply with the conditions of that SWMP.

Recommendations provided in the site-specific Geotechnical Report would be incorporated in the grading and paving plans and specifications. Precise grading would be designed to blend with the existing grades and join at the pedestrian access points. Surface drainage would be directed away from proposed and existing buildings and no ponding areas would be allowed. The new building would also include roof drainage, such as downspouts and scuppers, and stormwater would be collected and transferred to the street stormwater system.

13. Project Construction

The proposed building would be built to the standards of IIA Type (Title 24) construction per the California Building Code (CBC). Construction is anticipated to start in January 2023 and would occur over an approximately 18-month period. It is anticipated that soil required for grading would be balanced on site and no soil import or export or any no piles for the foundation would be required. The proposed project would have a slab on-grade concrete foundation. Per the geotechnical report prepared for the project, existing soil conditions at the site include approximately three to seven feet of fill material underlain with alluvial soils comprised of sand, silt and clay (Geotechnologies Inc. 2021). Since the fill material is not suitable to support the building's foundation, it would be removed/over excavated to a minimum depth of three feet below the foundations and reused for re-compaction.

14. Project Objectives

The project would focus on closing equity gaps in Science, Technology Engineering and Mathematics (STEM) degree pathways and inspiring Latinx and other students who have been historically underrepresented in STEM to pursue high-demand careers in science, technology, engineering, and mathematics. Spaces to be incorporated into the building are anticipated to include the following:

- Shared Building Resources;
- Outreach Programming Spaces;
- Next Generation Success Center Spaces;
- Campus & Community Maker Space; and
- Research Labs

Shared Building Resources

Shared building resources within the project would encompass the public spaces and building support spaces which include storage, loading spaces, etc. Public spaces are anticipated to include the lobby/entry, a showcase/exhibit space, and a variety of meeting and gathering spaces including a large presentation/meeting room, small student huddle rooms, and an open student study area.

Outreach Programming Spaces

The Outreach Programming Spaces would incorporate an Outreach Discovery Lab. The space would include large worktables, tiered seating, and an Emerging Technologies Corner to provide access to new technology and would also serve as additional multi-use project workspace.

Next Generation Student Success Center

The Next Generation Student Success Center would incorporate an open concept work and study area, small meeting rooms and offices, and support spaces, along with a check-in desk and a staff/supervisor workstation.

Campus & Community Makerspace

The Campus & Community Makerspace would include a project work area, 3D prototyping space, supervised shop fabrication, and supporting spaces such as tools check-out and student and staff workspaces.

Research Labs

The project may also include laboratory spaces for design/digital capture/AR, fabrication, emerging advanced materials, machining and testing, high-bay/structural testing, and incubator/research projects.

15. Required Approvals

CSUN, is the lead agency with responsibility for approving the project. The project will require the following CSU review and approvals:

- Minor Revision to the Campus Master Plan
- Schematic Design Approval by Board of Trustees

16. Other Public Agencies Whose Approval is Required

Other project approvals may include:

- Division of the State Architect (accessibility compliance)
- State Fire Marshal (fire/life safety)
- City of Los Angeles Fire Department (access)

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination

Based on this initial evaluation:

☐ I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the 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 project could have a significant effect on the environment, because all potential 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 project, nothing further is required.

Signature	March 8, 2022 Date
Kenneth E Rosenthal Printed Name	Associate Vice President, Facilities Development & Operations Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in PRC Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	■	☐
c. In non-urbanized 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 a 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?	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	■	☐

A scenic vista is defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. For purposes of determining significance under the California Environmental Quality Act (CEQA), scenic resources are the visible natural and cultural features of the landscape that contribute to the public's enjoyment of the environment. Public views are those that are experienced from a publicly accessible vantage point, such as a roadway or public park.

a. Would the project have a substantial adverse effect on a scenic vista?

The project site is located on the CSUN campus within a developed urban area of Los Angeles County. There are no scenic vistas in the immediate vicinity of the project site. The Santa Susana Mountains, which could be considered a distant scenic vista, are located to the north of the project site and are visible from certain on-campus vantage points. Although the project would include a new two-story building on the east side of Jacaranda Hall, it would not obstruct views of the Santa Susana Mountains from the project site given the developed nature of the project site and CSUN

campus. Since the project would not obstruct any public views of natural features, impacts to scenic vistas would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is located in an urban area and does not contain any scenic resources, nor is it in proximity to any such resources. The project site is not on or near any National Register of Historic Places, California State Historical Landmarks, or California Historical Resources or Points of Interest (California State Parks 2021). The nearest freeways to the project site are California State Route (SR) 118 and Interstate 405 (I-405) located approximately three miles north and east of the project site, respectively. However, the project site is not visible from either freeway. Moreover, according to the California Department of Transportation (Caltrans), these are not officially designated or eligible state scenic highways (Caltrans 2021).

Demolition activities required for project construction would involve removal of existing trees and shrubs from the project site including landscaping in the parkway along East University Drive/Lindley Avenue on the east side of the project and Jacaranda Walk on the south side of the project. However, the project would also replace these screening trees with new landscaping post project construction. Given the urban, developed nature of the site, the project would not substantially degrade views of mature trees, rock outcroppings, or any other scenic resources along or visible from a scenic highway. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project, in non-urbanized 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 a 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?

The project would involve the construction of a new, approximately 35,000 gsf building adjacent to Jacaranda Hall, between Lindley Avenue and Jacaranda Hall. The project site is located on the CSUN campus in an urbanized area. It is currently developed with a surface parking lot with a few shade trees, shrubs and landscaping along Plummer Street, East University Drive/Lindley Avenue and Jacaranda Walk, adjacent to the project site. The nearest residences are located approximately 1,000 feet north of the project site across Halsted Street and approximately 1,500 feet to the east across Zelzah Avenue. Most of these one-story residences have trees on their property, which currently obstruct their direct line-of-sight of the CSUN campus and the project site. Therefore, the existing visual character or quality of public views of the site and its surroundings would not be adversely impacted by development of the project.

The project would be consistent with applicable zoning regulations governing scenic quality described in the CSUN 2005 Master Plan and would not obstruct any existing vistas on campus. All applicable policies and review processes related to aesthetics would continue to apply to development under the project. Therefore, the project would not have a substantial adverse effect on visual character or quality of the CSUN campus and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The project would have indoor lighting in indoor amenity areas, as well as exterior lighting for outdoor gathering and seating areas. The project would utilize reflective materials, such as glass surfaces in its windows, which could create glare during daylight hours. The project would also generate new vehicle traffic to and from the project site that would contribute light from vehicle headlamps and glare from vehicle surfaces and windows.

The project site is in a fully urbanized area, which experiences high levels of nighttime lighting. Existing uses in proximity to the project site include other CSUN campus uses to the east and south of the project site. The nearest receptors that are sensitive to light and glare are single-family residences located approximately 1,000 feet north of the project site across Halsted Street and 1,400 feet east of Zelzah Avenue. However, given the distance from the site, the project would not substantially illuminate the existing residences. Furthermore, a majority of room lights at the site would be off at night which would further minimize lighting and glare in the project area during nighttime hours. Therefore, though the project would create a new source of light and glare on the CSUN campus, it would not adversely affect daytime or nighttime views and lighting in the area; impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant 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 maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)); timberland (as defined by PRC Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
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?	☐	☐	☐	■

a. Would the project convert Prime Farmland, Unique Farmland, 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?

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The project would include the construction of a new approximately 35,000 sf building on the east side of Jacaranda Hall. The project site is currently developed as an existing surface parking lot. The project site is designated "L-E5: Academic Core Parking Lot" by the CSUN 2035 Master Plan Update (CSUN 2005a). Although the perimeter of the parking lot and adjacent parkway is landscaped with shrubs and trees, the site does not constitute farmland, agricultural use, forest land or timberland. According to the California Department of Conservation's (DOC) 2016 map of the State of California Williamson Act Contract Land shows that the neighborhood of Northridge, along with most of Los Angeles County is designated as "Non-enrolled land" and is land not enrolled in a Williamson Act contract and not mapped by Farmland Mapping & Monitoring Program (FMMP). It is also not inside an area of "prime farmland" (DOC 2016). Therefore, the project would not involve any development that would result in the conversion of designated farmland to non-agricultural use. There would be no impact related to farmland.

Additionally, neither the project site nor the surrounding parcels are zoned for forest land or timberland, and there is no timberland production at the project site. Therefore, the project would have no impact on such resources or conflict with existing zoning for agricultural land. The project site is in an urbanized area and would be located on CSUN's campus that does not have any forest land or timber land. Therefore, the project would have no impact related to the conversion of farmland to non-agricultural use land.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

Overview of Air Pollution

The Federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, include carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),[1] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles in the atmosphere.

[1] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOCs are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this document.

Stationary air pollutant sources can be divided into two major subcategories:

- Point sources: Pollutants that are generated at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources: Pollutants that are widely distributed and originate from such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile air pollutant sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources that include aircraft, ships, trains, and self-propelled construction equipment.

Air Quality Standards and Attainment

The project site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SCAB is classified as being in "attainment" or "nonattainment." In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 1, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SCAB is in non-attainment for ozone and $PM_{2.5}$ federal standards. Also, the SCAB is in non-attainment for the state standard for PM_{10} and is designated unclassifiable or in attainment for all other federal and state standards. The Los Angeles County portion of the SCAB is also designated non-attainment for lead (SCAQMD 2016) as a result of stationary and mobile sources in the SCAB.

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[1]
Suspended particulate matter ($PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.
Lead	(1) Short-term overexposures: lead poisoning can cause (a) anemia, (b) weakness, (c) kidney damage, and (d) brain damage; (2) long-term exposures: long-term exposure to lead increases risk for (a) high blood pressure, (b) heart disease, (c) kidney failure, and (d) reduced fertility.

Source: USEPA 2021a

Current Air Quality

The SCAQMD operates a network of air quality monitoring stations throughout the SCAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The monitoring station closest to the project site is the Reseda monitoring station, located at 18330 Gault Street, approximately three miles south of the project site. This station monitors ozone, $PM_{2.5}$, and NO_2 concentrations.

The closest station that monitors PM_{10} is the Santa Clarita monitoring station at 22224 Placerita Canyon Road, approximately ten miles north of the project site.

The closest station that monitors lead is in City of Los Angeles at 1630 North Main Street, approximately 21 miles southwest of the project site.

Table 2 indicates the number of days that each of the federal and State standards have been exceeded at these stations in each of the last three years for which data is available. The data collected at these stations indicated that the federal and State 8-hour ozone standards were exceeded in all three years (2018, 2019, and 2020), and the worst state hour ozone standard was exceeded in 2020 with a concentration of 142 parts per billion. In addition, the state 24-hour PM_{10} was exceeded in 2019 and 2020, while the federal 24-hour $PM_{2.5}$ standard was exceeded in 2018 and 2020. No exceedances of the NO_2 and lead standard were reported.

Table 2 Ambient Air Quality at the Nearest Monitoring Stations

Pollutant	2018	2019	2020
Ozone (ppm), 8-Hour Average[1]	0.101	0.094	0.115
Number of days of state and federal exceedances (>0.070 ppm)	49	34	62
Ozone (ppm), Worst 1-Hour[1]	0.120	0.122	0.142
Number of days of state exceedances (>0.09 ppm)	14	14	33
Nitrogen Dioxide (ppm), Worst Hour[1]	0.057	0.064	0.050
Number of days of state exceedances (>0.18 ppm)	0	0	0
Particulate Matter <10 microns (µg/m^3)[2], Worst 24 Hours	49.4	62.9	67.8
Number of days of state exceedances (>50 µg/m^3)	0	1	1
Number of days of federal exceedances (>150 µg/m^3)	0	0	0
Particulate Matter <2.5 microns (µg/m^3)[1], Worst 24 Hours	38.9	30	73.8
Number of days of federal exceedances (>25 µg/m^3)	1	0	3
Lead (µg/m^3), 3-month average[3]	0.023	0.019	0.026
Number of days of federal exceedances (>0.15 µg/m^3)	0	0	0

ppm = parts per million; µg/m^3 = micrograms per cubic meter

[1] Measurements taken from the Reseda monitoring station at 18330 Gault Street

[2] Measurements taken from the Santa Clarita monitoring station at 22224 Placerita Canyon Road

[3] Measurements taken from the 1630 North Main Street monitoring station

Source: CARB 2021a, USEPA 2021b

Air Quality Management

Since the SCAB currently exceeds ozone and $PM_{2.5}$ NAAQS standard, the SCAQMD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS. The SCAQMD 2016 Air Quality Management Plan (2016 AQMP) is a regional blueprint designed to meet the NAAQS and demonstrate how attainment will be reached. The 2016 AQMP represents a thorough analysis of existing and potential regulatory control options, includes available, proven, and cost-effective strategies, and seeks to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP determines that, with implementation of the proposed control strategy, the SCAB can expect to reach attainment of the 1997 8-hour ozone standard by July 15, 2024, and the 2006 annual $PM_{2.5}$ by December 31, 2021[2]. The 2006 24-hour $PM_{2.5}$ did not meet the attainment date of December 31, 2019, which required SCAQMD to revise plan to meet standard as early as possible. SCAQMD expects the 2006 24-hour $PM_{2.5}$ to achieve attainment status by 2023. (SCAQMD 2017; SCAQMD 2020).

Air Pollutant Emission Thresholds

The SCAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions in its *CEQA Air Quality Handbook* (1993). This Initial Study conforms to the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993) and supplemental guidance

[2] SCAQMD achieved attainment status for 2006 annual $PM_{2.5}$ and is requesting redesignation (SCAQMD 2021).

provided by the SCAQMD, including recommended thresholds for emissions associated with construction and operation of the project (SCAQMD 2019).

Table 3 presents the recommended significance thresholds for construction and operational-related criteria air pollutant and precursor emissions. These thresholds represent the levels at and above which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to regionally significant air quality impacts within the SCAB. For the purposes of this analysis, the project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 3.

Table 3 SCAQMD Regional Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of VOC	55 pounds per day of VOC
100 pounds per day of NO_X	55 pounds per day of NO_X
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO_X	150 pounds per day of SO_X
150 pounds per day of PM_{10}	150 pounds per day of PM_{10}
55 pounds per day of $PM_{2.5}$	55 pounds per day of $PM_{2.5}$

lbs/day = pounds per day, NOX = nitrogen oxides, CO = carbon monoxide, PM10 = particulate matter 10 microns in diameter or less, PM2.5

= particulate matter 2.5 microns or less in diameter

Source: SCAQMD 2019

The SCAQMD has developed Localized Significance Thresholds (LST) in response to concerns regarding the exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor. The LSTs take into consideration ambient concentrations in each source receptor area (SRA), project size, and distance to the sensitive receptor. LSTs have been developed for nitrogen oxides (NO_X), carbon monoxide (CO), PM_{10}, and $PM_{2.5}$. However, LSTs only apply to emissions in a fixed stationary location, including idling emissions during construction and operation activities. As a result, LSTs are not applied to mobile sources, such as cars on a roadway (SCAQMD 2008). LSTs have been developed for emissions in areas up to five acres in size, with air pollutant modeling recommended for activity in larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres (SCAQMD 2009). LSTs are provided for distances of 82 to 1,640 feet from the project disturbance boundary to the sensitive receptors.

Construction of the project would disturb an area of approximately 1.38 acres. Therefore, this analysis utilizes the one-acre LSTs. Construction activity would occur approximately 950 feet from the closest sensitive receptor, which are single-family residences east of the project site. The analysis below uses the LST values for sensitive receptor distance of 950 feet. The project LST values were interpolated between the 200-and 500-meter values for a one-acre project from the *Final LST Methodology* document using the project's sensitive receptor distance above. In addition, the project is in SRA-7 (East San Fernando Valley). LSTs for construction in SRA-7 on a one-acre site with a receptor 950 feet away are shown in Table 4.

Table 4 SCAQMD LSTs for Construction (SRA 7)

Pollutant	Allowable Emissions for a 1-acre Site in SRA 7 for a Receptor 950 Feet Away (lbs/day)[1]
Gradual conversion of NO_X to NO_2	143
CO	3,739
PM_{10}	79
$PM_{2.5}$	33

lbs/day = pounds per day, NOX = nitrogen oxides, CO = carbon monoxide, PM10 = particulate matter 10 microns in diameter or less, PM2.5 = particulate matter 2.5 microns or less in diameter

[1] LST values for a project size of one acre with a receptor distance of 290 meters by interpolating SCAQMD Final LST Methodology between 200 and 500 meters.

Source: SCAQMD 2009

Also, SCAQMD has developed significance thresholds for the emissions of TACs based on health risks associated with elevated exposure to such compounds. For carcinogenic compounds, cancer risk is assessed in terms of incremental excess cancer risk. A project would result in a potentially significant impact if it would generate an incremental excess cancer risk of 10 in 1 million (1×10^{-6}) or a cancer burden of 0.5 excess cancer cases in areas exceeding a one-in-one-million risk. In addition, non-carcinogenic health risks are assessed in terms of a hazard index. A project would result in a potentially significant impact if it would result in a chronic and acute hazard index greater than 1.0 (SCAQMD 2019).

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., Educational, Residential, Commercial, etc.), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under the *Project Description*.

It is anticipated that construction of the project would occur over approximately 20 months. Construction emissions modeled included those generated by construction equipment used onsite and those generated by vehicle trips traveling to and from the site, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the project was analyzed based on the applicant-provided construction schedule and the default construction equipment list in CalEEMod. The model included assuming all construction equipment used would be diesel-powered and approximately 10 cubic yards of material would be exported and imported to and from the site during the site preparation phase. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with SCAQMD's Rule 403, *Fugitive Dust Control*, and Rule 1113, *Architectural Coating*, which provide best available dust control measures for earthwork-related construction activities and limits the VOCs of architectural coatings (i.e., paint) used in the SCAQMD region.

Operational emissions modeled included mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. According to the vehicles miles traveled (VMT) screening analysis conducted for the project, the project would generate 20 vehicle trips and 4 bus trips daily, for a total of 24 daily vehicle trips (Fehr & Peers 2021). The model uses these trip assumptions from the VMT

analysis to calculate mobile emissions. In addition, the model's fleet mix was adjusted to only accommodate light-duty automobile and bus trips generated by the project Emissions attributed to energy use include natural gas consumption by appliances as well as for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The 2016 AQMP, adopted in March 2017, is a regional and multi-agency effort between SCAQMD, CARB, Southern California Association of Governments (SCAG), and the USEPA. State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Connect SoCal (SCAG's 2020 Regional Transportation Plan/Sustainable Communities Strategy), and updated emission inventory methodologies for various source categories (SCAQMD 2020).[3] A significant air quality impact may occur if the project is not consistent with the applicable 2016 AQMP or would in some way represent a substantial hindrance to employing the polices or obtaining the goals of that plan. According to the SCAQMD, to be consistent with the AQMP, a project must conform to the local General Plan and must not result in or contribute to an exceedance of a jurisdiction's projected population, housing, or employment growth forecast.

The 2016 AQMP was developed using SCAG's population forecasts. According The city of Los Angeles has a current population of 3,923,341 (DOF 2021). The 2016 Regional Transportation Plan/Sustainable Communities Strategy forecasted that the population of Los Angeles will grow to 4,609,400 by 2040, which is an increase of 686,059, or 15 percent (SCAG 2016).

As discussed in Section 12, *Population and Housing*, the project does not include long-term residential development and, therefore, would not directly cause population growth. The proposed development would serve students currently attending CSUN. It is unclear if the project would create jobs that could indirectly cause population growth through employees that may relocate to the project area. However, it is anticipated that any new employees would mainly come from the local existing labor workforce and generally would not relocate to the neighborhood of Northridge. Therefore, the project would not cause a substantial increase in population. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Air pollution is largely a cumulative impact because the nonattainment status of regional pollutants is a result of past and present development. The SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. If a project's

[3] On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the SIP was adopted prior to this date and relies on the demographic and growth forecasts of the 2016-2040 RTP/SCS. Therefore, these forecasts are utilized in the analysis of the project's consistency with the AQMP.

emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

The SCAB has been designated as a federal nonattainment area for ozone and $PM_{2.5}$ and a state nonattainment area for ozone, PM_{10}, and $PM_{2.5}$. The Los Angeles County portion of the SCAB is designated in nonattainment for lead, as well. The SCAB is designated unclassifiable or in attainment for all other federal and State standards. The project does not include any stationary sources of lead emissions. Therefore, implementation of the project would not result in substantial emissions of lead and this pollutant is not discussed further in this analysis.

The following analysis evaluates air pollutant emissions generated by project construction and operation compared to the regional significance thresholds established by SCAQMD in the *CEQA Air Quality Handbook* (1993), as well as the SCAQMD LSTs. Construction and operational air pollutant emissions were modeled using CalEEMod, version 2020.4.0.

Construction Emissions

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction equipment and construction vehicles in addition to VOC emissions that would be released during the drying phase of architectural coating. Table 5 summarizes the estimated maximum daily emissions of pollutants during project construction.

As shown therein, VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds or the LST screening thresholds. Therefore, project construction would be adequately controlled by existing regulations, and the project would not result in substantial air pollutant emissions. Because air pollutant emissions generated by project construction would not exceed SCAQMD's regional significance thresholds or LST screening thresholds, project construction would not contribute substantially to an existing or projected air quality violation for which the region is in nonattainment. Impacts from construction emissions would be less than significant.

Table 5 Estimated Maximum Daily Construction Emissions

	Maximum Emissions (lbs/day)					
Construction Year	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2023	3	30	24	<1	7	4
2024	3	18	24	<1	1	1
Maximum Emissions (lbs/day)	**3**	**30**	**24**	<1	**7**	**4**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Maximum Onsite Emissions (lbs/day)	**3**	**29**	**23**	<1	**7**	**4**
SCAQMD LST Screening Thresholds[1]	N/A	143	3,739	N/A	79	33
Threshold Exceeded?	N/A	No	No	N/A	No	No

lbs/day = pounds per day; VOC = Volatile organic compounds, NOX = nitrogen oxides, CO = carbon monoxide, SO2 = sulfur dioxide, PM10 = particulate matter 10 microns in diameter or less, PM2.5 = particulate matter 2.5 microns or less in diameter

[1] LST screening thresholds are for a 2-acre project site in SRA-7 within 950 feet from the site boundary.

Source: All emissions modeling was completed using the California Emissions Estimator Model (CalEEMod). See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from CalEEMod's "mitigated" results, which is a term of art for the modeling output and is not equivalent to mitigation measures that may apply to the CEQA impact analysis. The CalEEMod "mitigated" results account for compliance with regulations and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

Operational Emissions

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., fireplaces, architectural coatings, consumer products, and landscaping equipment), energy sources (i.e., use of natural gas for space and water heating and cooking), and mobile sources (i.e., vehicle trips to and from the project site). Table 6 summarizes the project's maximum daily operational emissions by emission source. As shown therein, operational emissions would not exceed SCAQMD regional thresholds for criteria pollutants. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment, and impacts would be less than significant.

Table 6 Estimated Maximum Daily Operational Emissions

	Pollutant (lbs/day)					
Emissions Source	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	2	2	19	<1	4	1
Total	**3**	**2**	**19**	<1	**4**	1
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

lbs/day = pounds per day; VOC = Volatile organic compounds, NOX = nitrogen oxides, CO = carbon monoxide, SO2 = sulfur dioxide, PM10 = particulate matter 10 microns in diameter or less, PM2.5 = particulate matter 2.5 microns or less in diameter

Source: All emissions modeling was completed made using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations (including SCAQMD Rules 403 and 1113) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are land uses and populations that are more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptor locations include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). Sensitive receptors in the project vicinity include single-family residences approximately 950 feet north of the project site. The project also includes the siting of new sensitive receptors such as the proposed Hub and outdoor gather and seating areas. Localized air quality impacts to sensitive receptors typically result from CO hotspots and TACs, which are discussed in the following subsections.

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The SCAQMD conducted a detailed CO analysis for the SCAB during the preparation of the 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the SCAB, which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near I-405, which has an ADT of approximately 100,000 vehicles per day. The concentration of CO at this intersection was 4.6 ppm, which is well below the 35-ppm 1-hour CO federal standard and the State standard of 20 ppm. Furthermore, the SCAB has been in attainment of federal CO standards since 2007 (SCAQMD 2016).

Monitoring stations within Los Angeles County in 2020 recorded a max concentration of 4.5 parts per million for 1-hour CO and 3.1 parts per million for 8-hour CO in South Central Los Angeles County. The federal and State 8-hour CO standards (9 ppm and the federal and State 1-hour CO standards (35 ppm and 20 ppm) were not exceeded (SCAQMD 2021). Furthermore, development of the project is not expected to increase daily trips or ADT on the local roadways in proximity to project. If the project were to result in new daily trips, then the number of trips would be small enough not to contribute to a CO hotspot at congested intersections.

Based on the low background level of CO in the project area, ever-improving vehicle emissions standards for new cars in accordance with State and federal regulations, and the project's low or lack of new trips, the project would not create new hotspots or contribute substantially to existing hotspots. Localized air quality impacts related to CO hot spots would be less than significant.

Toxic Air Contaminants

Toxic Air Contaminants or TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

Construction

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2020) and is therefore the focus of this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the project would occur over approximately 20 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments (HRA), which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends at a single household location). OEHHA recommends this risk be bracketed with nine-year and 70-year exposure periods and that HRA should be limited to the period/duration of activities associated with the project (OEHHA 2015).

The maximum PM_{10} and $PM_{2.5}$ emissions would occur site preparation and grading activities. These activities would last for approximately 85 days. PM emissions would decrease for the remaining construction period because construction activities such as building construction, paving and architectural coating would require less intensive construction equipment. While the maximum DPM emissions associated with site preparation and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than one percent of the total 30-year exposure period for health risk calculation. Given the aforementioned discussion, DPM generated by

project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

Operation

Sources of operational TACs include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The project would not include any of these operational sources. Also, the project would not include stationary source equipment nor is the project expected to generate additional vehicle trips from students or employees. Therefore, operation of the project would not directly or indirectly emit TACs. Operational impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion, and odors disperse with distance. In addition, project construction would be required to comply with SCAQMD Rule 402, which specifies that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Overall, project construction would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

With respect to operation, the SCAQMD's *CEQA Air Quality Handbook* (1993) identifies land uses associated with odor complaints to be agricultural uses, wastewater treatment plants, chemical and food processing plants, composting, refineries, landfills, dairies, and fiberglass molding. Educational uses are not identified on this list and no odor-producing uses are in the project vicinity. In addition, solid waste generated by the proposed onsite uses would be collected by a contracted waste hauler, ensuring that odors resulting from onsite waste would be managed and collected in a manner to prevent the proliferation of odors. Therefore, the project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c. Have a substantial adverse 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?	☐	☐	☐	■
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?	☐	☐	☐	■
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	■	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Since the project site is in an urbanized area and is itself currently developed as a parking lot, it does not contain biological habitat. The project site includes several species of trees that would be removed and replaced with new landscaping. Additionally, trees bordering the project site could provide nesting habitat for a variety of bird species that are protected under the federal Migratory Bird Treaty Act (MBTA – 16 United State Code Section 703-711). Therefore, the project has the potential to impact migratory and other bird species if construction activities occur during the nesting season, which is typically February 15th through September 15th. Construction-related disturbances could result in nest abandonment or premature fledging of the young. Impacts could therefore be potentially significant.

The following mitigation measure are required to reduce potential impacts to onsite nesting birds to a less than significant level by requiring the provision of buffers from any identified active bird nests during construction.

BIO-1 Habitat Modification – Nesting Birds

- To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and California Fish and Game Commission, project activities including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (typically February 15th through September 15th).
  - If construction begins during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of ground disturbance and vegetation removal activities.
  - The nesting bird pre-construction survey shall be conducted on foot inside the project boundary, including a 300-foot buffer (500 feet for raptors).
  - The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in Southern California natural communities.
  - If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined by the qualified biologist and demarcated with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. If no tests are found, no further action will need to be taken at the project site.
  - All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur in this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c. Would the project have a substantial adverse 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?

d. Would the project 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?

The project site, an existing parking lot, is located in an urban setting and no habitat of quality to support native riparian plant/wildlife species or other sensitive natural community is present on the site. A pond is located in the existing orange grove approximately 1,600 feet southwest of the project site, which is habitat to ducks and turtles. However, the pond is not listed on the U.S. Fish and Wildlife Service (USFWS) Wetlands Mapper as a federally protected wetland or water as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.). Other protected waters do not occur in the vicinity of the project site (USFWS 2017). In addition, the project site and surrounding area are not shown on the California Department of Fish and Wildlife (CDFW) Biographic Information and Observation System (BIOS) databases for sensitive natural communities or connective migratory habitats. Therefore, the project would not impact riparian habitats, sensitive natural communities, wetlands, or the movement of any native resident or migratory fish or wildlife species. No impact would occur.

NO IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project would remove and replace the existing trees located along the eastern and southern boundary of the project site along East University Drive/Lindley Avenue and Jacaranda Walk. The removal and replacement of these tree during construction would be consistent with the 2014 CSUN Urban Forest Management Plan. In accordance with the Urban Forest Management Plan all tree pruning and removal work, in total conformity with ANSI A300 Pruning Standard, would be reviewed and approved by the Campus Urban Forestry Resource Manager. All design teams would be given a set of guidelines setting forth the CSUN's Tree Pruning and Tree Removal Policy and Protection of Trees During Construction Guidelines (Sections 4.2.2. and 4.2.3. of the Urban Forest Management Plan), to ensure that trees are accounted for from project initiation through operation.

The following standards would be followed when removing or grinding stumps:

> Before commencing stump removal, all underground utilities within the vicinity of the tree stump, allowing one foot for every inch of stump diameter, must be identified and clearly marked out. Proper precautions must be taken to prevent damage to utilities within tree stump removal areas. Before performing stump extraction, the tree worker or project contractor shall first consider if roots may be entangled with trees that are to remain. If so, these stumps shall have their roots severed before extracting the stump. When a tree root is to be ground, as opposed to being pulled out (depending on accessibility, topography, proximity to a building/pathway or other considerations), removal shall include the grinding of stump and roots to a minimum depth of 24 inches.

In addition, any trees identified to be preserved during project construction would also be subject to the CSUN Urban Forest Management Plan. Construction teams would be provided a set of guidelines that define the Physical Plan Management Department's Tree Preservation and Tree Protection procedures (Sections 4.2.2. and 4.2.3. of the Urban Forest Management Plan), and to assure that trees are accounted for from project initiation forward. Soil disturbance or other damaging activities within the Tree Protection Zone would be prohibited unless approved by the Campus Urban Forest Resource Manager and mitigation for specific injuries is implemented. No encroachment within 10 feet of a trunk would be permitted without the prior notification and approval of the CSUN's representative.

New project landscaping would be consistent with the 2005 CSUN Master Plan and planted with shade providing native and/or drought tolerant trees in compliance with the established CSUN approved tree list. Additionally, the planting of new trees would follow the guidelines established in Section 4.2.4 of the Urban Forest Management Plan. At all times, the ANSI standards for planting trees must be followed.

LESS THAN SIGNIFICANT

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is in an urbanized area that is not subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. No impact would occur.

NO IMPACT

5 Cultural Resources

	Potentially Significant Impact Likely Requiring Preparation of an EIR	Likely to Be Reduced to Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources as well as human remains. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be, eligible for listing in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

5. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

6. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
7. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Rincon conducted a cultural resources desktop analysis for the project in February 2022. This analysis included a cultural resources records search of the California Historical Resources Information System at the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton, and a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search.

The SCCIC records search was performed to identify previously conducted cultural resources studies, as well as previously recorded cultural resources within the project site and a 0.5-mile radius surrounding it. The records search included a review of available records at the SCCIC, as well as the National Register of Historic Places, the CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historical maps. The SCCIC records search identified seven cultural resources studies conducted within a 0.5-mile radius of the project site, none of which evaluated the project site. The SCCIC search also identified two previously recorded cultural resources within a 0.5-mile radius of the project site, one of which is recorded adjacent to the project site and none within the project site.

Response to the SLF search request from the NAHC for the project site is still pending.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

The background research identified one historic-period built environment resource adjacent to the project site (P-19-190016). Resource P-19-190016, or Jacaranda Hall, within the CSUN campus, was originally recorded by Shannon Loftus of ACE Environmental, LLC in 2011, and revisited by K.A. Crawford of Michael Brandman Associates in 2012. This resource is recorded as a two to four story building constructed circa 1965, with additional stories and alterations added through 1994 (Loftus 2011; Crawford 2012). It was built in a modern style with a concrete foundation, brick and concrete exterior walls and a flat roof. The building was previously evaluated and found ineligible for listing on the NRHP (Loftus 2011; Crawford 2012); no concurrence letter from the State Historic Preservation Officer (SHPO) was provided with the records search. The Jacaranda Hall building has not been evaluated for inclusion in the CRHR. Rincon Consultants Inc. (Rincon) did not assess the resource for inclusion in the CRHR as part of this analysis. However, the project would not demolish or negatively alter Jacaranda Hall (P-19-190016) or any designed landscape or site features, or any other built environment resources, in any way. In addition, the project site is currently used as a parking lot for Jacaranda Hall and surrounding CSUN uses. Therefore, no impact to historical resources would occur.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. Historical topographic maps from 1903 to 1924 depict the project site as undeveloped land located southeast of an unnamed road (NETR Online 2022; USGS

2022). Topographic maps from 1928 to 1941 depict the project site to be located west of Lindley Avenue and north of an unnamed paved road (NETR Online 2022; USGS 2022). Topographic mapping from 1944 to 1955 depict orchards and 10 structures to the west of the current project site, with further university construction surrounding the site from 1959 to 1966 (NETR Online 2022; USGS 2022). Mapping from 1968 to 1986 depict the project site in its current condition, adjacent to Jacaranda Hall (NETR Online 2022; USGS 2022). Aerial imagery from 1946 to 2018 confirms the topographic mapping depictions (NETR Online 2022).

This assessment did not identify any archaeological resources or archaeological deposits within the project site. Although the SLF results for the project have not been received as of the date for this Draft IS-MND (March 2022), no archaeological resources were identified by the CHRIS records search of the SCCIC. No pedestrian survey was conducted as the project site is entirely paved and therefore there is no ground visibility. The lack of surface evidence of archaeological materials does not preclude their subsurface existence. However, the absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the existing level of disturbance in the project site, suggest there is a low potential for encountering intact subsurface archaeological deposits. However, it is possible that unanticipated archaeological deposits and/or human remains could be encountered and damaged during the ground-disturbing activities associated with construction (such as grading and excavation), especially if those activities occur in less-disturbed buried sediments. Consequently, impacts would be potentially significant. In order to address the potential for project construction to result in significant adverse impacts to hereto unknown archaeological resources, a mitigation measure including protocols for handling unanticipated discoveries of archaeological resources, including those that may be considered historical resources, should be developed for the proposed project, so as to reduce impacts to a less-than-significant level.

Mitigation Measure

CUL-1 Unanticipated Discovery of Cultural Resources

In the unlikely event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If the find is prehistoric, then a Native American representative should also be contacted to participate in the evaluation of the find. If necessary, the evaluation shall require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the proposed Project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The cultural resources records search did not identify cemeteries or archaeological resources containing human remains within the project site or surrounding area. However, the discovery of human remains is always a possibility during ground disturbance activities, as would be required for the proposed project. Human burials outside of formal cemeteries often occur in prehistoric archaeological contexts. In addition to being potential archaeological resources, human burials have

specific provisions for treatment in PRC Section 5097. Additionally, California Health and Safety Code Sections 7050.5, 7051, and 7054 contain specific provisions for the protection of human burial remains. These existing regulations address the illegality of interfering with human burial remains and protects them from disturbance, vandalism, or destruction. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains and establishes the NAHC as the entity to resolve any related disputes.

If human remains are found, the California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access to the site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with PRC Section 5097.98 and State of California Health and Safety Code Section 7050.5 would ensure impacts to human remains are less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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 fault?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■

Geotechnical impacts were assessed in the 1998 Master Plan EIR. Since geological conditions have not changed since the 1998 Master Plan EIR was prepared, the conclusions remain applicable to the project.[4] However, an updated geotechnical analysis was conducted by Geotechnologies Inc. in July 2020 and determined that project grading would require the removal of existing unsuitable soils for concrete slab-on-grade support for the proposed building. The site was discovered to be underlain by about three feet of alluvial soils primarily consisting of silty sand to sand with occasional gravel and cobbles. There was no identified level of groundwater or soil caving. Any fill materials removed from the site that are not suitable to support the building's foundation would be removed/over excavated and reused for re-compaction. All structural concrete mixes will be Type II cement and all structural concrete would have a minimum compression strength between 3000 Pounds per Square Inch (PSI) and 5000 PSI. The project site is part of the CSUN campus and is relatively level, with no pronounced topographic highs or lows. However, similar to all of Southern California, the city of Los Angeles is underlain by local faults with detectable rupture areas, as well as blind thrust faults, which do not show signs at the earth's surface. According to the City of Los Angeles General Plan Safety Element, there have been 60 damaging seismic events in the Los Angeles region since 1800 (Los Angeles 1996). A Geotechnical Engineering Investigation conducted November 18, 2015, for a different project site approximately 0.3 mile away on the CSUN campus, determined that the primary geologic hazard on the CSUN campus is moderate to strong ground motion (acceleration) which may be caused by an earthquake on any of the local or regional faults.

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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 fault?

The closest active faults to the project site are the Northridge Hills fault, approximately three miles north of the project site, and the Sierra Madre-San Fernando fault, approximately ten miles east of the project site. No known active faults pass through or are immediately adjacent to the campus, and the campus is not located within any Alquist-Priolo Special Studies Zone.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Southern California is a seismically active region, and, thus, all new and existing development is susceptible to sustaining damage during strong seismic events. The CSUN campus and all of the uses on the campus are subject to strong ground motion during a significant earthquake on faults in the vicinity of the campus. Although the Northridge Hills fault is located within three miles of the site, the campus is not exposed to a greater than normal seismic risk for the Los Angeles basin. Because the project would be constructed in accordance with CBC standards for earthquake safety it is not anticipated the project directly or indirectly cause potential substantial adverse effects from strong seismic ground shaking.

LESS THAN SIGNIFICANT IMPACT

[4] California State University, Northridge Campus Master Plan Update, Final Master EIR, April 1998, Parsons Harland Bartholomew & Associates, Inc. (HBA).

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction is a phenomenon in which saturated silty-to-cohesionless soil above the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic stresses induced by an earthquake. These soils may acquire a high degree of mobility and lead to structurally damaging deformations. Liquefaction begins below the water table, but after liquefaction has developed, the groundwater table will rise and cause the overlying soil to mobilize. Liquefaction typically occurs in areas where groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine- to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction.

According to the California Geological Survey (CGS) Earthquake Zones of Required Investigation map, the CSUN campus, including the project site, is not located in a liquefication zone. The nearest liquefaction zone is located approximately 0.8 mile from the project site. Due to the distance from a liquefaction zone, there is little to no potential for liquefaction or seismic settlement at the project site and therefore, the project would not create or exacerbate liquefaction potential and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The 2005 Master Plan EIR concluded that no significant geologic hazards are anticipated to result from implementation of that Campus Master Plan. Construction activities have occurred on the campus for over 40 years without incidence of expansive soils or subsidence. There are no significant slopes on the campus, and no known existing or potential landslides are present on or immediately adjacent to the site. According to the Los Angeles County Safety Element (1990), the campus is not within an area of shallow groundwater; therefore, the possibility of liquefaction occurring on the project site is considered low. The site is sufficiently distant and elevated from the Pacific Ocean that it would not be prone to hazards from tsunami, seiche, or flooding from a breached upgradient reservoir.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Ground-disturbing activities associated with project construction may result in the removal of some topsoil during removal of the existing parking lot and landscaping on the project site. Implementation of required standard construction BMPs would be implemented to avoid or minimize soil erosion associated with ground-disturbing activities. As discussed further in Section 11, *Hydrology and Water Quality*, implementation of erosion control measures would avoid or minimize potential impacts. Upon completion of construction activities, the site would be almost entirely paved, and any soils would be stabilized by landscaping, minimizing the potential for soil erosion. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

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

As discussed under *Impact a.3.* of this section, according to the CGS Earthquake Zones of Required Investigation map, none of the CSUN campus including the project site is located in a liquefication zone. The nearest liquefaction zone is located approximately 0.8 mile from the project site, Therefore, there is little to no potential for liquefaction or seismic settlement at the project site and impacts related to unstable and expansive soils would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Existing wastewater and sewer facilities utilized by the CSUN campus fall under the jurisdiction of the City of Los Angeles with wastewater treated at the Hyperion Wastewater Treatment Plant located in Playa del Rey. The project would include a gravity sanitary sewer system designed and constructed to collect domestic effluent from the new EIH building and discharge to the existing sanitary sewer system. City of Los Angeles standards and guidelines for sanitary sewer design would be followed. Therefore, the use of septic tanks or other alternative wastewater disposal systems would not be required and no impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is currently developed as a surface parking lot and is surrounded by developed roads and campus buildings. There are no known unique paleontological resources or geologic features on or within the geologic units underlying the project site. According to the 1998 Master Plan EIR there are no known geologic conditions that would prevent the development of the site. Therefore, no impact would occur.

NO IMPACT

7 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	■

The 2005 Master Plan EIR does not explicitly discuss energy impacts. Energy was added to Appendix G of the CEQA Guidelines as its own category in 2019 and therefore, a discussion of energy impacts is provided to supplement the 2005 Master Plan EIR.

Pursuant to Section 15126.2 and Appendix G of the CEQA Guidelines, analysis of a project's energy use should consider whether the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The analysis should include the project's energy use for all phases and components, including construction and operation.

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project would use nonrenewable resources for construction and operation of the project. Natural resources that would be utilized by the project include petroleum-based fuels for vehicles and equipment, operational building energy usage, and operational water consumption.

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels such as diesel and gasoline, used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would require demolition, site preparation and grading, paving, building construction, architectural coating, and landscaping activities.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes that would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which

would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as 2019 California's Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11), the project would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and construction-related impacts would be less than significant.

Operational Energy Demand

The project would add to energy use through the use of office, research, and common use spaces. Operation of the project would contribute to area energy demand by slightly increasing the consumption of electricity, natural gas, and transportation fuels. Similarly, a slight increase of natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, and overall operation of the project. Gasoline and diesel fuel consumption would be attributed to the trips generated by visitors, employees, and deliveries.

However, the new building would be required to comply with CBC Title 24 energy efficiency standards which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. CALGreen requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the California Energy Commission (CEC). These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy efficient than the previous standards. According to the CEC, nonresidential buildings built to the 2019 standards use about 30 percent less energy than those built to the 2016 standards due to energy efficiency measures, particularly lighting upgrades (CEC 2018). Furthermore, the project would continue to reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by Southern California Edison (SCE) continues to increase to comply with state requirements through Senate Bill (SB) 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To achieve compliance with Title 24, the project applicant would incorporate several energy efficient features into overall project design. Energy efficient design features include energy-efficient appliances and lighting, water-efficient indoor fixtures throughout the project site, and drought tolerant landscaping. The project would also be certified as LEED (Leadership in Energy and Environmental Design) Gold BD+C– an internationally recognized green building certification that evaluates projects across the six following categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environment quality and design innovation. To qualify for LEED Gold status a project must score between 60-79 points on a 100-point scale. Points are allocated based on the potential environmental impacts and human benefits of each credit. As such, in order to earn LEED Gold certification, the project must abide by a high standard of energy efficiency.

The project site is also located adjacent to walking paths that provide pedestrian access to the rest of the CSUN campus. Additionally, numerous bus stops are located on CSUN campus including the CSUN Transit Center which is serviced by Metro bus routes 240 and 787. These features would incentivize the use of public transit, active transportation, and fuel-efficient vehicles for accessing the project site.

Construction and operation of the project would conform to all state energy efficiency standards. Furthermore, the project is intended to be built to achieve LEED Gold and therefore would demonstrate even greater energy efficiency than typical projects. Therefore, the project would not result in wasteful, inefficient or unnecessary consumption of energy and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

SB 100, adopted on September 10, 2018, accelerates the State's Renewable Portfolio Standards Program by mandating electricity providers to increase procurement from eligible renewable energy resources to 100 percent of total retail sales by 2045. All newly constructed buildings are to be developed in compliance with (and exceed) Title 24 Energy Efficiency Standards and alGreen.

Since the project would be powered by the existing electricity grid, it would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Additionally, development of the project would not conflict with or obstruct the State plan for renewable energy or energy efficiency; therefore, the project would not result in any significant impacts with respect to energy.

NO IMPACT

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8 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐

a. Would the project physically divide an established community?

The project would involve the construction of an approximately 35,000 sf campus building for office, lab, and research uses. The project site is currently used as a parking lot and has no other uses on site. It would not divide an established community, nor would it include any new roads or infrastructure that have the potential to divide any established communities. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site's current land use is designated "Academic Core Parking Lot" by the CSUN 2005 Master Plan Update (CSUN 2005a). According to the Master Plan Update Exhibit 41, *Campus Land Use Plan*, the site is designated "Academic/Administrative Facilities" for future development on the site. According to the Master Plan Update, the use of new buildings sites on campus would be subject to the expansion needs of academic and administrative programs. The building configuration on each site would depend upon, among other things, the programming of the individual facility in the pre-design stage of the project. To achieve these goals, the Master Plan makes use of new building sites that are currently used as surface parking lots (CSUN 2005a).

Although the project would involve demolition of an existing surface parking lot, it includes a new state of the art Global HSI EIH, which would continue to accommodate students, faculty, community members, and visiting individuals – including historically underserved communities, with modern facilities. As such, the project would be consistent with applicable land use plans and policies, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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9 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits the Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Since GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one; by contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).[5]

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report

[5] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

(2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatons of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050 (CARB 2017).

In 2014, CSUN completed and reported its first Greenhouse Gas Emissions Inventory, covering the period from 1990 to 2013 in preparation for the development of its Climate Action Plan (CAP). The CSUN CAP was released in 2016 with the goal of achieving 1990 greenhouse gas levels by 2020 and net-zero emissions (carbon neutrality) by 2040. This plan addresses greenhouse gas (carbon) emissions generated by energy use on the CSUN campus (Scope 1 and 2 emissions) and from activities related, but not directly controlled by the campus, such as commuting and business travel (Scope 3 emissions). The CAP is based on a Strategic Energy Plan that establishes a clear path towards eliminating Scope 1 and 2 emissions by 2040 through a number of defined energy conservation and efficiency projects combined with increased use of renewable energy by both CSUN and the local utility company. Scope 3 emissions would be reduced through a number of strategies that alter the mode mix of transportation used by CSUN students and employees, combined with increased use of electric and hybrid vehicles, and improved vehicle fuel economy standards established by the USEPA (CSUN 2016). The CSUN CAP does not meet the streamlining requirements of CEQA Guidelines Section 15183.5 because it has not yet been adopted in a public process; therefore, this analysis does not utilize the CSUN CAP to evaluate the project's GHG emissions.

The majority of individual projects do not generate sufficient GHG emissions to create significant project-specific environmental effects. However, the environmental effects of a project's GHG emissions can contribute incrementally to cumulative environmental effects that are significant, contributing to climate change, even if an individual project's environmental effects are limited (CEQA Guidelines Section 15064[h][1]). The issue of a project's environmental effects and contribution towards climate change typically involves an analysis of whether or not a project's contribution towards climate change is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The 2008 SCAQMD threshold considers emissions of over 10,000 MT of CO_2e per year to be significant. However, SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when SCAQMD is the CEQA lead agency.

In the latest guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in the meeting minutes, dated September 29, 2010 (SCAQMD 2010).

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Sections 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT CO_2e per year for industrial projects and 3,000 MT CO_2e per year for all non-industrial projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO_2e per year for land use projects.

Since CSUN does not have project specific GHG thresholds and the campus CAP is not adopted or certified, the project is evaluated based on SCAQMD's Tier 3 recommended/preferred option threshold for all land use types of 3,000 metric tons of CO_2e per year (SCAQMD 2010). Therefore, SCAQMD Tier 3 threshold remains the most applicable threshold for evaluating the project's GHG impacts.

GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2020.4.0, with the assumptions described under Section 3, *Air Quality*, in addition to the following:

Amortization of Construction Emissions. In accordance with SCAQMD recommendation, GHG emissions from construction of the project were amortized over a 30-year period and added to

annual operational emissions to determine the project's total annual GHG emissions (SCAQMD 2008).

CalEEMod currently incorporates California's 2019 Title 24 building energy requirements. A 10 percent energy use improvement was included in the model to account for the proposed structure 10 percent exceedance of 2019 Title 24, California's Building Energy Efficiency Standards.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Although construction activity is addressed in this analysis, the California Air Pollution Control Officers Association (CAPCOA) does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. The *CEQA and Climate Change* white paper states that additional study is needed to make such an assessment or to develop separate thresholds for construction activity (CAPCOA 2008). Nevertheless, the SCAQMD has recommended amortizing construction-related emissions over a 30-year period in conjunction with the project's operational emissions.

Project construction is assumed to occur over a period of approximately 20 months, and the project is assumed to become operational in 2024. Based on CalEEMod modeling results, construction activities for the project would generate approximately 753 MT of CO_2e, as shown in Table 7. Amortized over a 30-year period (the assumed life of the project per SCAQMD guidance), project construction would generate about 25 MT of CO_2e per year.

Table 7 Estimated Construction GHG Emissions

	Project Emissions (MT/yr CO_2e)
2023	397
2024	356
Total	**753**
Total Amortized over 30 Years	**25**

MT=mega tons; yr=year; CO_2e = carbon dioxide equivalent.
See Appendix A for CalEEMod worksheets.

As shown in Table 8, annual operational emissions generated by the project combined with amortized construction emissions would total approximately 768 MT of CO_2e per year. The project emission would not exceed SCAQMD Tier 3 Threshold of 3,000 MT of CO_2e per year. Therefore, the project's GHG emissions impact would be less than significant.

Table 8 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT of CO_2e)
Construction	25
Operation	
Area	<1
Energy	145
Mobile	562
Solid Waste	21
Water	15
Project Emissions	**768**
SCAQMD Tier 3 Threshold	3,000
Exceeds Threshold?	**No**

MT=mega tons; yr=year; CO_2e = carbon dioxide equivalent.
See Appendix A for CalEEMod outputs.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As discussed above, several plans and policies have been adopted to reduce GHG emissions in the southern California region, including 2017 Scoping Plan, SB 32, and SB 375. GHG reduction plans that address these regulations and apply to CSUN include the 2017 Scoping Plan, CSUN CAP, and SCAG RTP/SCS. Therefore, the following is an analysis of how the project would be consistent with regional and local goals and policies to reduce GHG emissions.

2017 Scoping Plan

The principal state plan and policy is AB 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's goals include reducing fossil fuel use and energy demand and maximizing recycling and diversion from landfills. The project would be consistent with the 2017 Scoping Plan and achieve a LEED Gold BD+C certification through project design. The Hub would be constructed with sustainability features to attain a green building rating. The Hub is intended for current CSUN students and would increase vehicle trips to and from the proposed site by 24 a day. Therefore, the project would be consistent with the 2017 Scoping Plan.

Connect SoCal (SCAG 2020-2045 RTP/SCS)

Connect SoCal is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. Connect SoCal includes ten

goals with corresponding implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The project's consistency with applicable goals of Connect SoCal is discussed in Table 9. As shown therein, the project would be consistent with the GHG emission reduction strategies contained in Connect SoCal.

Table 9 Project Consistency with Applicable Connect SoCal Strategies

Reduction Strategy	Project Consistency
Focus Growth Near Destinations & Mobility Options. ▪ Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations ▪ Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets ▪ Plan for growth near transit investments and support implementation of first/last mile strategies. ▪ Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses ▪ Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods ▪ Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) ▪ Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)	**Consistent.** The project would provide a new amenity to current CSUN students by infilling a parking lot with the new Hub. The Hub would be easily accessible through on-campus bike and walk lanes. The project does not expect an increase in solo trips on-campus since the Hub would cater to current CSUN students. Therefore, the project would focus growth near destinations.
Support Implementation of Sustainability Policies. ▪ Pursue funding opportunities to support local sustainable development implementation projects that reduce GHG emissions ▪ Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations ▪ Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space ▪ Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies ▪ Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region ▪ Continue to support long range planning efforts by local jurisdictions ▪ Provide educational opportunities to local decision makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**Consistent.** The project would be built to achieve LEED Gold BD+C certification. The certification provides a framework for building a holistic green building, giving you the chance to nail down every sustainability feature, maximizing the benefits. The Hub would achieve a gold rating that expresses how efficiently the building is designed and operated. Sustainability features would be incorporated into the project to meet or exceed certification goal. Also, the Hub would exceed the 2019 Title 24 Building Code by a minimum of 10 percent Therefore, the project would support implementation of applicable sustainability policies.
Promote a Green Region.	**Consistent.** The proposed Hub is an infill development project that would be constructed on

Reduction Strategy	Project Consistency
▪ Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards ▪ Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration ▪ Integrate local food production into the regional landscape ▪ Promote more resource efficient development focused on conservation, recycling, and reclamation ▪ Preserve, enhance, and restore regional wildlife connectivity ▪ Reduce consumption of resource areas, including agricultural land ▪ Identify ways to improve access to public park space	an existing parking lot. The project would not replace agricultural land, wildlife habitat, or public park space. The project would implement sustainability design features to reduce onsite electricity use and would be compatible with the CSUN CAP.

Source: SCAG 2020

CSUN CAP

The CSUN CAP was prepared in 2016 with the goal of achieving 1990 GHG levels by 2020 and net-zero emissions by 2040. This plan addresses GHG emissions generated by energy use on the CSUN campus (Scope 1 and 2 emissions) and from activities related, but not directly controlled by the campus, such as commuting and business travel (Scope 3 emissions). Because electricity is used in every building on campus, CSUN developed a Strategic Energy Plan to identify energy conservation measures associated with the CAP. The Strategic Energy Plan evaluated electricity on the main campus to determine current efficiencies, identify opportunities for improvement, and list energy efficiency measures for implementation. The Strategic Energy Plan revealed that on average 47 percent of the electricity consumed in campus buildings was from lighting, with HVAC load consuming 32 percent, and plug loads making up the remaining 21 percent. Buildout of the project would increase on-campus emissions when compared to current conditions. However, the project would include sustainability design features to reduce onsite electricity use and achieve compatibility with the CSUN CAP.

The project would be built to achieve LEED Gold certification. In addition, the project site is along bicycle and pedestrian routes and within a mile of the nearest bus stop along Zelzah Avenue, which would encourage visitors to reduce vehicle trips to and from the project site. The CSUN Transit Center on Vincennes Street is also located approximately 1500 feet from the project site and would provide further transit accessibility to the project. The project would be aligned with the CAP goal of reducing transportation by having options to reduce the number and distance of trips made (CSUN 2016).

LESS THAN SIGNIFICANT IMPACT

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10 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e. For a project located in 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?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	■

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	■

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The project would involve the construction and operation of an approximately 35,000-sf building on the east side of Jacaranda Hall, which would not use, dispose of, or transport hazardous materials typically associated with industrial projects and operations. Therefore, the project would not create a significant hazard to the public or environment through the routine handling of hazardous materials. Potentially hazardous materials such as fuels, lubricants, and solvents would be used by heavy machinery during construction of the project. However, the transport, use, and storage of hazardous materials during construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. The project does not involve the demolition of any existing facilities and therefore no further assessments are required, and impacts associated with construction would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The project involves the construction and operation of a new two-story building on a site currently developed as a parking lot on the CSUN campus. Given that the project would be part of the CSUN campus, the project would be located within 0.25 mile of other CSUN facilities. The nearest off-campus school is Northridge Academy High School, located approximately 0.3 mile northeast of the project site. Since the project may include uses such as labs, offices and research spaces, operation of the project would not emit hazardous emissions or handle hazardous materials typically associated with industrial operations. In addition, potentially hazardous materials utilized during construction, such as oil or fuel utilized by heavy-duty construction equipment, would be required to comply with local, State, and federal policies for handling such materials and equipment properly. impacts associated with potential hazardous emissions or the handling of hazardous substance within 0.25 mile of a school would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project site is not located on or directly adjacent to any known hazardous or contaminated sites. The USEPA is retiring the CERCLIS database and is replacing it with the Superfund Enterprise Management System (SEMS). The SEMS database search did not produce any results associated with the project site, indicating that the site is free of known hazards and contaminants (USEPA 2017b). Databases accessed to check known hazardous materials contamination at the project site included:

- USEPA: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)/Superfund Enterprise Management System (SEMS)/Envirofacts database search
- State Water Resources Control Board (SWRCB) GeoTracker search for leaking underground storage tanks (LUST) and other cleanup sites
- California Department of Toxic Substances Control (DTSC): Envirostor database for hazardous waste facilities or known contamination sites
- Cortese List of Hazardous Waste and Substances Sites

A search on the Envirostor database did not identify any hazardous waste facilities or other cleanup within 1,000 feet of the project site. The Envirostor listing nearest to the site is approximately 0.3 miles north at Northridge Academy High School. This property had been identified as having soil contamination due to historic agricultural uses. However, a "No Further Action" was determined by the DTSC for the property as of January 18, 2002 (DTSC 2017).

According to Geotracker, the gasoline station located approximately 2,100 feet southwest of the project site at the Nordhoff Street and Lindley Avenue intersection was under frequent monitoring due to a reported gasoline leak since 2004. However, the case was closed as of August 9, 2010, and a "No Further Action" letter was issued by the SWRCB. The gasoline station currently has a Los Angeles Fire Department (LAFD)-permitted underground storage tank (UST) (SWRCB 2015). There have not been any notices of violation since 2010, and no leaks have been reported for the UST at this facility. In addition, the USEPA's technical regulations for USTs require owners and operators to properly install tanks and report suspect releases, closures, leaks, and maintain records for operation and maintenance (USEPA 2017c). Based on the results of the database searches, the project would have a less than significant impact related to hazards associated with a listed site.

LESS THAN SIGNIFICANT IMPACT

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 for people residing or working in the project area?

f. For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?

The project site is located approximately 2.5 miles northwest of the Van Nuys Airport, which is the public airport nearest to the site. The site is not in a designated airport hazard area and would not result in a safety hazard for people residing or working in the project area. Therefore, no impact from airport operations would occur.

NO IMPACT

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No roads would be closed as a result of the construction or operation of the project, and the project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The design of any new access points would be reviewed and approved by LAFD to ensure that emergency access meets LAFD standards. Consequently, there would be no impact.

NO IMPACT

h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The neighborhood of Northridge is an urbanized community and there are no wildlands in the project vicinity. In addition, the project is not located in a wildfire hazard area as identified in the City of Los Angeles General Plan Safety Element, Exhibit D, Selected Wildfire Hazard Areas in the City of Los Angeles. The project site is not located in a fire buffer zone, a mountain fire district, or an area of known shallow methane accumulation (Los Angeles 1996). Construction of the project would involve demolition of a restaurant for construction of a hotel and new restaurant. There would be no risk of exposing people or structures to a significant risk of loss, injury, or death involving wildland fires. As such, there would be no impact.

NO IMPACT

11 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through 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 onsite or offsite;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	☐	☐	■	☐
(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; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	■
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

As part of Section 402 of the Clean Water Act (CWA), USEPA has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control both construction and operation (occupancy) stormwater discharges. In California, SWRCB administers the NPDES permitting program and is responsible for developing permitting requirements. The project would be required to comply with the NPDES permitting system

In February 2013, the SWRCB adopted a renewed Phase II General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), since Phase II Small MS4s are not regulated under the municipal Phase I regulations. The permit designated most CSU campuses, including CSUN, as "Non-Traditional" MS4s. Non-Traditional MS4s are operators of substantial storm drain systems that are owned by State or federal government entities. According to the CSU Post-Construction BMPs Guidance Document, requirements in the Phase II General Permit for Small MS4s are phased in by year over the term of the permit, which is five years. During year two of the Phase II General Permit, Non-Traditional MS4s are required to implement a Post-Construction SWMP, which includes a combination of structural and non-structural BMP that control surface runoff, erosion, and sedimentation. Structural BMP functions include mechanisms that store or detain runoff such that stormwater constituents settle out or are filtered and trapped by underlying soil or media. Non-structural BMPs are such measures as literature and signage that encourage facility users to eliminate non-stormwater discharges into the storm drain system and include maintenance programs, spill prevention plans, and street sweeping (CSU 2014).

The CSU Post-Construction BMPs Guidance Document provides CSU campuses with system-wide guidance for design, implementation, operation, and maintenance of post-construction BMP elements in order to provide permit compliance with the SWRCB Phase II General Permit for Small MS4s (CSU 2014). The project would be required to control pollutant discharge by implementing a combination of structural and non-structural BMPs during construction as well as general operation of the project to ensure that stormwater runoff meets the established water quality standards and waste discharge requirements.

Conformance with the requirements in Section 402 of the CWA and Phase II General Permit for Small MS4s would ensure that the project does not violate any water quality standards or waste discharge requirements, substantially decrease groundwater, or interfere with groundwater recharge. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Los Angeles Department of Water and Power (LADWP) supplies Northridge with potable and recycled water. Due to limited local water resources, LADWP depends heavily on imported water purchased from the Metropolitan Water District. However, local groundwater supplies are an important piece of LADWP's water portfolio, providing nearly 30 percent of total supply in drought years (LADWP 2013).

The project would replace an existing parking lot and impervious surface area with a new building and open space areas. These open space and permeable areas would allow for percolation of stormwater for groundwater recharge. Additionally, construction of the project would not include

substantial excavation for subterranean levels and, therefore, would not interfere with the local groundwater table. Impacts related to the depletion of groundwater supplies and groundwater recharge would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation onsite or offsite?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?

The project involves the construction of an approximately 35,000-sf building on a predominantly impervious project site. However, the project would not cause an alteration of streams or rivers since there are no existing water resources located on the project site. Although a pond is located on the CSUN campus approximately 0.3 mile southwest of the project site, all project construction and ground disturbance would be limited to the project site and, therefore, would not affect the pond. Construction of the project would be required to adhere to NPDES standards. Compliance with the NPDES would ensure that impacts associated with onsite or offsite erosion and flooding from project construction are less than significant. In addition, per the SWRCB Phase II General Permit for Small MS4s and CSU Post-Construction BMPs Guidance document, the project would be required to control pollutant discharge by implementing a combination of structural and non-structural CMPs during general operation of the project to ensure that stormwater runoff meets established water quality standards and waste discharge requirements. Compliance with NPDES and permit requirements would reduce potential impacts associated with erosion, siltation, or flooding onsite and offsite to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The project site is developed with an existing surface parking lot and is almost entirely paved with impermeable surfaces. The project would include the construction of a new approximately 35,000-sf building on the proposed site. As discussed above, the project would not alter drainage patterns on the site or lead to substantially altered runoff flows. Grading would be designed to meet existing conditions or provide accessible transition in hardscape and landscape. A paving and grading plan, horizontal control plan, paving and grading details including site sections at joining conditions, notes

and specifications to adequately identify all site improvements would be prepared after project approval. Drainage would not be allowed to collect anywhere on the project site or flow uncontrolled over any descending slope.

In addition, the project site is not located within a flood zone (Federal Emergency Management Agency [FEMA] 2008). Any runoff from the site would be properly retained on site and/or conveyed into the existing drainage system along Pacific Coast Highway. The project would not substantially change the site's drainage patterns and would not alter a stream, river, or other drainage course in a manner that would result in flooding or redirect flood flows. The project would not increase runoff such that flooding would occur, and impacts would be less than significant.

The "first-flush" stormwater would be collected and conveyed to a stormwater treatment system which shall be designed and constructed to comply with CSUN's Phase II Small Municipal Separate Storm Sewer System (MS4) Permit as specified in CSU's Guidance Document Post Construction BMPs section II. Documentation of compliance with MS4 post-construction requirements would be provided; the documentation shall be suitable for inspection by regulators and shall be suitable to upload to the State Water Resources Board's online Stormwater Multi-Application Reporting and Tracking System (SMARTS)

LESS THAN SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

According to the FEMA Flood Insurance Rate Map (FIRM), the project site is located in Zone X, which is characterized as an area of minimal flood hazard and having a less than 0.2 percent annual chance for a flood (Map #06037C1285F, September 26, 2008) (FEMA 2008). In addition, Exhibit F, 100-Year & 500-Year Flood Plains, and Exhibit G, Inundation & Tsunami Hazard Areas, of the City of Los Angeles General Plan Safety Element indicate that the project site is not within a 100- or 500-year flood plain area, inundation area, for flood control basin (Los Angeles 1996). Therefore, the project would not have the potential to impede flood flows or place housing or structures in a 100-year flood hazard area and there would be no impact.

NO IMPACT

12 Population an Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	■	☐
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a. Would the project induce substantial 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)?

The project would include the demolition of an existing parking lot and the construction of an approximately 35,000 gsf building. The new facility would include office, student/faculty activity meeting, research, and storage spaces as well as outdoor gathering and seating areas. The project does not include long-term residential development or businesses, nor does it extend roadways and other infrastructure and therefore, would not cause population growth. Therefore, the project would not cause a substantial increase in population. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

As discussed under Impact 12a. above, the project would involve the demolition of an existing surface parking lot and there are no housing units or people residing on the project site that would need to be relocated to replacement housing. Therefore, the project would not displace any existing housing units or people, necessitating construction of replacement housing elsewhere. No impact would occur.

NO IMPACT

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13 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	■
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?	☐	☐	☐	■

a. Would the project 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?

b. Would the project 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?

According to the City of Los Angeles General Plan Conservation Element, potential mineral deposit sites in the City of Los Angeles lie along the flood plain from the San Fernando Valley through Downtown Los Angeles. However, as shown in in Exhibit A, Mineral Resources, of the City's General Plan Conservation Element, the project site not located in a mineral deposit zone (City of Los Angeles 2001). In addition, the project site is located in an urbanized setting that is predominately developed with residential, commercial, and institutional uses with no mineral resource extraction activities occurring onsite or in adjacent areas.

The CGS Information Warehouse was also searched for mineral land classification of the project site (DOC 2016). According to the CGS Mineral Land Classification maps, the project site is not in an MRZ-2 zone or other known or potential mineral resource area (DOC 1979). Since there are no known mineral resources or mineral resource extraction on or near the project site and the project does not involve the use or mining of mineral resources, the project would have no impact on the availability or recovery of mineral resources.

NO IMPACT

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14 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	■	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
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?	☐	☐	☐	■

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?

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would

increase the noise level by 3 dB; dividing the energy in half would result in a 3dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}), Day-Night Average Level (DNL; may also be symbolized as L_{dn}), and the community noise equivalent level (CNEL; may also be symbolized as L_{den}).

L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise

levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{DN}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or L_{DEN}), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).[6] The relationship between the peak-hour L_{eq} value and the L_{DN}/CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by L_{DN} and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV), or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 10.

Table 10 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

[6] Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 11.

Table 11 Vibration Annoyance Potential Criteria

	Vibration Level (in/sec PPV)	
Human Response	Transient Sources	Continuous/ Frequent Intermittent Sources[1]
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

[1] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

Project Noise Setting

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the City of Los Angeles General Plan Noise Element, the following land uses are considered noise-sensitive: single-family and multi-unit dwellings; long-term care facilities (including convalescent and retirement facilities); dormitories; motels; hotels; transient lodgings and other residential uses; houses of worship; hospitals; libraries; schools; auditoriums; concert halls; outdoor theaters; nature and wildlife preserves, and parks (City of Los Angeles 1999).

On-campus noise-sensitive receptors in the project site vicinity include Jacaranda Hall 30 feet to the west, Sequoia Hall 250 feet to the south, Redwood Hall 250 feet to the east, and CSUN University Library 500 feet to the southeast of the project site. There are no off-campus noise-sensitive receptors near the project site.

Noise Measurements

The most prevalent sources of noise in the project site vicinity are vehicular traffic on Lindley Avenue to the west and Plummer Street to the north. Several CSUN buildings are also located in the project site vicinity. There are no other prevalent noise sources in the vicinity of the project site. To characterize ambient noise levels at the project site, two 15-minute sound level measurements were conducted on Friday, December 17, 2021, at 4:29 p.m. and 4:40 p.m. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements. Figure 4 shows the noise measurement locations, and Table 12 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix B.

Table 12 Project Site Vicinity Sound Level Monitoring Results- Short-Term

	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)
NM-1	Southeast Corner of Project Site	4:29 – 4:35 p.m.	35 feet to Centerline of Lindley Ave	59	51	74
NM-2	Center of Project Site	4:40 – 4:55 p.m.	75 feet to Centerline of Lindley Ave	55	52	70

L_{eq} = average noise level equivalent; dBA = A-weighted decibel; L_{min} = minimum instantaneous noise level; L_{max} = maximum instantaneous noise level

Detailed sound level measurement data are included in Appendix B

Regulatory Setting

The CSUN 2006 Master Plan does not contain guidelines for regulating noise levels and is not subject to City of Los Angeles standards. However, because CSUN does not have noise standards and is located within the City of Los Angeles, the City of Los Angeles standards are used in this Draft Initial Study/Mitigated Negative Declaration as guidance to evaluate potential noise impacts.

The goals, policies, and actions contained in the City of Los Angeles General Plan Noise Element focus on establishing and applying criteria for acceptable noise levels for different land uses in order to minimize the negative impacts of noise, especially at sensitive receiver locations. In support of these goals and policies, the City's Noise Element contains a land use and noise compatibility matrix (shown in Table 13) that determines the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses. According to the City's noise compatibility matrix shown in Table 13, ambient noise up to 60 CNEL is normally acceptable and noise up to 70 CNEL is conditionally acceptable for schools. In addition, consistent with state noise insulation standards (California Building Code Title 24), the City's Noise Element limits interior noise to a maximum of 45 CNEL in any habitable room (City of Los Angeles 1999).

Figure 4 Noise Measurement Locations

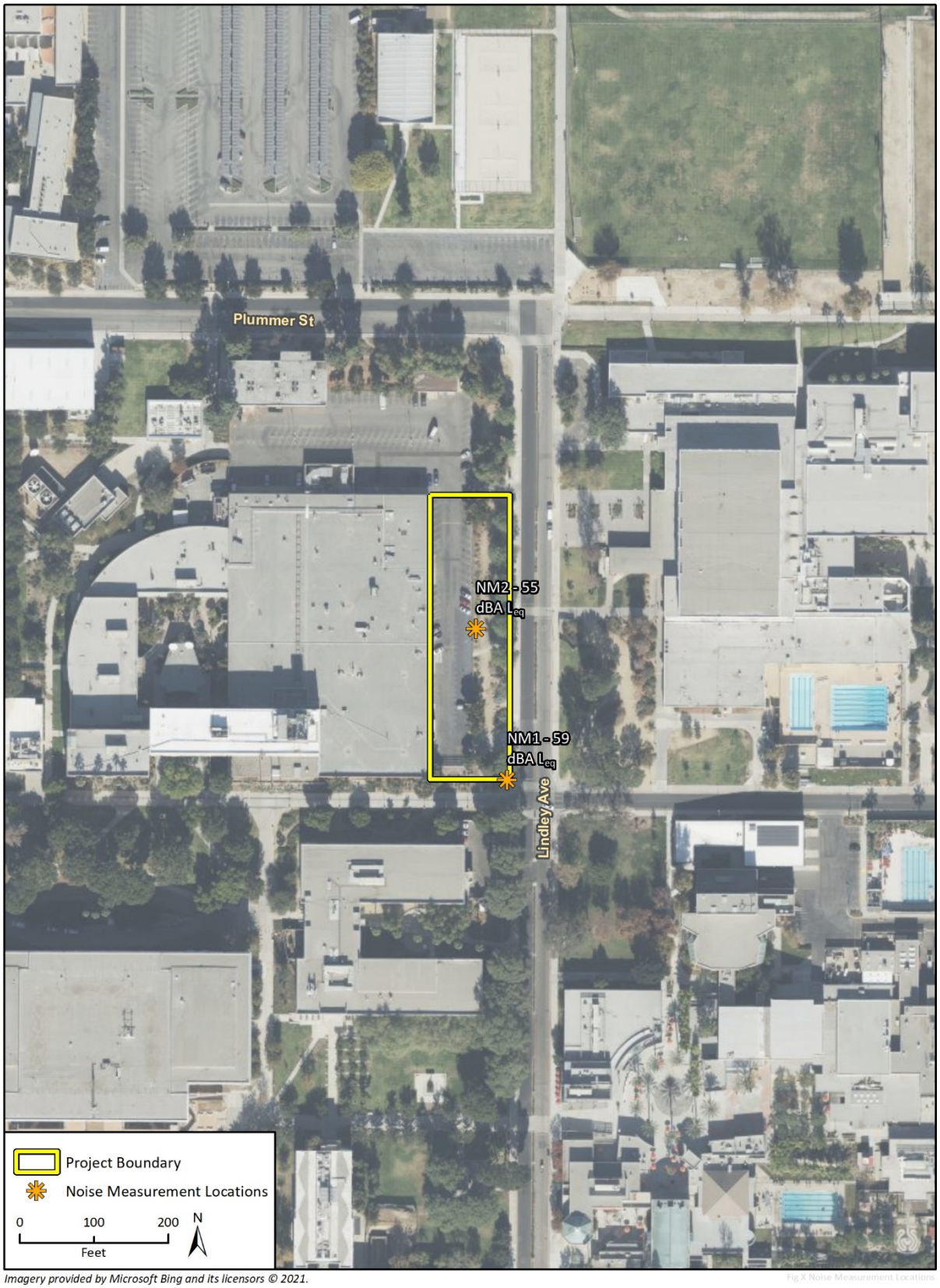

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Table 13 Land Use and Noise Compatibility Matrix (CNEL)

Land Use	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Single-Family, Duplex, Mobile Homes	50 – 55	55 – 70	70 – 75	75+
Multi-Family	50 – 60	60 – 70	70 – 75	75+
School, Library, Church, Hospital, Nursing Home	50 – 60	60 – 70	70 – 80	80+
Transient Lodging, Motel, Hotel	50 – 60	60 – 70	70 – 75	75+
Auditorium, Concert Hall, Amphitheater	–	50 – 65	–	65+
Sports Arena, Outdoor Spectator Sports	–	50 – 70	–	70+
Playground, Neighborhood Park	50 – 65	–	65 – 75	75+
Golf Course, Riding Stable, Water Recreation, Cemetery	50 – 70	–	70 – 75	75+
Office Building, Business, Commercial, Professional	50 – 65	65 – 75	75+	–
Agriculture, Industrial, Manufacturing, Utilities	50 – 70	70 – 75	75+	–

[1] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

[2] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning would normally suffice.

[3] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[4] Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: City of Los Angeles 1999

Construction Hours

TCSUN enforces construction and operational noise policies through limiting L construction activity to the hours below:

- Monday through Friday between 7:00 a.m. and 9:00 p.m.
- Other days between 8:00 a.m. and 6:00 p.m.

Noise Level Increases Over Ambient Noise Levels

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds

these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis.

a. Would the project result in 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?

Construction Noise

Construction activity would generate temporary noise in the project site vicinity, exposing surrounding sensitive receivers to increased noise levels. Project construction noise would be generated by heavy-duty diesel construction equipment used for demolition, site preparation, grading, building construction, and paving activities. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., demolition, site preparation, and grading work) and would be lower during the later construction phases (i.e., building construction and paving). Construction noise was estimated using reference noise levels and equipment use factors from the FHWA Roadway Construction Noise Model (RCNM 2006).

Noise impacts from construction equipment are typically assessed from the center of the equipment activity area (e.g., construction site, demolition area, grading area, etc.) over the time period of a construction day. Due to the size of the project site, modeling conservatively assumes simultaneous operation of one tractor, one dozer, and one grader operating simultaneously during the grading phase. Maximum hourly noise levels were estimated to be 83 dBA L_{eq} at a distance of 60 feet (RCNM calculations are included in Appendix B).

The closest sensitive receivers to project construction would be Jacaranda Hall, a CSUN building located to the west of the project site. Over the course of a typical construction day, the construction equipment would be mobile and is estimated to operate at an average distance of 60 feet from the nearest sensitive receivers. Therefore, construction noise levels would be approximately 83 dBA L_{eq} at the nearest sensitive receivers, which would exceed the daytime desired construction noise threshold of 75 dBA L_{eq}. Construction noise levels at other nearby sensitive receivers would be less than the noise levels at the nearest sensitive receiver due to distance attenuation.

Construction noise would result in noise levels in exceedance of 75dBA Legnoise level limit. Therefore, construction noise impacts would be potentially significant. Implementation of the Recommended Measure NO-1 would reduce construction noise impacts to nearby noise-sensitive receptors to a less than significant level.

Onsite Operational Noise

New onsite noise sources associated with operation of the proposed project would include noise from heating ventilation air conditioning (HVAC) use as well as noise from outdoor gathering areas.

Heating, Ventilation, and Air Conditioning Units

The proposed building would include rooftop HVAC units within an enclosure. Operational noise from HVAC equipment is a common noise source associated with new development. The design of the equipment would be required to comply with LAMC Section 112.02, which prohibits noise from air conditioning, refrigeration, heating, pumping, and filtering equipment from exceeding the ambient noise level on the premises of any other occupied property by more than 5 dBA. Compliance with this section of the LAMC would ensure that operation of onsite HVAC equipment would not result in a significant noise impact.

Outdoor Event Space Gathering Areas

The proposed outdoor space would include student study and collaboration areas, outdoor lab areas, and an outdoor gathering area. Noise from regular use of these spaces is typical of the surrounding noise environment and would not contribute to a substantial increase in ambient noise levels in the vicinity of the project. Use of the proposed outdoor spaces would not result in a significant noise impact.

Offsite Roadway Noise

Project operation would add approximately 689 average daily trips to the nearby roadways. Daily trip estimates were estimated using CalEEMod version 2020.4.0. Traffic noise impacts are evaluated in consideration of the City's Noise and Land Use Compatibility Guidelines (see Table 13) and community response to changes in ambient noise levels. As discussed under *Overview of Noise and Vibration*, the average healthy ear can barely perceive an increase of up to 3 dBA in noise levels, and a change of 5 dBA is readily perceptible. Based on this information, offsite traffic noise impacts would be significant if project-related traffic would result if one of the following would occur:

- A noise level increase of 5 dBA or greater if noise levels remain within the same land use compatibility classification at the sensitive receiver;
- A noise level increase of 3 dBA or greater if noise levels change the land use compatibility classification of the sensitive receiver;
- Any increase in noise levels if existing noise levels fall within the "normally unacceptable" or "clearly unacceptable" ranges at the sensitive receiver.

Existing traffic was estimated using traffic counts for the segments of Reseda Boulevard and Nordhoff Street nearest the project site. The existing traffic count is 19,463 at Reseda Boulevard (City of Los Angeles 2009) and 34,458 at Nordhoff Street (City of Los Angeles 2019a). Project-related traffic would increase daily traffic volumes on Reseda Boulevard and Nordhoff Street by approximately two percent and four percent, respectively. Generally, a doubling of traffic (i.e., a doubling of the sound energy) would result in a 3 dBA increase. A four percent increase of traffic would be much lower than a doubling of traffic; therefore, project-related traffic would not result in a 3 dBA increase in noise levels. Impacts to roadway noise levels would be less than significant.

Mitigation Measures

NOI-1 Construction Noise Reductions

The project applicant shall reduce construction noise to a level not to exceed 75 dBA L_{eq} at the nearest sensitive receivers. This shall be accomplished through the following required measures:

- Installation of temporary noise barriers/blankets along the western project boundary line adjacent to Jacaranda Hall, the nearest receiver. The temporary noise barriers and/or blankets may be constructed of material with a minimum weight of two pounds per square foot with no gaps or perforations. The temporary barriers/blankets shall be of sufficient height to extend from the top of the temporary construction fence and drape on the ground or be sealed at the ground. The temporary barriers/blankets shall have grommets along the top edge with exterior grade hooks, and loop fasteners along the vertical edges with overlapping seams, with a minimum overlap of 2 inches.
- Provide a sign at the yard entrance, or other conspicuous location, that includes a 24-hour telephone number for project information, and a procedure where a field engineer/construction manager shall respond to and investigate noise complaints and take corrective action, if necessary, in a timely manner. The sign shall have a minimum dimension of 48 inches wide by 24 inches high. The sign shall be placed 5 feet above ground level.
- If a noise complaint(s) is registered, the contractor would retain a University-approved noise consultant to conduct noise measurements at the use(s) that registered the complaint. The noise measurements would be conducted for a minimum of 1 hour and would include 1-minute intervals. The consultant shall prepare a letter report for code enforcement summarizing the measurements, calculation data used in determining impacts, and potential measures to reduce noise levels to the maximum extent feasible.

The following measures may also be used to reduce noise levels:

- The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only.
- Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators) or located as far from sensitive receivers, as feasible.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

CSUN has not adopted standards to assess vibration impacts during construction and operation. However, Caltrans has developed limits for the assessment of vibrations from transportation and construction sources and these will be used as guidance The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources. The thresholds of significance used in this analysis to evaluate vibration impacts are based on these impact criteria, as summarized in Table 11.

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted by the project. The greatest anticipated source of vibration during general project construction activities would be from a dozer, which, due to setbacks and the equipment size, may be used within 10 feet of Jacaranda Hall, the nearest offsite sensitive receiver to the east. Vibration levels at this offsite receiver would be approximately 0.24 PPV.

Vibration levels from individual pieces of construction equipment would not exceed the threshold at which damage can occur to engineered structures, 1.0 PPV, or the threshold at which transient vibration sources would be distinctly perceptible to 0.25 PPV. Construction vibration levels at all other buildings in the immediate vicinity would be less than the levels at Jacaranda Hall because

vibration levels would attenuate with distance. Therefore, construction vibration impacts would be less than significant.

Operation

As a university building, the proposed project would not generate significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operational vibration impact would occur.

LESS THAN SIGNIFICANT IMPACT

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?

The airport nearest to the project site, Van Nuys Airport, is located approximately 2.5 miles to the southeast. The project would not be located within the noise contours of the airport (Los Angeles County Airport Land Use Commission 2004). Therefore, no substantial noise exposure from airport noise would occur to construction workers, users, or employees of the project, and no impacts would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
	1 Fire protection?	☐	☐	■	☐
	2 Police protection?	☐	☐	■	☐
	3 Schools?	☐	☐	■	☐
	4 Parks?	☐	☐	■	☐
	5 Other public facilities?	☐	☐	■	☐

According to the 2005 Master Plan EIR, the campus is responsible for the University Department of Public Safety which provides police protection services for on-campus needs (CSUN 2005b).

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Although the project would not cause direct growth in the CSUN campus population, the project would add a new building to the campus, which would incrementally increase demand for fire protection services. According to the 2005 Master Plan EIR, the LAFD provides fire prevention, fire protection, and emergency medical services for the CSUN campus. Fire Station No. 103, located at 18143 Parthenia Street, Northridge, CA 91325 approximately 0.85 mile from the project site, provides primary fire protection for the south campus and Fire Station No. 70, located at 9861 Reseda Boulevard, Northridge, CA 91324 approximately 0.75 mile from the project site, provides fire protection for the north campus (CSUN 2005b). The project would likewise be supported by Fire Stations Nos. 70 and 103. Currently, the average response times for Fire Station No. 103 are approximately six minutes for emergency medical services and non-emergency medical services and four minutes for structure fires (LAFD 2017).

CSUN campus is exempt from the City of Los Angeles review process and as a result the LAFD will only review onsite fire access. Instead, the Office of the State Fire Marshall (OSFM) will review all applicable development plans and the project would have to comply with all OSFM requirements. In addition, the 2005 Master Plan EIR states that all projects should comply with standard design requirements in accordance with CBC, which include fire sprinklers and fire alarm devices (CSUN 2005b). New building construction would also be required to install backflow preventers, and pressure reducing station, post indicator valves, and LAFD connections for new building sprinkler systems (CSUN 2005b), and would be extending utilities from Jacaranda Hall, as discussed in Section 19, *Utilities and Service Systems*. Since the project would comply with applicable LAFD and CBC requirements and would not require new or expanded fire protection facilities, it would result in a less than significant impact related to fire protection services.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The project remains within the service area of the University Police Department Operations Division and would not require additional services beyond those already established for CSUN. According to the 2005 Master Plan EIR, first-response police protection services for the campus are provided by the University Police Department, which is a division of the University Department of Public Safety. The University Police Department Patrol Operations Division provides 24-hour patrol of CSUN property, buildings, parking lots, and residence halls and enforces all campus, state and other polices codes, including regulations CSUN establishes to administer the campus community (CSUN 2005b). Since the University Police Department is limited to campus incidents only, response times to the project site would be adequate and the project would not require new or expanded municipal police protection facilities. Furthermore, since LAPD and other surrounding municipal police departments do not serve the CSUN campus there would not be any impact to their services either. Overall impacts would, therefore, be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The project site is currently an empty parking lot which would be converted into two story building of approximately 35,000 sf. The goal of the project is to close equity gaps in STEM degree pathways and inspire Latinx and other post-traditional students who have been historically underrepresented in STEM to pursue high-demand careers in science, technology, engineering, and mathematics. To reach these goals, the project would add amenities such as office spaces and research facilities. Potential occupancy of the project would include P-14 students in addition to CSUN students and faculty. As such, the project would result in beneficial impacts for the CSUN campus and community and would not result in the need for new or physically altered schools in the project vicinity Impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The project would include rooms and spaces for shared building resources, outreach spaces, a Next Generation Success Center, Campus and Community Makerspace, and research labs. The project would also include outdoor work and activity areas open to students, faculty, and visitors. The project would have no direct impact on any existing parks, nor would it add resident population that would increase demand for parks.

The development of the project would not result in incremental impacts to the City's public services and facilities. Impacts to the CSUN's utilities (discussed in Section 19, *Utilities and Service Systems*) would be less than significant. As discussed in the Section 12, *Population and Housing*, the project would not generate long-term growth of the campus population. The CSUN's health care center, Klotz Student Health Care Center along with the two closest hospitals, Dignity Health Northridge Hospital Medical Center and Olive View Medical Center would be available for students, faculty, and visitors for any medical needs or emergencies.

The project would have a less than significant impacts to existing parks and would not generate significant impacts to other public facilities, such as libraries and hospitals. Impacts to public facilities would also be less than significant.

LESS THAN SIGNIFICANT IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	■	☐
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?	☐	☐	■	☐

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?

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?

The proposed project would add amenities such as office lab, research facilities, and spaces for outdoor activity areas at the new building. There would be an approximately 15-foot walkway between Jacaranda Hall and the EIH and other landscaped open areas around the new building. However, the project does not include the construction of any recreational facilities, nor would it increase the use of existing neighborhood and regional park facilities.

As discussed above in Section 12, *Population and Housing*, and Section 15, *Public Services*, the project would not substantially increase the number of residents or employees in the area. Students and visitors would be able to access open space and recreational opportunities within the CSUN campus. The project would not create unanticipated demand on existing CSUN open spaces and park areas or cause substantial deterioration of existing onsite recreational uses such that new facilities would be needed. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	■
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	■
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
d. Result in inadequate emergency access?	☐	☐	■	☐

A VMT Screening Analysis was completed for the project by Fehr & Peers in December 2021 (see Appendix C). The below analysis is based on the results of the VMT Screening Analysis.

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project is in conformance with the CSUN Master Plan. The project site would be accessible from Jacaranda Walk, an on-campus pedestrian walkway adjacent to the southern boundary of the site. A sidewalk currently exists on the eastern boundary of the project site along East University Drive/ Lindley Avenue. The scope of work for the project would not include any modifications to Jacaranda Walk and may include replacing the walk along East University Drive/Lindley Avenue with a similar walk, which would not impact pedestrian circulation. Construction of the project would not include any temporary lane closures on East University Drive/ Lindley Avenue or elsewhere on the CSUN campus, nor would the project alter any existing roadways. Although the project does not include any new parking spaces, additional EV stations, or additional bicycle parking spaces, vehicle and bicycle parking for students, faculty and staff would continue to be provided in nearby parking structures and lots around the CSUN campus. Public transit would be provided numerous bus stops currently located on CSUN campus including the CSUN Transit Center, located approximately 1,500 feet west of the project site, which is serviced by Metro bus routes 240 and 787. No transit routes would be impacted by construction or operation of the project. The project would not involve construction or operational activities that conflict with the campus Master Plan; nor would it adversely affect public transit, bikeways or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, no impact would occur.

NO IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)??

CEQA Guidelines Section 15064.3(b) identifies appropriate criteria for evaluating transportation impacts. It states that land use projects with VMT exceeding an applicable threshold of significance may indicate a significant impact, and that projects that decrease VMT compared to existing conditions should be presumed to have a less than significant transportation impact.

The CSU's guidelines include criteria for screening out projects from full VMT analysis. For CSU projects, examples of projects that would be screened from VMT assessment due to their VMT reducing nature (i.e., no further analysis required) are noted below:

- Local serving retail that is less than 50,000 sf, or retail that is located wholly within the core of a CSU campus;
- Childcare centers that serve students, faculty, and staff families;
- Student services facilities;
- Healthcare centers serving students, faculty, and staff;
- Recreation/fitness/wellness centers that serve students, faculty, and staff;
- On-campus housing serving students, faculty and staff; and
- Projects generating less than 110 vehicle trips per day, as noted in the OPR Technical Advisory.

If a project meets any of the screening criteria, then no further VMT assessment is required of the operational period.

According to the VMT Screening Analysis, prepared by Fehr & Peers, in 2022, the screening criteria of projects generating less than 110 vehicle trips per day is applicable to the project. The project would primarily serve the existing students in Jacaranda Hall as well as other students on the CSUN campus. The proposed project is expected to generate one visit from a K-12 school per day, equaling up to two busloads of students. The project is also expected to generate visits from non- enrolled students and their families, no more than ten a day. These are anticipated to primarily be from the San Fernando Valley and other CSUN service areas, such as the Santa Clarita Valley and Simi Valley. As such, the project is expected to generate two buses per day and ten family visits per day, for a total of 24 daily vehicle trips. This is well below the applicable threshold of 110 daily trips and it is concluded that the project would result in a less than a significant transportation impact related to VMT and no further analysis is required.

The VMT Screening Analysis concluded that no additional VMT analysis is required and as a result the project would be consistent with CEQA Guidelines Section 15064.3(b). Therefore, no impact would occur.

NO IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The project would not allow vehicle access to the project site and as a result the project does not include any geometric design features such as sharp curves or dangerous intersections or incompatible uses that would increase hazards. The project also does not include any modifications to existing streets and would not increase hazards on East University Drive/ Lindley Avenue. Therefore, there no impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

During construction of the project, oversized vehicles would be required for the transport of construction equipment to and from the project site. The project would obtain necessary permits and comply with all permit requirements from Caltrans for the safe transport of construction equipment. Furthermore, construction of the project would not include any temporary lane closures on East University Drive/ Lindley Avenue or elsewhere on the CSUN campus, nor would the project alter any existing roadways.

Although the project would redevelop the southern portion of existing Parking Lot E5 and thus remove vehicular access to that portion of the parking lot, the northern portion of Parking Lot E5 would still be accessible to vehicles by a driveway off of East University Drive/ Lindley Avenue. Emergency vehicles would be able to access the northern boundary of the project site through this driveway and as a result the project would not substantially alter site access.

Furthermore, the site plan and emergency access features would be subject to review and by the OSFM and LAFD to ensure that conformance with emergency access requirements is maintained. Therefore, the project would not result in inadequate emergency access and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a PRC Section 21074 as either a site, feature, place, or 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:				
e. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or	☐	■	☐	☐
f. 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	■	☐	☐

As of July 1, 2015, AB 52 was enacted and expanded CEQA requirements by defining a new resource category of "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is

traditionally and culturally affiliated with the geographic area of the proposed project," specifically with those Native American tribes that have requested notice of projects proposed within the jurisdiction of the lead agency.

On December 17, 2021, CSUN sent via mail and email a notification of the project to Jairo Avila, Tribal Historic and Cultural Preservation Officer of the Fernandeño Tataviam Band of Mission Indians (FTBMI). On December 20, 2021, Mr. Avila responded via email to CSUN requesting consultation under AB 52 and requested any geotechnical or excavation reporting conducted for the project. CSUN provided the geotechnical report to the FTBMI on January 4, 2022. On January 7, 2022, FTBMI requested the scope of the cultural resources investigation and the SCCIC records search result. CSUN provided the cultural resources scope of work and the records search results from a 2018 study nearby. CSUN and FTBMI consulted over the phone on January 20, 2022, about mitigation measures and after a series of emails between the two parties, the mitigation measures below were agreed upon and adopted.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC 21074 that is 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 PRC Section 5024.1?*

Based on the AB 52 consultation with the FTBMI, it is possible that unanticipated tribal cultural resource deposits and/or human remains could be encountered and damaged during the ground-disturbing activities associated with construction (such as grading and excavation), especially if those activities occur in less-disturbed buried sediments. Consequently, impacts to tribal cultural resources could be potentially significant. In order to address the potential for project construction to result in significant adverse impacts to tribal cultural resources, mitigation measures including protocols for handling unanticipated discoveries of tribal cultural resources should be developed for the proposed project; such mitigation measures are expected to reduce project impacts to a less-than-significant level.

Mitigation Measure

TCR1 Unanticipated Discovery of Tribal Cultural Resources

In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall assess the find. Work on the portions of the Projects outside of the buffered area may continue during this assessment period. The Fernandeño Tataviam Band of Mission Indians (FTBMI) shall be contacted regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

TCR2 Native American Monitoring

Should the find be deemed significant, as defined by CEQA (as amended, 2015), the University shall retain a professional Native American monitor with traditional and cultural affiliation to the area to observe all remaining ground-disturbing activities including, but not limited to, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, clearing, driving posts, auguring, blasting, stripping topsoil or a similar activity, and archaeological work. The FTBMI shall be given the opportunity to conduct construction monitoring.

TCR3 Native Consultation

Then University shall, in good faith, consult with the FTBMI on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
g. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	■	☐
h. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	☐	☐	■	☐
i. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	■	☐
j. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	■	☐
k. 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?	☐	☐	■	☐
l. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	■	☐
m. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	■	☐

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

e. Would the project 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?

The Los Angeles Bureau of Sanitation (LASAN) operates and maintains the City of Los Angeles's wastewater infrastructure. The City's wastewater collection system serves over four million residential and business customers in a 600-square-mile service area that includes Los Angeles and 29 contracting cities and agencies. Over 6,700 miles of public sewers connect to the City's four wastewater treatment and water reclamation plants, which have a combined capacity to treat an average of 580 million gallons per day (mgd) of wastewater (LASAN 2017a). The Hyperion Treatment Plant serves the project site and is located in Playa del Rey. According to LASAN, the Hyperion Treatment Plant is designed to treat up to 450 mgd and currently treats an average of 275 mgd, with a remaining capacity of 175 mgd (LASAN 2017b).

The project would involve the construction of a two-story building of approximately 35,000 gsf. Since the project site is currently utilized as a paved parking lot, there are no current needs for water or wastewater infrastructure on the site. The project would house office and research lab spaces. These new uses would increase the need for water, stormwater drainage and wastewater treatment. However, the campus would be able provide the project with connections to existing Cold Water, Sanitary Sewer, and Storm Drain utility lines located to the west of the project site. Site utility plans, specifications, notes and calculations to adequately identify utility works within the project limit would be prepared prior to project construction.

Existing utilities that traverse the site and that are to remain would be identified and would be protected during construction. If applicable, recommendations for potholing and/or exploratory trenching would be presented to CSUN. Existing utility lines in conflict with the proposed improvements would be rerouted to accommodate the new facilities (CSUN 2021).

Stormwater management for the project would ensure that stormwater is collected and conveyed into the existing storm drain system. It would not interfere with the existing stormwater management for Jacaranda Hall or other adjacent campus uses. Although this may require relocating drainage pipes, this would not conflict or impact the existing storm drain system. Drainage structures and piping systems for the underground storm drain system would be designed based on hydrologic and hydraulic calculations to provide for a minimum flow velocity of three feet per second and the ability to convey the appropriate design storm event (CSUN 2021). Therefore, the project's impact to stormwater drainage would be less than significant.

The Projected Total Master Plan Water Demands for 2035 of the 2005 Master Plan EIR shows projected campus water demand for the project in 2035 (CSUN 2005b). The annual campus water

usage would increase from 1,808 AFY to 4,299 AFY in 2035, this water consumption projection represents approximately 0.55 percent of the projected water demand (776,000 AFY) that the Los Angeles Department of Water and Power (LADWP) plans to meet by 2035 (CSUN 2005b). Since this is a relatively small fraction, the project would not exceed water usage demands and impacts to water supplies would be less than significant.

The 2005 Master Plan EIR identified projected campus wastewater generation up to 2035, based on a 40 percent increase in total campus population between 2004 and 2035. The annual campus wastewater generation, including new student and faculty/staff housing, would be 2.38 MGD or 869 MGY (CSUN 2005b). These would include the project's wastewater usage and would be sufficient to meet its projected demand. CSUN abides by the requirements under Region 4 of the Regional Water Quality Control Board (RWQCB) (CSUN 2005b). The project would not exceed requirements established by the RWQCB and would not require new wastewater treatment facilities associated with the project. As such, the project would not generate wastewater such that the Hyperion Treatment Plant would become constrained. Therefore, impacts to wastewater facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

The project has two components (construction and operation) that would result in the generation of solid waste. For purposes of this analysis, the estimated operational waste is used to determine the net increase in solid waste from the project. Construction of the project would also involve site preparation activities that would generate waste materials. However, construction would be temporary. According to the 2005 Master Plan EIR, solid waste generated at CSUN is currently disposed of at the Sunshine Canyon Landfill, which has adequate capacity for solid waste.

Table 14 Solid Waste Disposal Facilities

Facility	Permitted Daily Throughput (tons/day)	Average Daily Waste Quantities Disposed (tons/day)	Estimated Remained Daily Capacity (tons/day)[1]	Estimated Remaining Life (years)
Sunshine Canyon Landfill	12,100	6,387	5,713	18

[1] Estimated remaining daily capacity was calculated by subtracting the average daily waste quantities disposed from the permitted daily throughput.

Sources: Los Angeles County, Countywide Integrated Waste Management Plan, 2020
https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF

Solid waste generated by the project is not anticipated to exceed capacity at the Sunshine Canyon Landfill. The project would comply with federal, State, and local statutes and regulations related to solid waste, such as AB 939 and the Solid Waste Management Policy Plan. The gravity sanitary sewer system would be designed and constructed to collect domestic effluent from the project site and discharged into the existing sanitary sewer system according to the City of Los Angeles standards and guidelines for sanitary sewer design (CSUN 2021). Impacts related to solid waste and waste facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted 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?	☐	☐	☐	■
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?	☐	☐	☐	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

CSUN is serviced by the LAFD for fire protection. Northridge is a highly urbanized city that does not contain any State Responsibility Areas (SRA) within the city's boundaries. The project site is located on the existing CSUN campus, which is within the urbanized Northridge neighborhood of the City of Los Angeles. Undeveloped wildland areas are not located within proximity to the project site. According to the City of Los Angeles General Plan Safety Element, Exhibit D, Selected Wildfire Hazard Areas in the city of Los Angeles, the project is not located in a wildfire hazard area. The project site is not located in a fire buffer zone, a mountain fire district, or an area of known shallow methane accumulation (City of Los Angeles 1996).

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

As stated above, the project is not within an SRA. The nearest SRA is approximately five miles from the project site. The project site is also not located in Very High Fire Hazard Severity Zone (VHFHSZ) for wildland fires (CalFIRE 2021).

As discussed in Section 15, *Public Services*, CSUN's fire protection services are provided by LAFD. The LAFD would provide fire protection, and emergency response for the project. According to the 2005 Master Plan EIR, the CSUN Department of Public Safety and Environmental Health and Safety Office have prepared and adopted campus emergency procedures (CSUN 2005b). In order to comply with these procedures, all development including the project on the CSUN campus would take into account existing emergency routes, response procedures and action plans. Fire department access would be provided in accordance with the California Fire Code, California State Fire Marshal, City of Los Angeles and LAFD standards and requirements, specifically the City of Los Angeles Fire Code. During construction, the required flow rates and number of hydrants would be determined based on California Fire Code and local Fire Department requirements. LAFD Hydrant and Access Division approval will be obtained. Construction of the project would maintain emergency access to the site and on area roadways and would not interfere with any emergency response plan or evacuation route as described in the 2005 Master Plan EIR. No impact would occur.

NO IMPACT

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?

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

The project site is in an urbanized area and is not located in a high fire hazard severity zone (CAL FIRE 2021). The project would involve construction of a new building. The existing project site currently consists of a parking lot and concrete walkways adjacent to a landscaped corridor. The landscape area contains a swale and a moderate slope up to Lindley Avenue along the east edge of the project. The project site generally slopes from the northwest to the southeast. Runoff sheet flows east from the parking lot into the landscape corridor where it enters the swale and is collected by area drains (CSUN 2021). Positive surface drainage away from project and existing buildings would be implemented and no ponding areas shall be allowed. Overflow relief would be provided for all proposed sump conditions designed to prevent flooding of proposed or existing buildings. Operation of the project would not involve activities known to cause or exacerbate wildfires. No impact would occur.

NO IMPACT

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?

The project site is located in an urbanized area and is not located in or near a state responsibility area or land classified as a very high fire hazard severity zone (CAL FIRE 2021). It is also not within an SRA zone. The project consists of the construction of a new building adjacent to Jacaranda Hall, with

excavation activities only to serve the construction process. Existing utilities that are to remain would be identified in order to ensure their protection during excavation activities. Temporary shutoffs, disconnection or rerouting of utilities shall be coordinated with CSUN and the applicable utility company. In regard to fire water infrastructure, all existing conditions will be reviewed, lines that need to be protected in place would be indicated, and service to existing occupied buildings and food service would be maintained so as not to disrupt operation or service during construction (CSUN 2021).

The project site would be adequately served by existing facilities and utilities. Therefore, the project would not require additional roads, fuel breaks, emergency water sources, power lines or other utilities that would exacerbate fire risk and no temporary or ongoing impacts to the environment would occur. There would be no impact.

NO IMPACT

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
e. 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?	☐	■	☐	☐
f. 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)?	☐	☐	■	☐
g. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

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?

As discussed in Section 4, *Biological Resources*, the project does not include any mapped essential habitat connectivity areas in the immediate vicinity of the project site. Regional wildlife movement is restricted due to the urbanized nature of the city in which the project site is located. As such, no native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or native wildlife nursery sites exist on the project site. However, the project site currently has existing trees that would be removed for project construction, which may contain nesting or breeding birds. Therefore, implementation of Mitigation Measure BIO-1 would require nesting bird

surveys to be completed prior to construction activities and, therefore, would reduce potential impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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)?

No known planned or pending projects are located in the immediate site vicinity that would substantially contribute to any additive effects in conjunction with the project. The project's contribution to cumulative regional and global impacts with respect to such issues as air quality, climate change, and noise would not be substantial due to the project size, location, and design. Therefore, the project would not contribute to cumulative impacts related to any if the issues areas and cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

As detailed in the preceding sections, the project has the potential to result in impacts to Cultural and Paleontological Resources. Compliance with applicable rules and regulations would reduce potential impacts on human beings to less than significant.

LESS THAN SIGNIFICANT IMPACT

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Appendices – Table of Contents

Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Outputs

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Annual

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

CSUN Northridge Project -AQGHG

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	35.00	1000sqft	1.38	35,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
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 - Based on applicant data.

Construction Phase - Construction Schedule provided by applicant

Off-road Equipment - Default setting but included concrete/industrial saw in Demo/site prep phase.

Trips and VMT - Google earth map to get cubic feet of hardscape and landscape (15,984) divide by 27 for cubic yards, then divide 16 cubic yard hauling capacity per trip for 74 additonal hauling trips. 2 default trips

Grading - Data provided by applicant

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - VMT memo expects project to generate 24 vehicle trips per day

Area Coating - SCAQMD Rule 1113

Water And Wastewater - No septic tank onsite and wastewater treatment plants dont have faculative lagoons

Construction Off-road Equipment Mitigation - Based on SCAQMD Rule 403

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Annual

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

Area Mitigation - Based on SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Fleet Mix - Data provided by VMT memo. 20 vehicles per day and 4 Bus trips per day.

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_Nonresidential_Exterior	17000	16000
tblAreaCoating	Area_Nonresidential_Interior	51000	48000
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	200.00	371.00
tblConstructionPhase	NumDays	10.00	371.00
tblConstructionPhase	NumDays	10.00	282.00
tblFleetMix	HHD	9.2090e-003	0.00
tblFleetMix	LDA	0.54	0.83
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.4480e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.7210e-003	0.00

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Annual

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

tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	8.1000e-004	0.17
tblFleetMix	SBUS	7.5100e-004	0.00
tblFleetMix	UBUS	5.0300e-004	0.00
tblGrading	MaterialExported	0.00	10.00
tblGrading	MaterialImported	0.00	10.00
tblLandUse	LotAcreage	0.80	1.38
tblTripsAndVMT	HaulingTripNumber	3.00	76.00
tblVehicleTrips	ST_TR	11.23	0.69
tblVehicleTrips	SU_TR	1.21	0.69
tblVehicleTrips	WD_TR	20.25	0.69
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	1,667,667.10	1,569,569.04
tblWater	OutdoorWaterUseRate	2,608,402.40	2,454,966.96
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	0.2927	2.2906	2.4777	4.6000e-003	0.3104	0.1021	0.4124	0.1415	0.0966	0.2381	0.0000	394.4515	394.4515	0.0840	2.3400e-003	397.2490
2024	0.2814	1.8069	2.3671	4.1500e-003	0.0360	0.0780	0.1139	9.6400e-003	0.0743	0.0839	0.0000	353.7108	353.7108	0.0686	2.1000e-003	356.0510
Maximum	**0.2927**	**2.2906**	**2.4777**	**4.6000e-003**	**0.3104**	**0.1021**	**0.4124**	**0.1415**	**0.0966**	**0.2381**	**0.0000**	**394.4515**	**394.4515**	**0.0840**	**2.3400e-003**	**397.2490**

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	0.2927	2.2906	2.4777	4.6000e-003	0.1594	0.1021	0.2615	0.0690	0.0966	0.1656	0.0000	394.4511	394.4511	0.0840	2.3400e-003	397.2485
2024	0.2814	1.8068	2.3671	4.1500e-003	0.0360	0.0780	0.1139	9.6400e-003	0.0743	0.0839	0.0000	353.7104	353.7104	0.0686	2.1000e-003	356.0506
Maximum	**0.2927**	**2.2906**	**2.4777**	**4.6000e-003**	**0.1594**	**0.1021**	**0.2615**	**0.0690**	**0.0966**	**0.1656**	**0.0000**	**394.4511**	**394.4511**	**0.0840**	**2.3400e-003**	**397.2485**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Annual

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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**43.58**	**0.00**	**28.67**	**47.99**	**0.00**	**22.52**	**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	**1-2-2023**	**4-1-2023**	0.5419	0.5419
2	**4-2-2023**	**7-1-2023**	0.6177	0.6177
3	**7-2-2023**	**10-1-2023**	0.6959	0.6959
4	**10-2-2023**	**1-1-2024**	0.7413	0.7413
5	**1-2-2024**	**4-1-2024**	0.6927	0.6927
6	**4-2-2024**	**7-1-2024**	0.6920	0.6920
7	**7-2-2024**	**9-30-2024**	0.6920	0.6920
		Highest	0.7413	0.7413

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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	0.1339	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.7000e-004	8.7000e-004	0.0000	0.0000	9.3000e-004
Energy	5.0600e-003	0.0460	0.0387	2.8000e-004		3.5000e-003	3.5000e-003		3.5000e-003	3.5000e-003	0.0000	156.5439	156.5439	6.0400e-003	1.5300e-003	157.1519
Mobile	4.3900e-003	0.0200	0.0678	3.4000e-004	0.0285	2.1000e-004	0.0287	7.7700e-003	2.0000e-004	7.9700e-003	0.0000	32.2089	32.2089	5.3000e-004	1.8100e-003	32.7611
Waste						0.0000	0.0000		0.0000	0.0000	8.9722	0.0000	8.9722	0.5302	0.0000	22.2283
Water						0.0000	0.0000		0.0000	0.0000	0.5553	14.9757	15.5310	2.6300e-003	1.2900e-003	15.9823
Total	**0.1434**	**0.0660**	**0.1069**	**6.2000e-004**	**0.0285**	**3.7100e-003**	**0.0322**	**7.7700e-003**	**3.7000e-003**	**0.0115**	**9.5275**	**203.7294**	**213.2569**	**0.5394**	**4.6300e-003**	**228.1245**

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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	0.1339	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.7000e-004	8.7000e-004	0.0000	0.0000	9.3000e-004
Energy	4.5700e-003	0.0415	0.0349	2.5000e-004		3.1600e-003	3.1600e-003		3.1600e-003	3.1600e-003	0.0000	148.6678	148.6678	5.8000e-003	1.4300e-003	149.2379
Mobile	4.3900e-003	0.0200	0.0678	3.4000e-004	0.0285	2.1000e-004	0.0287	7.7700e-003	2.0000e-004	7.9700e-003	0.0000	32.2089	32.2089	5.3000e-004	1.8100e-003	32.7611
Waste						0.0000	0.0000		0.0000	0.0000	8.9722	0.0000	8.9722	0.5302	0.0000	22.2283
Water						0.0000	0.0000		0.0000	0.0000	0.4443	13.6927	14.1370	2.1800e-003	1.0500e-003	14.5030
Total	**0.1429**	**0.0615**	**0.1031**	**5.9000e-004**	**0.0285**	**3.3700e-003**	**0.0319**	**7.7700e-003**	**3.3600e-003**	**0.0111**	**9.4165**	**194.5702**	**203.9867**	**0.5388**	**4.2900e-003**	**218.7313**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.34**	**6.82**	**3.54**	**4.84**	**0.00**	**9.16**	**1.06**	**0.00**	**9.19**	**2.96**	**1.17**	**4.50**	**4.35**	**0.13**	**7.34**	**4.12**

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 & Site Preparation	Site Preparation	1/2/2023	4/1/2023	5	65	
2	Grading	Grading	4/1/2023	4/30/2023	5	20	
3	Building Construction	Building Construction	5/1/2023	9/30/2024	5	371	

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

4	Paving	Paving	5/1/2023	9/30/2024	5	371	
5	Architectural Coating	Architectural Coating	9/1/2023	9/30/2024	5	282	

Acres of Grading (Site Preparation Phase): 60.94

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 51,000; Non-Residential Outdoor: 17,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition & Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition & Site Preparation	Graders	1	8.00	187	0.41
Demolition & Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Demolition & Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
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	1	6.00	78	0.48

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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 & Site Preparation	4	10.00	0.00	76.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition & Site Preparation - 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					0.2036	0.0000	0.2036	0.0976	0.0000	0.0976	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4878	0.3347	7.6000e-004		0.0207	0.0207		0.0193	0.0193	0.0000	66.5951	66.5951	0.0168	0.0000	67.0138
Total	**0.0477**	**0.4878**	**0.3347**	**7.6000e-004**	**0.2036**	**0.0207**	**0.2242**	**0.0976**	**0.0193**	**0.1170**	**0.0000**	**66.5951**	**66.5951**	**0.0168**	**0.0000**	**67.0138**

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

3.2 Demolition & Site Preparation - 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	8.0000e-005	4.8200e-003	1.2900e-003	2.0000e-005	6.5000e-004	3.0000e-005	6.9000e-004	1.8000e-004	3.0000e-005	2.1000e-004	0.0000	2.1675	2.1675	1.2000e-004	3.4000e-004	2.2732
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	1.0100e-003	7.8000e-004	0.0106	3.0000e-005	3.5700e-003	2.0000e-005	3.5900e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	2.8254	2.8254	7.0000e-005	7.0000e-005	2.8486
Total	**1.0900e-003**	**5.6000e-003**	**0.0119**	**5.0000e-005**	**4.2200e-003**	**5.0000e-005**	**4.2800e-003**	**1.1300e-003**	**5.0000e-005**	**1.1800e-003**	**0.0000**	**4.9929**	**4.9929**	**1.9000e-004**	**4.1000e-004**	**5.1217**

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					0.0916	0.0000	0.0916	0.0439	0.0000	0.0439	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4878	0.3347	7.6000e-004		0.0207	0.0207		0.0193	0.0193	0.0000	66.5950	66.5950	0.0168	0.0000	67.0137
Total	**0.0477**	**0.4878**	**0.3347**	**7.6000e-004**	**0.0916**	**0.0207**	**0.1123**	**0.0439**	**0.0193**	**0.0633**	**0.0000**	**66.5950**	**66.5950**	**0.0168**	**0.0000**	**67.0137**

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

3.2 Demolition & Site Preparation - 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	8.0000e-005	4.8200e-003	1.2900e-003	2.0000e-005	6.5000e-004	3.0000e-005	6.9000e-004	1.8000e-004	3.0000e-005	2.1000e-004	0.0000	2.1675	2.1675	1.2000e-004	3.4000e-004	2.2732
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	1.0100e-003	7.8000e-004	0.0106	3.0000e-005	3.5700e-003	2.0000e-005	3.5900e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	2.8254	2.8254	7.0000e-005	7.0000e-005	2.8486
Total	**1.0900e-003**	**5.6000e-003**	**0.0119**	**5.0000e-005**	**4.2200e-003**	**5.0000e-005**	**4.2800e-003**	**1.1300e-003**	**5.0000e-005**	**1.1800e-003**	**0.0000**	**4.9929**	**4.9929**	**1.9000e-004**	**4.1000e-004**	**5.1217**

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					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1447	0.0870	2.1000e-004		6.0400e-003	6.0400e-003		5.5600e-003	5.5600e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	**0.0133**	**0.1447**	**0.0870**	**2.1000e-004**	**0.0708**	**6.0400e-003**	**0.0769**	**0.0343**	**5.5600e-003**	**0.0398**	**0.0000**	**18.1039**	**18.1039**	**5.8600e-003**	**0.0000**	**18.2503**

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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	0.0000	0.0000	0.0000	0.0000	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	3.1000e-004	2.4000e-004	3.2700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8694	0.8694	2.0000e-005	2.0000e-005	0.8765
Total	**3.1000e-004**	**2.4000e-004**	**3.2700e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.8694**	**0.8694**	**2.0000e-005**	**2.0000e-005**	**0.8765**

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					0.0319	0.0000	0.0319	0.0154	0.0000	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1447	0.0870	2.1000e-004		6.0400e-003	6.0400e-003		5.5600e-003	5.5600e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	**0.0133**	**0.1447**	**0.0870**	**2.1000e-004**	**0.0319**	**6.0400e-003**	**0.0379**	**0.0154**	**5.5600e-003**	**0.0210**	**0.0000**	**18.1039**	**18.1039**	**5.8600e-003**	**0.0000**	**18.2503**

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	0.0000	0.0000	0.0000	0.0000	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	3.1000e-004	2.4000e-004	3.2700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8694	0.8694	2.0000e-005	2.0000e-005	0.8765
Total	**3.1000e-004**	**2.4000e-004**	**3.2700e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.8694**	**0.8694**	**2.0000e-005**	**2.0000e-005**	**0.8765**

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	0.1333	1.0247	1.1035	1.9300e-003		0.0450	0.0450		0.0435	0.0435	0.0000	158.8992	158.8992	0.0270	0.0000	159.5738
Total	**0.1333**	**1.0247**	**1.1035**	**1.9300e-003**		**0.0450**	**0.0450**		**0.0435**	**0.0435**	**0.0000**	**158.8992**	**158.8992**	**0.0270**	**0.0000**	**159.5738**

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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	5.7000e-004	0.0200	7.6100e-003	1.0000e-004	3.3100e-003	1.1000e-004	3.4200e-003	9.6000e-004	1.1000e-004	1.0600e-003	0.0000	9.3435	9.3435	3.1000e-004	1.3500e-003	9.7548
Worker	3.8200e-003	2.9400e-003	0.0401	1.1000e-004	0.0134	8.0000e-005	0.0135	3.5700e-003	7.0000e-005	3.6400e-003	0.0000	10.6495	10.6495	2.7000e-004	2.7000e-004	10.7369
Total	**4.3900e-003**	**0.0229**	**0.0477**	**2.1000e-004**	**0.0168**	**1.9000e-004**	**0.0169**	**4.5300e-003**	**1.8000e-004**	**4.7000e-003**	**0.0000**	**19.9930**	**19.9930**	**5.8000e-004**	**1.6200e-003**	**20.4917**

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	0.1333	1.0247	1.1035	1.9300e-003		0.0450	0.0450		0.0435	0.0435	0.0000	158.8990	158.8990	0.0270	0.0000	159.5736
Total	**0.1333**	**1.0247**	**1.1035**	**1.9300e-003**		**0.0450**	**0.0450**		**0.0435**	**0.0435**	**0.0000**	**158.8990**	**158.8990**	**0.0270**	**0.0000**	**159.5736**

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	5.7000e-004	0.0200	7.6100e-003	1.0000e-004	3.3100e-003	1.1000e-004	3.4200e-003	9.6000e-004	1.1000e-004	1.0600e-003	0.0000	9.3435	9.3435	3.1000e-004	1.3500e-003	9.7548
Worker	3.8200e-003	2.9400e-003	0.0401	1.1000e-004	0.0134	8.0000e-005	0.0135	3.5700e-003	7.0000e-005	3.6400e-003	0.0000	10.6495	10.6495	2.7000e-004	2.7000e-004	10.7369
Total	**4.3900e-003**	**0.0229**	**0.0477**	**2.1000e-004**	**0.0168**	**1.9000e-004**	**0.0169**	**4.5300e-003**	**1.8000e-004**	**4.7000e-003**	**0.0000**	**19.9930**	**19.9930**	**5.8000e-004**	**1.6200e-003**	**20.4917**

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	0.1392	1.0843	1.2267	2.1600e-003		0.0442	0.0442		0.0426	0.0426	0.0000	177.9790	177.9790	0.0296	0.0000	178.7200
Total	**0.1392**	**1.0843**	**1.2267**	**2.1600e-003**		**0.0442**	**0.0442**		**0.0426**	**0.0426**	**0.0000**	**177.9790**	**177.9790**	**0.0296**	**0.0000**	**178.7200**

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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	6.2000e-004	0.0225	8.3900e-003	1.1000e-004	3.7100e-003	1.2000e-004	3.8300e-003	1.0700e-003	1.2000e-004	1.1900e-003	0.0000	10.3143	10.3143	3.5000e-004	1.5000e-003	10.7691
Worker	4.0000e-003	2.9400e-003	0.0419	1.2000e-004	0.0151	8.0000e-005	0.0151	4.0000e-003	8.0000e-005	4.0700e-003	0.0000	11.6712	11.6712	2.7000e-004	2.8000e-004	11.7621
Total	**4.6200e-003**	**0.0254**	**0.0503**	**2.3000e-004**	**0.0188**	**2.0000e-004**	**0.0190**	**5.0700e-003**	**2.0000e-004**	**5.2600e-003**	**0.0000**	**21.9855**	**21.9855**	**6.2000e-004**	**1.7800e-003**	**22.5312**

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	0.1392	1.0843	1.2267	2.1600e-003		0.0442	0.0442		0.0426	0.0426	0.0000	177.9788	177.9788	0.0296	0.0000	178.7198
Total	**0.1392**	**1.0843**	**1.2267**	**2.1600e-003**		**0.0442**	**0.0442**		**0.0426**	**0.0426**	**0.0000**	**177.9788**	**177.9788**	**0.0296**	**0.0000**	**178.7198**

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	6.2000e-004	0.0225	8.3900e-003	1.1000e-004	3.7100e-003	1.2000e-004	3.8300e-003	1.0700e-003	1.2000e-004	1.1900e-003	0.0000	10.3143	10.3143	3.5000e-004	1.5000e-003	10.7691
Worker	4.0000e-003	2.9400e-003	0.0419	1.2000e-004	0.0151	8.0000e-005	0.0151	4.0000e-003	8.0000e-005	4.0700e-003	0.0000	11.6712	11.6712	2.7000e-004	2.8000e-004	11.7621
Total	**4.6200e-003**	**0.0254**	**0.0503**	**2.3000e-004**	**0.0188**	**2.0000e-004**	**0.0190**	**5.0700e-003**	**2.0000e-004**	**5.2600e-003**	**0.0000**	**21.9855**	**21.9855**	**6.2000e-004**	**1.7800e-003**	**22.5312**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0564	0.5456	0.7702	1.1900e-003		0.0270	0.0270		0.0249	0.0249	0.0000	103.0087	103.0087	0.0327	0.0000	103.8251
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0564**	**0.5456**	**0.7702**	**1.1900e-003**		**0.0270**	**0.0270**		**0.0249**	**0.0249**	**0.0000**	**103.0087**	**103.0087**	**0.0327**	**0.0000**	**103.8251**

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

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5500e-003	2.7300e-003	0.0372	1.1000e-004	0.0125	7.0000e-005	0.0126	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	9.8889	9.8889	2.5000e-004	2.5000e-004	9.9700
Total	**3.5500e-003**	**2.7300e-003**	**0.0372**	**1.1000e-004**	**0.0125**	**7.0000e-005**	**0.0126**	**3.3100e-003**	**7.0000e-005**	**3.3800e-003**	**0.0000**	**9.8889**	**9.8889**	**2.5000e-004**	**2.5000e-004**	**9.9700**

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	0.0564	0.5456	0.7702	1.1900e-003		0.0270	0.0270		0.0249	0.0249	0.0000	103.0086	103.0086	0.0327	0.0000	103.8250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0564**	**0.5456**	**0.7702**	**1.1900e-003**		**0.0270**	**0.0270**		**0.0249**	**0.0249**	**0.0000**	**103.0086**	**103.0086**	**0.0327**	**0.0000**	**103.8250**

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

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5500e-003	2.7300e-003	0.0372	1.1000e-004	0.0125	7.0000e-005	0.0126	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	9.8889	9.8889	2.5000e-004	2.5000e-004	9.9700
Total	**3.5500e-003**	**2.7300e-003**	**0.0372**	**1.1000e-004**	**0.0125**	**7.0000e-005**	**0.0126**	**3.3100e-003**	**7.0000e-005**	**3.3800e-003**	**0.0000**	**9.8889**	**9.8889**	**2.5000e-004**	**2.5000e-004**	**9.9700**

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	0.0606	0.5744	0.8649	1.3300e-003		0.0275	0.0275		0.0254	0.0254	0.0000	115.3859	115.3859	0.0366	0.0000	116.3003
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0606**	**0.5744**	**0.8649**	**1.3300e-003**		**0.0275**	**0.0275**		**0.0254**	**0.0254**	**0.0000**	**115.3859**	**115.3859**	**0.0366**	**0.0000**	**116.3003**

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	0.0000	0.0000	0.0000	0.0000	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	3.7100e-003	2.7300e-003	0.0389	1.2000e-004	0.0140	8.0000e-005	0.0141	3.7100e-003	7.0000e-005	3.7800e-003	0.0000	10.8375	10.8375	2.5000e-004	2.6000e-004	10.9219
Total	**3.7100e-003**	**2.7300e-003**	**0.0389**	**1.2000e-004**	**0.0140**	**8.0000e-005**	**0.0141**	**3.7100e-003**	**7.0000e-005**	**3.7800e-003**	**0.0000**	**10.8375**	**10.8375**	**2.5000e-004**	**2.6000e-004**	**10.9219**

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	0.0606	0.5744	0.8649	1.3300e-003		0.0275	0.0275		0.0254	0.0254	0.0000	115.3857	115.3857	0.0366	0.0000	116.3002
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0606**	**0.5744**	**0.8649**	**1.3300e-003**		**0.0275**	**0.0275**		**0.0254**	**0.0254**	**0.0000**	**115.3857**	**115.3857**	**0.0366**	**0.0000**	**116.3002**

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	0.0000	0.0000	0.0000	0.0000	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	3.7100e-003	2.7300e-003	0.0389	1.2000e-004	0.0140	8.0000e-005	0.0141	3.7100e-003	7.0000e-005	3.7800e-003	0.0000	10.8375	10.8375	2.5000e-004	2.6000e-004	10.9219
Total	**3.7100e-003**	**2.7300e-003**	**0.0389**	**1.2000e-004**	**0.0140**	**8.0000e-005**	**0.0141**	**3.7100e-003**	**7.0000e-005**	**3.7800e-003**	**0.0000**	**10.8375**	**10.8375**	**2.5000e-004**	**2.6000e-004**	**10.9219**

3.6 Architectural Coating - 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					
Archit. Coating	0.0240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2400e-003	0.0560	0.0779	1.3000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	10.9790	10.9790	6.6000e-004	0.0000	10.9954
Total	**0.0323**	**0.0560**	**0.0779**	**1.3000e-004**		**3.0500e-003**	**3.0500e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**10.9790**	**10.9790**	**6.6000e-004**	**0.0000**	**10.9954**

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.1000e-004	4.2200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1215	1.1215	3.0000e-005	3.0000e-005	1.1307
Total	**4.0000e-004**	**3.1000e-004**	**4.2200e-003**	**1.0000e-005**	**1.4200e-003**	**1.0000e-005**	**1.4200e-003**	**3.8000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.1215**	**1.1215**	**3.0000e-005**	**3.0000e-005**	**1.1307**

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	0.0240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2400e-003	0.0560	0.0779	1.3000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	10.9790	10.9790	6.6000e-004	0.0000	10.9954
Total	**0.0323**	**0.0560**	**0.0779**	**1.3000e-004**		**3.0500e-003**	**3.0500e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**10.9790**	**10.9790**	**6.6000e-004**	**0.0000**	**10.9954**

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.1000e-004	4.2200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1215	1.1215	3.0000e-005	3.0000e-005	1.1307
Total	**4.0000e-004**	**3.1000e-004**	**4.2200e-003**	**1.0000e-005**	**1.4200e-003**	**1.0000e-005**	**1.4200e-003**	**3.8000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.1215**	**1.1215**	**3.0000e-005**	**3.0000e-005**	**1.1307**

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	0.0548					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0177	0.1194	0.1774	2.9000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	25.0219	25.0219	1.4100e-003	0.0000	25.0571
Total	**0.0725**	**0.1194**	**0.1774**	**2.9000e-004**		**5.9700e-003**	**5.9700e-003**		**5.9700e-003**	**5.9700e-003**	**0.0000**	**25.0219**	**25.0219**	**1.4100e-003**	**0.0000**	**25.0571**

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	8.6000e-004	6.3000e-004	8.9800e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2400e-003	8.6000e-004	2.0000e-005	8.7000e-004	0.0000	2.5010	2.5010	6.0000e-005	6.0000e-005	2.5205
Total	**8.6000e-004**	**6.3000e-004**	**8.9800e-003**	**3.0000e-005**	**3.2300e-003**	**2.0000e-005**	**3.2400e-003**	**8.6000e-004**	**2.0000e-005**	**8.7000e-004**	**0.0000**	**2.5010**	**2.5010**	**6.0000e-005**	**6.0000e-005**	**2.5205**

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	0.0548					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0177	0.1194	0.1774	2.9000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	25.0219	25.0219	1.4100e-003	0.0000	25.0571
Total	**0.0725**	**0.1194**	**0.1774**	**2.9000e-004**		**5.9700e-003**	**5.9700e-003**		**5.9700e-003**	**5.9700e-003**	**0.0000**	**25.0219**	**25.0219**	**1.4100e-003**	**0.0000**	**25.0571**

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	8.6000e-004	6.3000e-004	8.9800e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2400e-003	8.6000e-004	2.0000e-005	8.7000e-004	0.0000	2.5010	2.5010	6.0000e-005	6.0000e-005	2.5205
Total	**8.6000e-004**	**6.3000e-004**	**8.9800e-003**	**3.0000e-005**	**3.2300e-003**	**2.0000e-005**	**3.2400e-003**	**8.6000e-004**	**2.0000e-005**	**8.7000e-004**	**0.0000**	**2.5010**	**2.5010**	**6.0000e-005**	**6.0000e-005**	**2.5205**

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	tons/yr										MT/yr					
Mitigated	4.3900e-003	0.0200	0.0678	3.4000e-004	0.0285	2.1000e-004	0.0287	7.7700e-003	2.0000e-004	7.9700e-003	0.0000	32.2089	32.2089	5.3000e-004	1.8100e-003	32.7611
Unmitigated	4.3900e-003	0.0200	0.0678	3.4000e-004	0.0285	2.1000e-004	0.0287	7.7700e-003	2.0000e-004	7.9700e-003	0.0000	32.2089	32.2089	5.3000e-004	1.8100e-003	32.7611

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	24.15	24.15	24.15	72,942	72,942
Total	24.15	24.15	24.15	72,942	72,942

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.833330	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.166666	0.000000	0.000000	0.000000	0.000000

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive 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	103.4742	103.4742	4.9300e-003	6.0000e-004	103.7758
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	106.4513	106.4513	5.0800e-003	6.2000e-004	106.7616
NaturalGas Mitigated	4.5700e-003	0.0415	0.0349	2.5000e-004		3.1600e-003	3.1600e-003		3.1600e-003	3.1600e-003	0.0000	45.1935	45.1935	8.7000e-004	8.3000e-004	45.4621
NaturalGas Unmitigated	5.0600e-003	0.0460	0.0387	2.8000e-004		3.5000e-003	3.5000e-003		3.5000e-003	3.5000e-003	0.0000	50.0926	50.0926	9.6000e-004	9.2000e-004	50.3903

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					
Junior College (2yr)	938700	5.0600e-003	0.0460	0.0387	2.8000e-004		3.5000e-003	3.5000e-003		3.5000e-003	3.5000e-003	0.0000	50.0926	50.0926	9.6000e-004	9.2000e-004	50.3903
Total		**5.0600e-003**	**0.0460**	**0.0387**	**2.8000e-004**		**3.5000e-003**	**3.5000e-003**		**3.5000e-003**	**3.5000e-003**	**0.0000**	**50.0926**	**50.0926**	**9.6000e-004**	**9.2000e-004**	**50.3903**

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					
Junior College (2yr)	846895	4.5700e-003	0.0415	0.0349	2.5000e-004		3.1600e-003	3.1600e-003		3.1600e-003	3.1600e-003	0.0000	45.1935	45.1935	8.7000e-004	8.3000e-004	45.4621
Total		**4.5700e-003**	**0.0415**	**0.0349**	**2.5000e-004**		**3.1600e-003**	**3.1600e-003**		**3.1600e-003**	**3.1600e-003**	**0.0000**	**45.1935**	**45.1935**	**8.7000e-004**	**8.3000e-004**	**45.4621**

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			
Junior College (2yr)	339150	106.4513	5.0800e-003	6.2000e-004	106.7616
Total		**106.4513**	**5.0800e-003**	**6.2000e-004**	**106.7616**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	329665	103.4742	4.9300e-003	6.0000e-004	103.7758
Total		**103.4742**	**4.9300e-003**	**6.0000e-004**	**103.7758**

6.0 Area Detail

6.1 Mitigation Measures Area

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	0.1339	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.7000e-004	8.7000e-004	0.0000	0.0000	9.3000e-004
Unmitigated	0.1339	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.7000e-004	8.7000e-004	0.0000	0.0000	9.3000e-004

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	7.4200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.7000e-004	8.7000e-004	0.0000	0.0000	9.3000e-004
Total	**0.1339**	**0.0000**	**4.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.7000e-004**	**8.7000e-004**	**0.0000**	**0.0000**	**9.3000e-004**

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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	7.4200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.7000e-004	8.7000e-004	0.0000	0.0000	9.3000e-004
Total	**0.1339**	**0.0000**	**4.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.7000e-004**	**8.7000e-004**	**0.0000**	**0.0000**	**9.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

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	14.1370	2.1800e-003	1.0500e-003	14.5030
Unmitigated	15.5310	2.6300e-003	1.2900e-003	15.9823

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	1.56957 / 2.45497	15.5310	2.6300e-003	1.2900e-003	15.9823
Total		**15.5310**	**2.6300e-003**	**1.2900e-003**	**15.9823**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	1.25566 / 2.45497	14.1370	2.1800e-003	1.0500e-003	14.5030
Total		**14.1370**	**2.1800e-003**	**1.0500e-003**	**14.5030**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.9722	0.5302	0.0000	22.2283
Unmitigated	8.9722	0.5302	0.0000	22.2283

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			
Junior College (2yr)	44.2	8.9722	0.5302	0.0000	22.2283
Total		**8.9722**	**0.5302**	**0.0000**	**22.2283**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	44.2	8.9722	0.5302	0.0000	22.2283
Total		**8.9722**	**0.5302**	**0.0000**	**22.2283**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

CSUN Northridge Project -AQGHG

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	35.00	1000sqft	1.38	35,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
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 - Based on applicant data.

Construction Phase - Construction Schedule provided by applicant

Off-road Equipment - Default setting but included concrete/industrial saw in Demo/site prep phase.

Trips and VMT - Google earth map to get cubic feet of hardscape and landscape (15,984) divide by 27 for cubic yards, then divide 16 cubic yard hauling capacity per trip for 74 additonal hauling trips. 2 default trips

Grading - Data provided by applicant

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - VMT memo expects project to generate 24 vehicle trips per day

Area Coating - SCAQMD Rule 1113

Water And Wastewater - No septic tank onsite and wastewater treatment plants dont have faculative lagoons

Construction Off-road Equipment Mitigation - Based on SCAQMD Rule 403

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

Area Mitigation - Based on SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Fleet Mix - Data provided by VMT memo. 20 vehicles per day and 4 Bus trips per day.

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_Nonresidential_Exterior	17000	16000
tblAreaCoating	Area_Nonresidential_Interior	51000	48000
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	200.00	371.00
tblConstructionPhase	NumDays	10.00	371.00
tblConstructionPhase	NumDays	10.00	282.00
tblFleetMix	HHD	9.2090e-003	0.00
tblFleetMix	LDA	0.54	0.83
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.4480e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.7210e-003	0.00

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

tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	8.1000e-004	0.17
tblFleetMix	SBUS	7.5100e-004	0.00
tblFleetMix	UBUS	5.0300e-004	0.00
tblGrading	MaterialExported	0.00	10.00
tblGrading	MaterialImported	0.00	10.00
tblLandUse	LotAcreage	0.80	1.38
tblTripsAndVMT	HaulingTripNumber	3.00	76.00
tblVehicleTrips	ST_TR	11.23	0.69
tblVehicleTrips	SU_TR	1.21	0.69
tblVehicleTrips	WD_TR	20.25	0.69
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	1,667,667.10	1,569,569.04
tblWater	OutdoorWaterUseRate	2,608,402.40	2,454,966.96
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	3.0208	29.6606	24.3655	0.0467	13.5902	1.2423	14.8326	6.4934	1.1532	7.6467	0.0000	4,528.2191	4,528.2191	1.2224	0.0238	4,563.6036
2024	2.8735	18.4196	24.2213	0.0425	0.3738	0.7956	1.1694	0.1000	0.7580	0.8580	0.0000	3,991.2984	3,991.2984	0.7711	0.0231	4,017.4670
Maximum	**3.0208**	**29.6606**	**24.3655**	**0.0467**	**13.5902**	**1.2423**	**14.8326**	**6.4934**	**1.1532**	**7.6467**	**0.0000**	**4,528.2191**	**4,528.2191**	**1.2224**	**0.0238**	**4,563.6036**

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	3.0208	29.6606	24.3655	0.0467	6.2498	1.2423	7.4921	2.9577	1.1532	4.1110	0.0000	4,528.2191	4,528.2191	1.2224	0.0238	4,563.6036
2024	2.8735	18.4196	24.2213	0.0425	0.3738	0.7956	1.1694	0.1000	0.7580	0.8580	0.0000	3,991.2984	3,991.2984	0.7711	0.0231	4,017.4670
Maximum	**3.0208**	**29.6606**	**24.3655**	**0.0467**	**6.2498**	**1.2423**	**7.4921**	**2.9577**	**1.1532**	**4.1110**	**0.0000**	**4,528.2191**	**4,528.2191**	**1.2224**	**0.0238**	**4,563.6036**

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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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.57	0.00	45.87	53.62	0.00	41.57	0.00	0.00	0.00	0.00	0.00	0.00

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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	lb/day										lb/day					
Area	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Energy	0.0277	0.2521	0.2118	1.5100e-003		0.0192	0.0192		0.0192	0.0192		302.5625	302.5625	5.8000e-003	5.5500e-003	304.3604
Mobile	0.0257	0.1029	0.3866	1.9400e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		200.1355	200.1355	3.1100e-003	0.0108	203.4154
Total	**0.7874**	**0.3551**	**0.6019**	**3.4500e-003**	**0.1594**	**0.0204**	**0.1798**	**0.0434**	**0.0203**	**0.0637**		**502.7056**	**502.7056**	**8.9300e-003**	**0.0163**	**507.7840**

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	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Energy	0.0250	0.2275	0.1911	1.3600e-003		0.0173	0.0173		0.0173	0.0173		272.9718	272.9718	5.2300e-003	5.0000e-003	274.5939
Mobile	0.0257	0.1029	0.3866	1.9400e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		200.1355	200.1355	3.1100e-003	0.0108	203.4154
Total	**0.7847**	**0.3304**	**0.5812**	**3.3000e-003**	**0.1594**	**0.0185**	**0.1779**	**0.0434**	**0.0184**	**0.0618**		**473.1149**	**473.1149**	**8.3600e-003**	**0.0158**	**478.0175**

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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	N20	CO2e
Percent Reduction	**0.34**	**6.95**	**3.44**	**4.35**	**0.00**	**9.19**	**1.04**	**0.00**	**9.23**	**2.94**	**0.00**	**5.89**	**5.89**	**6.38**	**3.37**	**5.86**

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 & Site Preparation	Site Preparation	1/2/2023	4/1/2023	5	65	
2	Grading	Grading	4/1/2023	4/30/2023	5	20	
3	Building Construction	Building Construction	5/1/2023	9/30/2024	5	371	
4	Paving	Paving	5/1/2023	9/30/2024	5	371	
5	Architectural Coating	Architectural Coating	9/1/2023	9/30/2024	5	282	

Acres of Grading (Site Preparation Phase): 60.94

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 51,000; Non-Residential Outdoor: 17,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition & Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition & Site Preparation	Graders	1	8.00	187	0.41
Demolition & Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Demolition & Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

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

Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
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	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition & Site Preparation	4	10.00	0.00	76.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

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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 & Site Preparation - 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					6.2636	0.0000	6.2636	3.0038	0.0000	3.0038			0.0000			0.0000
Off-Road	1.4676	15.0092	10.2994	0.0235		0.6357	0.6357		0.5951	0.5951		2,258.7230	2,258.7230	0.5680		2,272.9239
Total	**1.4676**	**15.0092**	**10.2994**	**0.0235**	**6.2636**	**0.6357**	**6.8993**	**3.0038**	**0.5951**	**3.5989**		**2,258.7230**	**2,258.7230**	**0.5680**		**2,272.9239**

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	2.5200e-003	0.1408	0.0396	6.7000e-004	0.0205	1.0700e-003	0.0215	5.6100e-003	1.0200e-003	6.6300e-003		73.4815	73.4815	4.0900e-003	0.0117	77.0625
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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0345**	**0.1623**	**0.3913**	**1.6500e-003**	**0.1322**	**1.7000e-003**	**0.1339**	**0.0353**	**1.6000e-003**	**0.0369**		**173.6815**	**173.6815**	**6.4900e-003**	**0.0139**	**177.9960**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

3.2 Demolition & Site Preparation - 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					2.8186	0.0000	2.8186	1.3517	0.0000	1.3517			0.0000			0.0000
Off-Road	1.4676	15.0092	10.2994	0.0235		0.6357	0.6357		0.5951	0.5951	0.0000	2,258.7230	2,258.7230	0.5680		2,272.9239
Total	**1.4676**	**15.0092**	**10.2994**	**0.0235**	**2.8186**	**0.6357**	**3.4543**	**1.3517**	**0.5951**	**1.9468**	**0.0000**	**2,258.7230**	**2,258.7230**	**0.5680**		**2,272.9239**

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	2.5200e-003	0.1408	0.0396	6.7000e-004	0.0205	1.0700e-003	0.0215	5.6100e-003	1.0200e-003	6.6300e-003		73.4815	73.4815	4.0900e-003	0.0117	77.0625
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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0345**	**0.1623**	**0.3913**	**1.6500e-003**	**0.1322**	**1.7000e-003**	**0.1339**	**0.0353**	**1.6000e-003**	**0.0369**		**173.6815**	**173.6815**	**6.4900e-003**	**0.0139**	**177.9960**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0319**	**0.0214**	**0.3517**	**9.8000e-004**	**0.1118**	**6.3000e-004**	**0.1124**	**0.0296**	**5.8000e-004**	**0.0302**		**100.1999**	**100.1999**	**2.4000e-003**	**2.2600e-003**	**100.9334**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.1872**	**0.6044**	**3.7915**	**1.5411**	**0.5560**	**2.0971**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0319**	**0.0214**	**0.3517**	**9.8000e-004**	**0.1118**	**6.3000e-004**	**0.1124**	**0.0296**	**5.8000e-004**	**0.0302**		**100.1999**	**100.1999**	**2.4000e-003**	**2.2600e-003**	**100.9334**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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	6.6300e-003	0.2178	0.0858	1.0900e-003	0.0384	1.2700e-003	0.0397	0.0111	1.2100e-003	0.0123		117.6186	117.6186	3.9500e-003	0.0170	122.7916
Worker	0.0447	0.0300	0.4924	1.3700e-003	0.1565	8.8000e-004	0.1574	0.0415	8.1000e-004	0.0423		140.2799	140.2799	3.3600e-003	3.1600e-003	141.3068
Total	**0.0514**	**0.2478**	**0.5782**	**2.4600e-003**	**0.1949**	**2.1500e-003**	**0.1971**	**0.0526**	**2.0200e-003**	**0.0546**		**257.8984**	**257.8984**	**7.3100e-003**	**0.0202**	**264.0984**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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	6.6300e-003	0.2178	0.0858	1.0900e-003	0.0384	1.2700e-003	0.0397	0.0111	1.2100e-003	0.0123		117.6186	117.6186	3.9500e-003	0.0170	122.7916
Worker	0.0447	0.0300	0.4924	1.3700e-003	0.1565	8.8000e-004	0.1574	0.0415	8.1000e-004	0.0423		140.2799	140.2799	3.3600e-003	3.1600e-003	141.3068
Total	**0.0514**	**0.2478**	**0.5782**	**2.4600e-003**	**0.1949**	**2.1500e-003**	**0.1971**	**0.0526**	**2.0200e-003**	**0.0546**		**257.8984**	**257.8984**	**7.3100e-003**	**0.0202**	**264.0984**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

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	6.4800e-003	0.2188	0.0843	1.0800e-003	0.0384	1.2700e-003	0.0397	0.0111	1.2200e-003	0.0123		115.9265	115.9265	3.9500e-003	0.0168	121.0339
Worker	0.0418	0.0268	0.4594	1.3300e-003	0.1565	8.4000e-004	0.1573	0.0415	7.8000e-004	0.0423		137.2623	137.2623	3.0400e-003	2.9500e-003	138.2163
Total	**0.0482**	**0.2456**	**0.5437**	**2.4100e-003**	**0.1949**	**2.1100e-003**	**0.1970**	**0.0526**	**2.0000e-003**	**0.0546**		**253.1888**	**253.1888**	**6.9900e-003**	**0.0198**	**259.2502**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

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	6.4800e-003	0.2188	0.0843	1.0800e-003	0.0384	1.2700e-003	0.0397	0.0111	1.2200e-003	0.0123		115.9265	115.9265	3.9500e-003	0.0168	121.0339
Worker	0.0418	0.0268	0.4594	1.3300e-003	0.1565	8.4000e-004	0.1573	0.0415	7.8000e-004	0.0423		137.2623	137.2623	3.0400e-003	2.9500e-003	138.2163
Total	**0.0482**	**0.2456**	**0.5437**	**2.4100e-003**	**0.1949**	**2.1100e-003**	**0.1970**	**0.0526**	**2.0000e-003**	**0.0546**		**253.1888**	**253.1888**	**6.9900e-003**	**0.0198**	**259.2502**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

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	0.0415	0.0279	0.4573	1.2700e-003	0.1453	8.2000e-004	0.1461	0.0385	7.5000e-004	0.0393		130.2599	130.2599	3.1200e-003	2.9400e-003	131.2135
Total	**0.0415**	**0.0279**	**0.4573**	**1.2700e-003**	**0.1453**	**8.2000e-004**	**0.1461**	**0.0385**	**7.5000e-004**	**0.0393**		**130.2599**	**130.2599**	**3.1200e-003**	**2.9400e-003**	**131.2135**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

3.5 Paving - 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	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

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	0.0415	0.0279	0.4573	1.2700e-003	0.1453	8.2000e-004	0.1461	0.0385	7.5000e-004	0.0393		130.2599	130.2599	3.1200e-003	2.9400e-003	131.2135
Total	**0.0415**	**0.0279**	**0.4573**	**1.2700e-003**	**0.1453**	**8.2000e-004**	**0.1461**	**0.0385**	**7.5000e-004**	**0.0393**		**130.2599**	**130.2599**	**3.1200e-003**	**2.9400e-003**	**131.2135**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**		**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

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	0.0388	0.0249	0.4266	1.2400e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		127.4579	127.4579	2.8200e-003	2.7400e-003	128.3437
Total	**0.0388**	**0.0249**	**0.4266**	**1.2400e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**127.4579**	**127.4579**	**2.8200e-003**	**2.7400e-003**	**128.3437**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**	**0.0000**	**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

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	0.0388	0.0249	0.4266	1.2400e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		127.4579	127.4579	2.8200e-003	2.7400e-003	128.3437
Total	**0.0388**	**0.0249**	**0.4266**	**1.2400e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**127.4579**	**127.4579**	**2.8200e-003**	**2.7400e-003**	**128.3437**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

3.6 Architectural Coating - 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					
Archit. Coating	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**0.7505**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	9.5800e-003	6.4300e-003	0.1055	2.9000e-004	0.0335	1.9000e-004	0.0337	8.8900e-003	1.7000e-004	9.0700e-003		30.0600	30.0600	7.2000e-004	6.8000e-004	30.2800
Total	**9.5800e-003**	**6.4300e-003**	**0.1055**	**2.9000e-004**	**0.0335**	**1.9000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0700e-003**		**30.0600**	**30.0600**	**7.2000e-004**	**6.8000e-004**	**30.2800**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

3.6 Architectural Coating - 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					
Archit. Coating	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**0.7505**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	9.5800e-003	6.4300e-003	0.1055	2.9000e-004	0.0335	1.9000e-004	0.0337	8.8900e-003	1.7000e-004	9.0700e-003		30.0600	30.0600	7.2000e-004	6.8000e-004	30.2800
Total	**9.5800e-003**	**6.4300e-003**	**0.1055**	**2.9000e-004**	**0.0335**	**1.9000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0700e-003**		**30.0600**	**30.0600**	**7.2000e-004**	**6.8000e-004**	**30.2800**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**0.7396**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	8.9500e-003	5.7500e-003	0.0984	2.9000e-004	0.0335	1.8000e-004	0.0337	8.8900e-003	1.7000e-004	9.0600e-003		29.4134	29.4134	6.5000e-004	6.3000e-004	29.6178
Total	**8.9500e-003**	**5.7500e-003**	**0.0984**	**2.9000e-004**	**0.0335**	**1.8000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0600e-003**		**29.4134**	**29.4134**	**6.5000e-004**	**6.3000e-004**	**29.6178**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**0.7396**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	8.9500e-003	5.7500e-003	0.0984	2.9000e-004	0.0335	1.8000e-004	0.0337	8.8900e-003	1.7000e-004	9.0600e-003		29.4134	29.4134	6.5000e-004	6.3000e-004	29.6178
Total	**8.9500e-003**	**5.7500e-003**	**0.0984**	**2.9000e-004**	**0.0335**	**1.8000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0600e-003**		**29.4134**	**29.4134**	**6.5000e-004**	**6.3000e-004**	**29.6178**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	0.0257	0.1029	0.3866	1.9400e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		200.1355	200.1355	3.1100e-003	0.0108	203.4154
Unmitigated	0.0257	0.1029	0.3866	1.9400e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		200.1355	200.1355	3.1100e-003	0.0108	203.4154

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	24.15	24.15	24.15	72,942	72,942
Total	24.15	24.15	24.15	72,942	72,942

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.833330	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.166666	0.000000	0.000000	0.000000	0.000000

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0250	0.2275	0.1911	1.3600e-003		0.0173	0.0173		0.0173	0.0173		272.9718	272.9718	5.2300e-003	5.0000e-003	274.5939
NaturalGas Unmitigated	0.0277	0.2521	0.2118	1.5100e-003		0.0192	0.0192		0.0192	0.0192		302.5625	302.5625	5.8000e-003	5.5500e-003	304.3604

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					
Junior College (2yr)	2571.78	0.0277	0.2521	0.2118	1.5100e-003		0.0192	0.0192		0.0192	0.0192		302.5625	302.5625	5.8000e-003	5.5500e-003	304.3604
Total		**0.0277**	**0.2521**	**0.2118**	**1.5100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**		**302.5625**	**302.5625**	**5.8000e-003**	**5.5500e-003**	**304.3604**

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					
Junior College (2yr)	2.32026	0.0250	0.2275	0.1911	1.3600e-003		0.0173	0.0173		0.0173	0.0173		272.9718	272.9718	5.2300e-003	5.0000e-003	274.5939
Total		**0.0250**	**0.2275**	**0.1911**	**1.3600e-003**		**0.0173**	**0.0173**		**0.0173**	**0.0173**		**272.9718**	**272.9718**	**5.2300e-003**	**5.0000e-003**	**274.5939**

6.0 Area Detail

6.1 Mitigation Measures Area

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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	lb/day										lb/day					
Mitigated	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Unmitigated	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-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	lb/day										lb/day					
Architectural Coating	0.0406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3000e-004	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Total	**0.7340**	**3.0000e-005**	**3.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**7.6600e-003**	**7.6600e-003**	**2.0000e-005**		**8.1600e-003**

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	0.0406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3000e-004	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Total	**0.7340**	**3.0000e-005**	**3.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**7.6600e-003**	**7.6600e-003**	**2.0000e-005**		**8.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Summer

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

CSUN Northridge Project -AQGHG

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2yr)	35.00	1000sqft	1.38	35,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
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 - Based on applicant data.

Construction Phase - Construction Schedule provided by applicant

Off-road Equipment - Default setting but included concrete/industrial saw in Demo/site prep phase.

Trips and VMT - Google earth map to get cubic feet of hardscape and landscape (15,984) divide by 27 for cubic yards, then divide 16 cubic yard hauling capacity per trip for 74 additonal hauling trips. 2 default trips

Grading - Data provided by applicant

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - VMT memo expects project to generate 24 vehicle trips per day

Area Coating - SCAQMD Rule 1113

Water And Wastewater - No septic tank onsite and wastewater treatment plants dont have faculative lagoons

Construction Off-road Equipment Mitigation - Based on SCAQMD Rule 403

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

Area Mitigation - Based on SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Fleet Mix - Data provided by VMT memo. 20 vehicles per day and 4 Bus trips per day.

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_Nonresidential_Exterior	17000	16000
tblAreaCoating	Area_Nonresidential_Interior	51000	48000
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	200.00	371.00
tblConstructionPhase	NumDays	10.00	371.00
tblConstructionPhase	NumDays	10.00	282.00
tblFleetMix	HHD	9.2090e-003	0.00
tblFleetMix	LDA	0.54	0.83
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.4480e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.7210e-003	0.00

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	8.1000e-004	0.17
tblFleetMix	SBUS	7.5100e-004	0.00
tblFleetMix	UBUS	5.0300e-004	0.00
tblGrading	MaterialExported	0.00	10.00
tblGrading	MaterialImported	0.00	10.00
tblLandUse	LotAcreage	0.80	1.38
tblTripsAndVMT	HaulingTripNumber	3.00	76.00
tblVehicleTrips	ST_TR	11.23	0.69
tblVehicleTrips	SU_TR	1.21	0.69
tblVehicleTrips	WD_TR	20.25	0.69
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	1,667,667.10	1,569,569.04
tblWater	OutdoorWaterUseRate	2,608,402.40	2,454,966.96
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	3.0259	29.6713	24.2680	0.0466	13.5902	1.2423	14.8326	6.4934	1.1532	7.6467	0.0000	4,516.6718	4,516.6718	1.2224	0.0243	4,552.1435
2024	2.8785	18.4358	24.1309	0.0423	0.3738	0.7956	1.1694	0.1000	0.7580	0.8580	0.0000	3,974.4520	3,974.4520	0.7712	0.0235	4,000.7492
Maximum	**3.0259**	**29.6713**	**24.2680**	**0.0466**	**13.5902**	**1.2423**	**14.8326**	**6.4934**	**1.1532**	**7.6467**	**0.0000**	**4,516.6718**	**4,516.6718**	**1.2224**	**0.0243**	**4,552.1435**

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	3.0259	29.6713	24.2680	0.0466	6.2498	1.2423	7.4921	2.9577	1.1532	4.1110	0.0000	4,516.6718	4,516.6718	1.2224	0.0243	4,552.1435
2024	2.8785	18.4358	24.1309	0.0423	0.3738	0.7956	1.1694	0.1000	0.7580	0.8580	0.0000	3,974.4520	3,974.4520	0.7712	0.0235	4,000.7492
Maximum	**3.0259**	**29.6713**	**24.2680**	**0.0466**	**6.2498**	**1.2423**	**7.4921**	**2.9577**	**1.1532**	**4.1110**	**0.0000**	**4,516.6718**	**4,516.6718**	**1.2224**	**0.0243**	**4,552.1435**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.57	0.00	45.87	53.62	0.00	41.57	0.00	0.00	0.00	0.00	0.00	0.00

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Energy	0.0277	0.2521	0.2118	1.5100e-003		0.0192	0.0192		0.0192	0.0192		302.5625	302.5625	5.8000e-003	5.5500e-003	304.3604
Mobile	0.0245	0.1086	0.3670	1.8800e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		193.7505	193.7505	3.2600e-003	0.0109	197.0906
Total	**0.7862**	**0.3608**	**0.5824**	**3.3900e-003**	**0.1594**	**0.0204**	**0.1798**	**0.0434**	**0.0203**	**0.0637**		**496.3207**	**496.3207**	**9.0800e-003**	**0.0165**	**501.4592**

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	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Energy	0.0250	0.2275	0.1911	1.3600e-003		0.0173	0.0173		0.0173	0.0173		272.9718	272.9718	5.2300e-003	5.0000e-003	274.5939
Mobile	0.0245	0.1086	0.3670	1.8800e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		193.7505	193.7505	3.2600e-003	0.0109	197.0906
Total	**0.7835**	**0.3361**	**0.5616**	**3.2400e-003**	**0.1594**	**0.0185**	**0.1779**	**0.0434**	**0.0184**	**0.0618**		**466.7300**	**466.7300**	**8.5100e-003**	**0.0159**	**471.6927**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	N20	CO2e
Percent Reduction	0.34	6.84	3.56	4.42	0.00	9.19	1.04	0.00	9.23	2.94	0.00	5.96	5.96	6.28	3.34	5.94

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 & Site Preparation	Site Preparation	1/2/2023	4/1/2023	5	65	
2	Grading	Grading	4/1/2023	4/30/2023	5	20	
3	Building Construction	Building Construction	5/1/2023	9/30/2024	5	371	
4	Paving	Paving	5/1/2023	9/30/2024	5	371	
5	Architectural Coating	Architectural Coating	9/1/2023	9/30/2024	5	282	

Acres of Grading (Site Preparation Phase): 60.94

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 51,000; Non-Residential Outdoor: 17,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition & Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition & Site Preparation	Graders	1	8.00	187	0.41
Demolition & Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Demolition & Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
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	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition & Site Preparation	4	10.00	0.00	76.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

3.2 Demolition & Site Preparation - 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					6.2636	0.0000	6.2636	3.0038	0.0000	3.0038			0.0000			0.0000
Off-Road	1.4676	15.0092	10.2994	0.0235		0.6357	0.6357		0.5951	0.5951		2,258.7230	2,258.7230	0.5680		2,272.9239
Total	**1.4676**	**15.0092**	**10.2994**	**0.0235**	**6.2636**	**0.6357**	**6.8993**	**3.0038**	**0.5951**	**3.5989**		**2,258.7230**	**2,258.7230**	**0.5680**		**2,272.9239**

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	2.3500e-003	0.1476	0.0402	6.7000e-004	0.0205	1.0700e-003	0.0215	5.6100e-003	1.0200e-003	6.6300e-003		73.5643	73.5643	4.0800e-003	0.0117	77.1491
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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0361**	**0.1710**	**0.3585**	**1.5900e-003**	**0.1322**	**1.7000e-003**	**0.1339**	**0.0353**	**1.6000e-003**	**0.0369**		**167.9492**	**167.9492**	**6.5100e-003**	**0.0141**	**172.3092**

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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 & Site Preparation - 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					2.8186	0.0000	2.8186	1.3517	0.0000	1.3517			0.0000			0.0000
Off-Road	1.4676	15.0092	10.2994	0.0235		0.6357	0.6357		0.5951	0.5951	0.0000	2,258.7230	2,258.7230	0.5680		2,272.9239
Total	**1.4676**	**15.0092**	**10.2994**	**0.0235**	**2.8186**	**0.6357**	**3.4543**	**1.3517**	**0.5951**	**1.9468**	**0.0000**	**2,258.7230**	**2,258.7230**	**0.5680**		**2,272.9239**

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	2.3500e-003	0.1476	0.0402	6.7000e-004	0.0205	1.0700e-003	0.0215	5.6100e-003	1.0200e-003	6.6300e-003		73.5643	73.5643	4.0800e-003	0.0117	77.1491
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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0361**	**0.1710**	**0.3585**	**1.5900e-003**	**0.1322**	**1.7000e-003**	**0.1339**	**0.0353**	**1.6000e-003**	**0.0369**		**167.9492**	**167.9492**	**6.5100e-003**	**0.0141**	**172.3092**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0337**	**0.0235**	**0.3183**	**9.2000e-004**	**0.1118**	**6.3000e-004**	**0.1124**	**0.0296**	**5.8000e-004**	**0.0302**		**94.3849**	**94.3849**	**2.4300e-003**	**2.4000e-003**	**95.1601**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.1872**	**0.6044**	**3.7915**	**1.5411**	**0.5560**	**2.0971**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0337**	**0.0235**	**0.3183**	**9.2000e-004**	**0.1118**	**6.3000e-004**	**0.1124**	**0.0296**	**5.8000e-004**	**0.0302**		**94.3849**	**94.3849**	**2.4300e-003**	**2.4000e-003**	**95.1601**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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	6.3500e-003	0.2286	0.0885	1.0900e-003	0.0384	1.2700e-003	0.0397	0.0111	1.2200e-003	0.0123		117.8312	117.8312	3.9300e-003	0.0171	123.0174
Worker	0.0472	0.0328	0.4456	1.2900e-003	0.1565	8.8000e-004	0.1574	0.0415	8.1000e-004	0.0423		132.1389	132.1389	3.4000e-003	3.3600e-003	133.2242
Total	**0.0536**	**0.2614**	**0.5341**	**2.3800e-003**	**0.1949**	**2.1500e-003**	**0.1971**	**0.0526**	**2.0300e-003**	**0.0546**		**249.9701**	**249.9701**	**7.3300e-003**	**0.0204**	**256.2416**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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	6.3500e-003	0.2286	0.0885	1.0900e-003	0.0384	1.2700e-003	0.0397	0.0111	1.2200e-003	0.0123		117.8312	117.8312	3.9300e-003	0.0171	123.0174
Worker	0.0472	0.0328	0.4456	1.2900e-003	0.1565	8.8000e-004	0.1574	0.0415	8.1000e-004	0.0423		132.1389	132.1389	3.4000e-003	3.3600e-003	133.2242
Total	**0.0536**	**0.2614**	**0.5341**	**2.3800e-003**	**0.1949**	**2.1500e-003**	**0.1971**	**0.0526**	**2.0300e-003**	**0.0546**		**249.9701**	**249.9701**	**7.3300e-003**	**0.0204**	**256.2416**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

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	6.1900e-003	0.2297	0.0871	1.0800e-003	0.0384	1.2800e-003	0.0397	0.0111	1.2200e-003	0.0123		116.1396	116.1396	3.9300e-003	0.0169	121.2598
Worker	0.0442	0.0293	0.4159	1.2500e-003	0.1565	8.4000e-004	0.1573	0.0415	7.8000e-004	0.0423		129.3013	129.3013	3.0900e-003	3.1200e-003	130.3093
Total	**0.0504**	**0.2590**	**0.5030**	**2.3300e-003**	**0.1949**	**2.1200e-003**	**0.1970**	**0.0526**	**2.0000e-003**	**0.0546**		**245.4408**	**245.4408**	**7.0200e-003**	**0.0200**	**251.5691**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

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	6.1900e-003	0.2297	0.0871	1.0800e-003	0.0384	1.2800e-003	0.0397	0.0111	1.2200e-003	0.0123		116.1396	116.1396	3.9300e-003	0.0169	121.2598
Worker	0.0442	0.0293	0.4159	1.2500e-003	0.1565	8.4000e-004	0.1573	0.0415	7.8000e-004	0.0423		129.3013	129.3013	3.0900e-003	3.1200e-003	130.3093
Total	**0.0504**	**0.2590**	**0.5030**	**2.3300e-003**	**0.1949**	**2.1200e-003**	**0.1970**	**0.0526**	**2.0000e-003**	**0.0546**		**245.4408**	**245.4408**	**7.0200e-003**	**0.0200**	**251.5691**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

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	0.0438	0.0305	0.4138	1.2000e-003	0.1453	8.2000e-004	0.1461	0.0385	7.5000e-004	0.0393		122.7004	122.7004	3.1600e-003	3.1200e-003	123.7082
Total	**0.0438**	**0.0305**	**0.4138**	**1.2000e-003**	**0.1453**	**8.2000e-004**	**0.1461**	**0.0385**	**7.5000e-004**	**0.0393**		**122.7004**	**122.7004**	**3.1600e-003**	**3.1200e-003**	**123.7082**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

3.5 Paving - 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	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

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	0.0438	0.0305	0.4138	1.2000e-003	0.1453	8.2000e-004	0.1461	0.0385	7.5000e-004	0.0393		122.7004	122.7004	3.1600e-003	3.1200e-003	123.7082
Total	**0.0438**	**0.0305**	**0.4138**	**1.2000e-003**	**0.1453**	**8.2000e-004**	**0.1461**	**0.0385**	**7.5000e-004**	**0.0393**		**122.7004**	**122.7004**	**3.1600e-003**	**3.1200e-003**	**123.7082**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**		**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

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	0.0411	0.0272	0.3862	1.1600e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		120.0655	120.0655	2.8700e-003	2.9000e-003	121.0015
Total	**0.0411**	**0.0272**	**0.3862**	**1.1600e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**120.0655**	**120.0655**	**2.8700e-003**	**2.9000e-003**	**121.0015**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**	**0.0000**	**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

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	0.0411	0.0272	0.3862	1.1600e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		120.0655	120.0655	2.8700e-003	2.9000e-003	121.0015
Total	**0.0411**	**0.0272**	**0.3862**	**1.1600e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**120.0655**	**120.0655**	**2.8700e-003**	**2.9000e-003**	**121.0015**

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

3.6 Architectural Coating - 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					
Archit. Coating	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**0.7505**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.0101	7.0300e-003	0.0955	2.8000e-004	0.0335	1.9000e-004	0.0337	8.8900e-003	1.7000e-004	9.0700e-003		28.3155	28.3155	7.3000e-004	7.2000e-004	28.5480
Total	**0.0101**	**7.0300e-003**	**0.0955**	**2.8000e-004**	**0.0335**	**1.9000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0700e-003**		**28.3155**	**28.3155**	**7.3000e-004**	**7.2000e-004**	**28.5480**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, Winter

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

3.6 Architectural Coating - 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					
Archit. Coating	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**0.7505**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.0101	7.0300e-003	0.0955	2.8000e-004	0.0335	1.9000e-004	0.0337	8.8900e-003	1.7000e-004	9.0700e-003		28.3155	28.3155	7.3000e-004	7.2000e-004	28.5480
Total	**0.0101**	**7.0300e-003**	**0.0955**	**2.8000e-004**	**0.0335**	**1.9000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0700e-003**		**28.3155**	**28.3155**	**7.3000e-004**	**7.2000e-004**	**28.5480**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**0.7396**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	9.4700e-003	6.2800e-003	0.0891	2.7000e-004	0.0335	1.8000e-004	0.0337	8.8900e-003	1.7000e-004	9.0600e-003		27.7074	27.7074	6.6000e-004	6.7000e-004	27.9234
Total	**9.4700e-003**	**6.2800e-003**	**0.0891**	**2.7000e-004**	**0.0335**	**1.8000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0600e-003**		**27.7074**	**27.7074**	**6.6000e-004**	**6.7000e-004**	**27.9234**

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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	0.5588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**0.7396**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	9.4700e-003	6.2800e-003	0.0891	2.7000e-004	0.0335	1.8000e-004	0.0337	8.8900e-003	1.7000e-004	9.0600e-003		27.7074	27.7074	6.6000e-004	6.7000e-004	27.9234
Total	**9.4700e-003**	**6.2800e-003**	**0.0891**	**2.7000e-004**	**0.0335**	**1.8000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0600e-003**		**27.7074**	**27.7074**	**6.6000e-004**	**6.7000e-004**	**27.9234**

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	0.0245	0.1086	0.3670	1.8800e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		193.7505	193.7505	3.2600e-003	0.0109	197.0906
Unmitigated	0.0245	0.1086	0.3670	1.8800e-003	0.1594	1.1800e-003	0.1606	0.0434	1.1000e-003	0.0445		193.7505	193.7505	3.2600e-003	0.0109	197.0906

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	24.15	24.15	24.15	72,942	72,942
Total	24.15	24.15	24.15	72,942	72,942

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.833330	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.166666	0.000000	0.000000	0.000000	0.000000

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0250	0.2275	0.1911	1.3600e-003		0.0173	0.0173		0.0173	0.0173		272.9718	272.9718	5.2300e-003	5.0000e-003	274.5939
NaturalGas Unmitigated	0.0277	0.2521	0.2118	1.5100e-003		0.0192	0.0192		0.0192	0.0192		302.5625	302.5625	5.8000e-003	5.5500e-003	304.3604

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					
Junior College (2yr)	2571.78	0.0277	0.2521	0.2118	1.5100e-003		0.0192	0.0192		0.0192	0.0192		302.5625	302.5625	5.8000e-003	5.5500e-003	304.3604
Total		**0.0277**	**0.2521**	**0.2118**	**1.5100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**		**302.5625**	**302.5625**	**5.8000e-003**	**5.5500e-003**	**304.3604**

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					
Junior College (2yr)	2.32026	0.0250	0.2275	0.1911	1.3600e-003		0.0173	0.0173		0.0173	0.0173		272.9718	272.9718	5.2300e-003	5.0000e-003	274.5939
Total		**0.0250**	**0.2275**	**0.1911**	**1.3600e-003**		**0.0173**	**0.0173**		**0.0173**	**0.0173**		**272.9718**	**272.9718**	**5.2300e-003**	**5.0000e-003**	**274.5939**

6.0 Area Detail

6.1 Mitigation Measures Area

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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	lb/day										lb/day					
Mitigated	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Unmitigated	0.7340	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-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	lb/day										lb/day					
Architectural Coating	0.0406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3000e-004	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Total	**0.7340**	**3.0000e-005**	**3.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**7.6600e-003**	**7.6600e-003**	**2.0000e-005**		**8.1600e-003**

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	0.0406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3000e-004	3.0000e-005	3.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.6600e-003	7.6600e-003	2.0000e-005		8.1600e-003
Total	**0.7340**	**3.0000e-005**	**3.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**7.6600e-003**	**7.6600e-003**	**2.0000e-005**		**8.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

CSUN Northridge Project -AQGHG - South Coast AQMD Air District, 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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Noise NOI-1 and NOI-2

Data Logger 2
SET 3
A
SLOW
Range 40-100
L05 63.4
L10 60.8
L50 54.4
L90 52.4
L95 52.0
Max dB 73.5
2021/12/17 16:25:33
SEL 88.1
Leq 58.6

No.s	Date Time	dB
174	2021/12/17 16:29:27	52.7
175	2021/12/17 16:29:30	54.3
176	2021/12/17 16:29:33	55.1
177	2021/12/17 16:29:36	62.8
178	2021/12/17 16:29:39	61.6
179	2021/12/17 16:29:42	60.8
180	2021/12/17 16:29:45	57.8
181	2021/12/17 16:29:48	54.8
182	2021/12/17 16:29:51	54.4
183	2021/12/17 16:29:54	53.2
184	2021/12/17 16:29:57	53.5
185	2021/12/17 16:30:00	54.2
186	2021/12/17 16:30:03	54.0
187	2021/12/17 16:30:06	54.3
188	2021/12/17 16:30:09	54.5
189	2021/12/17 16:30:12	56.0
190	2021/12/17 16:30:15	57.6
191	2021/12/17 16:30:18	55.2
192	2021/12/17 16:30:21	56.1
193	2021/12/17 16:30:24	55.7
194	2021/12/17 16:30:27	57.0
195	2021/12/17 16:30:30	54.7
196	2021/12/17 16:30:33	54.0
197	2021/12/17 16:30:36	53.0
198	2021/12/17 16:30:39	52.7
199	2021/12/17 16:30:42	52.2
200	2021/12/17 16:30:45	52.6
201	2021/12/17 16:30:48	52.7
202	2021/12/17 16:30:51	52.5
203	2021/12/17 16:30:54	52.6
204	2021/12/17 16:30:57	52.9
205	2021/12/17 16:31:00	52.8
206	2021/12/17 16:31:03	52.6
207	2021/12/17 16:31:06	53.5
208	2021/12/17 16:31:09	53.7
209	2021/12/17 16:31:12	58.1
210	2021/12/17 16:31:15	57.9
211	2021/12/17 16:31:18	54.9
212	2021/12/17 16:31:21	54.0

213	2021/12/17 16:31:24	56.3
214	2021/12/17 16:31:27	54.6
215	2021/12/17 16:31:30	53.2
216	2021/12/17 16:31:33	52.9
217	2021/12/17 16:31:36	52.8
218	2021/12/17 16:31:39	53.3
219	2021/12/17 16:31:42	56.1
220	2021/12/17 16:31:45	60.8
221	2021/12/17 16:31:48	62.2
222	2021/12/17 16:31:51	62.1
223	2021/12/17 16:31:54	61.9
224	2021/12/17 16:31:57	58.8
225	2021/12/17 16:32:00	57.4
226	2021/12/17 16:32:03	55.2
227	2021/12/17 16:32:06	54.3
228	2021/12/17 16:32:09	54.4
229	2021/12/17 16:32:12	54.1
230	2021/12/17 16:32:15	53.7
231	2021/12/17 16:32:18	53.4
232	2021/12/17 16:32:21	55.1
233	2021/12/17 16:32:24	59.3
234	2021/12/17 16:32:27	54.9
235	2021/12/17 16:32:30	53.7
236	2021/12/17 16:32:33	53.9
237	2021/12/17 16:32:36	57.5
238	2021/12/17 16:32:39	57.2
239	2021/12/17 16:32:42	56.3
240	2021/12/17 16:32:45	56.0
241	2021/12/17 16:32:48	54.4
242	2021/12/17 16:32:51	54.3
243	2021/12/17 16:32:54	55.5
244	2021/12/17 16:32:57	54.7
245	2021/12/17 16:33:00	55.3
246	2021/12/17 16:33:03	55.0
247	2021/12/17 16:33:06	54.3
248	2021/12/17 16:33:09	53.3
249	2021/12/17 16:33:12	53.8
250	2021/12/17 16:33:15	53.2
251	2021/12/17 16:33:18	53.4
252	2021/12/17 16:33:21	57.7
253	2021/12/17 16:33:24	57.6
254	2021/12/17 16:33:27	53.4
255	2021/12/17 16:33:30	52.4
256	2021/12/17 16:33:33	52.3
257	2021/12/17 16:33:36	52.2
258	2021/12/17 16:33:39	52.5
259	2021/12/17 16:33:42	52.4
260	2021/12/17 16:33:45	52.1
261	2021/12/17 16:33:48	52.1
262	2021/12/17 16:33:51	51.7
263	2021/12/17 16:33:54	52.3
264	2021/12/17 16:33:57	51.7
265	2021/12/17 16:34:00	51.7
266	2021/12/17 16:34:03	52.4

267	2021/12/17 16:34:06	52.8
268	2021/12/17 16:34:09	53.7
269	2021/12/17 16:34:12	53.6
270	2021/12/17 16:34:15	53.5
271	2021/12/17 16:34:18	52.9
272	2021/12/17 16:34:21	52.6
273	2021/12/17 16:34:24	52.3
274	2021/12/17 16:34:27	55.1
275	2021/12/17 16:34:30	56.2
276	2021/12/17 16:34:33	58.7
277	2021/12/17 16:34:36	54.6
278	2021/12/17 16:34:39	58.8
279	2021/12/17 16:34:42	61.0
280	2021/12/17 16:34:45	60.5
281	2021/12/17 16:34:48	59.6
282	2021/12/17 16:34:51	57.6
283	2021/12/17 16:34:54	55.4
284	2021/12/17 16:34:57	55.1
285	2021/12/17 16:35:00	54.7
286	2021/12/17 16:35:03	55.1
287	2021/12/17 16:35:06	55.6
288	2021/12/17 16:35:09	55.9
289	2021/12/17 16:35:12	53.9
290	2021/12/17 16:35:15	54.9
291	2021/12/17 16:35:18	54.3
292	2021/12/17 16:35:21	54.9
293	2021/12/17 16:35:24	53.7
294	2021/12/17 16:35:27	53.2
295	2021/12/17 16:35:30	52.6
296	2021/12/17 16:35:33	52.8
297	2021/12/17 16:35:36	51.9
298	2021/12/17 16:35:39	52.1
299	2021/12/17 16:35:42	54.5
300	2021/12/17 16:35:45	62.8
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6	2021/12/17 16:21:03	54.0
7	2021/12/17 16:21:06	55.0
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9	2021/12/17 16:21:12	53.8
10	2021/12/17 16:21:15	53.0
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12	2021/12/17 16:21:21	55.1
13	2021/12/17 16:21:24	61.7
14	2021/12/17 16:21:27	67.3
15	2021/12/17 16:21:30	63.1
16	2021/12/17 16:21:33	57.4
17	2021/12/17 16:21:36	57.1
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19	2021/12/17 16:21:42	57.1
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43	2021/12/17 16:22:54	70.0
44	2021/12/17 16:22:57	60.0
45	2021/12/17 16:23:00	68.6
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55	2021/12/17 16:23:30	52.2
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72	2021/12/17 16:24:21	64.1
73	2021/12/17 16:24:24	69.9
74	2021/12/17 16:24:27	71.0

75	2021/12/17 16:24:30	67.0
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78	2021/12/17 16:24:39	53.1
79	2021/12/17 16:24:42	55.1
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89	2021/12/17 16:25:12	56.5
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91	2021/12/17 16:25:18	57.9
92	2021/12/17 16:25:21	61.6
93	2021/12/17 16:25:24	64.2
94	2021/12/17 16:25:27	61.1
95	2021/12/17 16:25:30	73.4
96	2021/12/17 16:25:33	66.7
97	2021/12/17 16:25:36	67.1
98	2021/12/17 16:25:39	58.3
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101	2021/12/17 16:25:48	54.1
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103	2021/12/17 16:25:54	60.8
104	2021/12/17 16:25:57	63.5
105	2021/12/17 16:26:00	57.8
106	2021/12/17 16:26:03	56.3
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113	2021/12/17 16:26:24	54.0
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116	2021/12/17 16:26:33	59.6
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122	2021/12/17 16:26:51	53.3
123	2021/12/17 16:26:54	52.6
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129	2021/12/17 16:27:12	55.1
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131	2021/12/17 16:27:18	55.7
132	2021/12/17 16:27:21	57.2
133	2021/12/17 16:27:24	61.6
134	2021/12/17 16:27:27	56.2
135	2021/12/17 16:27:30	56.4
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138	2021/12/17 16:27:39	57.6
139	2021/12/17 16:27:42	60.8
140	2021/12/17 16:27:45	66.6
141	2021/12/17 16:27:48	64.4
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143	2021/12/17 16:27:54	61.0
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145	2021/12/17 16:28:00	60.2
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147	2021/12/17 16:28:06	60.7
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152	2021/12/17 16:28:21	53.4
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175	2021/12/17 16:29:30	54.3
176	2021/12/17 16:29:33	55.1
177	2021/12/17 16:29:36	62.8
178	2021/12/17 16:29:39	61.6
179	2021/12/17 16:29:42	60.8
180	2021/12/17 16:29:45	57.8
181	2021/12/17 16:29:48	54.8
182	2021/12/17 16:29:51	54.4

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186	2021/12/17 16:30:03	54.0
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189	2021/12/17 16:30:12	56.0
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191	2021/12/17 16:30:18	55.2
192	2021/12/17 16:30:21	56.1
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194	2021/12/17 16:30:27	57.0
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196	2021/12/17 16:30:33	54.0
197	2021/12/17 16:30:36	53.0
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203	2021/12/17 16:30:54	52.6
204	2021/12/17 16:30:57	52.9
205	2021/12/17 16:31:00	52.8
206	2021/12/17 16:31:03	52.6
207	2021/12/17 16:31:06	53.5
208	2021/12/17 16:31:09	53.7
209	2021/12/17 16:31:12	58.1
210	2021/12/17 16:31:15	57.9
211	2021/12/17 16:31:18	54.9
212	2021/12/17 16:31:21	54.0
213	2021/12/17 16:31:24	56.3
214	2021/12/17 16:31:27	54.6
215	2021/12/17 16:31:30	53.2
216	2021/12/17 16:31:33	52.9
217	2021/12/17 16:31:36	52.8
218	2021/12/17 16:31:39	53.3
219	2021/12/17 16:31:42	56.1
220	2021/12/17 16:31:45	60.8
221	2021/12/17 16:31:48	62.2
222	2021/12/17 16:31:51	62.1
223	2021/12/17 16:31:54	61.9
224	2021/12/17 16:31:57	58.8
225	2021/12/17 16:32:00	57.4
226	2021/12/17 16:32:03	55.2
227	2021/12/17 16:32:06	54.3
228	2021/12/17 16:32:09	54.4
229	2021/12/17 16:32:12	54.1
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231	2021/12/17 16:32:18	53.4
232	2021/12/17 16:32:21	55.1
233	2021/12/17 16:32:24	59.3
234	2021/12/17 16:32:27	54.9
235	2021/12/17 16:32:30	53.7
236	2021/12/17 16:32:33	53.9

237	2021/12/17 16:32:36	57.5
238	2021/12/17 16:32:39	57.2
239	2021/12/17 16:32:42	56.3
240	2021/12/17 16:32:45	56.0
241	2021/12/17 16:32:48	54.4
242	2021/12/17 16:32:51	54.3
243	2021/12/17 16:32:54	55.5
244	2021/12/17 16:32:57	54.7
245	2021/12/17 16:33:00	55.3
246	2021/12/17 16:33:03	55.0
247	2021/12/17 16:33:06	54.3
248	2021/12/17 16:33:09	53.3
249	2021/12/17 16:33:12	53.8
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251	2021/12/17 16:33:18	53.4
252	2021/12/17 16:33:21	57.7
253	2021/12/17 16:33:24	57.6
254	2021/12/17 16:33:27	53.4
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256	2021/12/17 16:33:33	52.3
257	2021/12/17 16:33:36	52.2
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259	2021/12/17 16:33:42	52.4
260	2021/12/17 16:33:45	52.1
261	2021/12/17 16:33:48	52.1
262	2021/12/17 16:33:51	51.7
263	2021/12/17 16:33:54	52.3
264	2021/12/17 16:33:57	51.7
265	2021/12/17 16:34:00	51.7
266	2021/12/17 16:34:03	52.4
267	2021/12/17 16:34:06	52.8
268	2021/12/17 16:34:09	53.7
269	2021/12/17 16:34:12	53.6
270	2021/12/17 16:34:15	53.5
271	2021/12/17 16:34:18	52.9
272	2021/12/17 16:34:21	52.6
273	2021/12/17 16:34:24	52.3
274	2021/12/17 16:34:27	55.1
275	2021/12/17 16:34:30	56.2
276	2021/12/17 16:34:33	58.7
277	2021/12/17 16:34:36	54.6
278	2021/12/17 16:34:39	58.8
279	2021/12/17 16:34:42	61.0
280	2021/12/17 16:34:45	60.5
281	2021/12/17 16:34:48	59.6
282	2021/12/17 16:34:51	57.6
283	2021/12/17 16:34:54	55.4
284	2021/12/17 16:34:57	55.1
285	2021/12/17 16:35:00	54.7
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287	2021/12/17 16:35:06	55.6
288	2021/12/17 16:35:09	55.9
289	2021/12/17 16:35:12	53.9
290	2021/12/17 16:35:15	54.9

291	2021/12/17 16:35:18	54.3
292	2021/12/17 16:35:21	54.9
293	2021/12/17 16:35:24	53.7
294	2021/12/17 16:35:27	53.2
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296	2021/12/17 16:35:33	52.8
297	2021/12/17 16:35:36	51.9
298	2021/12/17 16:35:39	52.1
299	2021/12/17 16:35:42	54.5
300	2021/12/17 16:35:45	62.8

Data Logger 2
SET 3
A
SLOW
Range 40-100
L05 56.6
L10 55.6
L50 53.7
L90 52.7
L95 52.5
Max dB 69.6
2021/12/17 16:52:26
SEL 84.2
Leq 54.7

No.s	Date Time	dB
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3	2021/12/17 16:40:07	51.7
4	2021/12/17 16:40:10	58.7
5	2021/12/17 16:40:13	52.7
6	2021/12/17 16:40:16	53.3
7	2021/12/17 16:40:19	54.6
8	2021/12/17 16:40:22	52.5
9	2021/12/17 16:40:25	53.7
10	2021/12/17 16:40:28	53.2
11	2021/12/17 16:40:31	52.7
12	2021/12/17 16:40:34	52.4
13	2021/12/17 16:40:37	52.6
14	2021/12/17 16:40:40	53.5
15	2021/12/17 16:40:43	55.3
16	2021/12/17 16:40:46	53.4
17	2021/12/17 16:40:49	52.7
18	2021/12/17 16:40:52	52.6
19	2021/12/17 16:40:55	52.7
20	2021/12/17 16:40:58	53.4
21	2021/12/17 16:41:01	53.5
22	2021/12/17 16:41:04	53.5
23	2021/12/17 16:41:07	53.3
24	2021/12/17 16:41:10	53.4
25	2021/12/17 16:41:13	54.4
26	2021/12/17 16:41:16	54.1
27	2021/12/17 16:41:19	53.4
28	2021/12/17 16:41:22	52.8
29	2021/12/17 16:41:25	54.9
30	2021/12/17 16:41:28	54.6
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32	2021/12/17 16:41:34	55.2
33	2021/12/17 16:41:37	55.0
34	2021/12/17 16:41:40	58.9
35	2021/12/17 16:41:43	57.7
36	2021/12/17 16:41:46	54.0
37	2021/12/17 16:41:49	54.8
38	2021/12/17 16:41:52	54.1
39	2021/12/17 16:41:55	53.4

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45	2021/12/17 16:42:13	52.8
46	2021/12/17 16:42:16	55.5
47	2021/12/17 16:42:19	53.2
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49	2021/12/17 16:42:25	52.0
50	2021/12/17 16:42:28	53.1
51	2021/12/17 16:42:31	54.4
52	2021/12/17 16:42:34	55.5*
53	2021/12/17 16:42:37	53.0*
54	2021/12/17 16:42:40	52.7*
55	2021/12/17 16:42:43	53.2*
56	2021/12/17 16:42:46	55.0*
57	2021/12/17 16:42:49	54.2*
58	2021/12/17 16:42:52	54.6*
59	2021/12/17 16:42:55	53.6*
60	2021/12/17 16:42:58	54.4
61	2021/12/17 16:43:01	53.8
62	2021/12/17 16:43:04	54.7
63	2021/12/17 16:43:07	53.4
64	2021/12/17 16:43:10	53.0
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66	2021/12/17 16:43:16	55.2
67	2021/12/17 16:43:19	55.7
68	2021/12/17 16:43:22	53.8
69	2021/12/17 16:43:25	53.1
70	2021/12/17 16:43:28	53.5
71	2021/12/17 16:43:31	53.0
72	2021/12/17 16:43:34	52.7
73	2021/12/17 16:43:37	52.7
74	2021/12/17 16:43:40	53.0
75	2021/12/17 16:43:43	53.2
76	2021/12/17 16:43:46	53.2
77	2021/12/17 16:43:49	53.3
78	2021/12/17 16:43:52	52.7
79	2021/12/17 16:43:55	53.5
80	2021/12/17 16:43:58	52.8
81	2021/12/17 16:44:01	53.1
82	2021/12/17 16:44:04	54.3
83	2021/12/17 16:44:07	54.1
84	2021/12/17 16:44:10	53.5
85	2021/12/17 16:44:13	53.3
86	2021/12/17 16:44:16	53.4
87	2021/12/17 16:44:19	52.8
88	2021/12/17 16:44:22	52.2
89	2021/12/17 16:44:25	52.5
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91	2021/12/17 16:44:31	53.0
92	2021/12/17 16:44:34	53.0
93	2021/12/17 16:44:37	55.3

94	2021/12/17 16:44:40	54.3
95	2021/12/17 16:44:43	53.7
96	2021/12/17 16:44:46	53.2
97	2021/12/17 16:44:49	52.9
98	2021/12/17 16:44:52	53.0
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100	2021/12/17 16:44:58	52.5
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111	2021/12/17 16:45:31	53.8
112	2021/12/17 16:45:34	54.1
113	2021/12/17 16:45:37	53.1
114	2021/12/17 16:45:40	57.2
115	2021/12/17 16:45:43	54.6
116	2021/12/17 16:45:46	55.3
117	2021/12/17 16:45:49	54.7
118	2021/12/17 16:45:52	54.4
119	2021/12/17 16:45:55	56.2
120	2021/12/17 16:45:58	54.8
121	2021/12/17 16:46:01	54.7
122	2021/12/17 16:46:04	54.3
123	2021/12/17 16:46:07	54.1
124	2021/12/17 16:46:10	54.3
125	2021/12/17 16:46:13	53.7
126	2021/12/17 16:46:16	53.9
127	2021/12/17 16:46:19	54.3
128	2021/12/17 16:46:22	53.4
129	2021/12/17 16:46:25	53.1
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132	2021/12/17 16:46:34	52.7
133	2021/12/17 16:46:37	53.1
134	2021/12/17 16:46:40	53.0
135	2021/12/17 16:46:43	53.5
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138	2021/12/17 16:46:52	53.9
139	2021/12/17 16:46:55	53.6
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144	2021/12/17 16:47:10	53.3
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147	2021/12/17 16:47:19	53.0

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154	2021/12/17 16:47:40	54.4
155	2021/12/17 16:47:43	54.9
156	2021/12/17 16:47:46	55.3
157	2021/12/17 16:47:49	54.6
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171	2021/12/17 16:48:31	52.3
172	2021/12/17 16:48:34	52.6
173	2021/12/17 16:48:37	52.5
174	2021/12/17 16:48:40	52.7
175	2021/12/17 16:48:43	52.7
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178	2021/12/17 16:48:52	52.9
179	2021/12/17 16:48:55	53.3
180	2021/12/17 16:48:58	53.1
181	2021/12/17 16:49:01	54.2
182	2021/12/17 16:49:04	55.1
183	2021/12/17 16:49:07	53.8
184	2021/12/17 16:49:10	55.0
185	2021/12/17 16:49:13	54.2
186	2021/12/17 16:49:16	53.6
187	2021/12/17 16:49:19	53.4
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195	2021/12/17 16:49:43	59.1
196	2021/12/17 16:49:46	54.7
197	2021/12/17 16:49:49	54.2
198	2021/12/17 16:49:52	53.6
199	2021/12/17 16:49:55	53.8
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202	2021/12/17 16:50:04	52.8
203	2021/12/17 16:50:07	53.0
204	2021/12/17 16:50:10	53.0
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212	2021/12/17 16:50:34	57.1
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220	2021/12/17 16:50:58	54.7
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222	2021/12/17 16:51:04	54.1
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240	2021/12/17 16:51:58	53.0
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245	2021/12/17 16:52:13	55.5
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250	2021/12/17 16:52:28	56.6
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252	2021/12/17 16:52:34	55.4
253	2021/12/17 16:52:37	55.7
254	2021/12/17 16:52:40	55.1
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262	2021/12/17 16:53:04	53.6
263	2021/12/17 16:53:07	53.0
264	2021/12/17 16:53:10	53.7
265	2021/12/17 16:53:13	53.3
266	2021/12/17 16:53:16	53.7
267	2021/12/17 16:53:19	53.8
268	2021/12/17 16:53:22	53.0
269	2021/12/17 16:53:25	53.1
270	2021/12/17 16:53:28	53.0
271	2021/12/17 16:53:31	53.1
272	2021/12/17 16:53:34	54.1
273	2021/12/17 16:53:37	53.8
274	2021/12/17 16:53:40	53.5
275	2021/12/17 16:53:43	54.7
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279	2021/12/17 16:53:55	54.1
280	2021/12/17 16:53:58	56.3
281	2021/12/17 16:54:01	55.8
282	2021/12/17 16:54:04	53.7
283	2021/12/17 16:54:07	52.9
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285	2021/12/17 16:54:13	53.8
286	2021/12/17 16:54:16	54.8
287	2021/12/17 16:54:19	55.3
288	2021/12/17 16:54:22	56.0
289	2021/12/17 16:54:25	55.3
290	2021/12/17 16:54:28	53.7
291	2021/12/17 16:54:31	53.0
292	2021/12/17 16:54:34	53.9
293	2021/12/17 16:54:37	53.9
294	2021/12/17 16:54:40	55.6
295	2021/12/17 16:54:43	55.1
296	2021/12/17 16:54:46	53.3
297	2021/12/17 16:54:49	53.7
298	2021/12/17 16:54:52	53.8
299	2021/12/17 16:54:55	53.4
300	2021/12/17 16:54:58	52.9
301	2021/12/17 16:55:01	53.5
302	2021/12/17 16:55:04	53.3
303	2021/12/17 16:55:07	52.9
304	2021/12/17 16:55:10	54.8
305	2021/12/17 16:55:13	53.7
306	2021/12/17 16:55:16	56.0
307	2021/12/17 16:55:19	54.7
308	2021/12/17 16:55:22	54.5

Report date: 12/16/2021
Case Description: CSUN Equity Innovation Hub Construction Noise

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Jacaranda Hall-University Building	Commercial	75	75	75

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		60	0
Dozer	No	40		81.7	60	0
Tractor	No	40	84		60	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Grader	83.4	79.4
Dozer	80.1	76.1
Tractor	82.4	78.4
Total	83.4	83

*Calculated Lmax is the Loudest value.

Appendix C

Traffic Assessment – CSUN VMT Screening

FEHR PEERS

Technical Memorandum

Date: December 23, 2021

To: Anna Choudhuri and Danielle Griffith, Rincon

From: Tom Gaul and Vivian Lee

Subject: California State University of Northridge Global HSI Equity Innovation Hub VMT Screening Analysis

LA21-3332

This technical memorandum documents the vehicle miles traveled (VMT) screening analysis for the California State University of Northridge (CSUN) Global Hispanic-Serving Institution (HIS) Equity Innovation Hub (the Project). The VMT screening analysis completed for this project is based on the screening criteria in the California State University's (CSU) current *Transportation Impact Study Manual* (TIS Manual) for assessing transportation impacts. If a project is found to meet certain criteria, a full VMT analysis is not required. This memorandum describes the VMT impact screening criteria used by CSU and their application to this project.

Project Description

The Global HSI Equity Innovation Hub programming will focus on closing equity gaps in STEM degree pathways, and inspiring Latinx and other post-traditional students who have been historically underrepresented in STEM to pursue high-demand careers in science, technology, engineering, and mathematics. The HSI Equity Innovation Hub will also include a campus makerspace as well as a student showcase space to inspire student curiosity and creativity. In addition, there will be student success spaces and P-14 outreach and discovery spaces to engage middle, high school, and community college students, as well as integrating families to include a whole family outreach approach.

The Project will provide a new, modern, state-of-the-art addition to the existing Jacaranda Hall. Located on the eastern façade of the existing building, the Project will expand Jacaranda Hall by 35,000 gross square feet. Additional planned site improvements include outdoor gather and seating areas and hands-on STEM activity areas empowered by technology.

VMT Screening Analysis

The following sections describe relevant considerations for screening projects to determine whether a determination of less than significant VMT impact can be readily made, or if a more extensive evaluation of VMT-related transportation impacts is necessary to determine the potential for significant VMT-related transportation impacts to the environment per CEQA.

Regulatory Context

On September 27, 2013, Governor Jerry Brown signed SB 743 into law, which initiated a process to change transportation impact analyses completed in support of California Environmental Quality Act (CEQA) documentation. SB 743 eliminates the vehicular level of service (LOS) as a basis for determining significant transportation impacts under CEQA and provides a new performance metric, VMT. As a result, the State has shifted from measuring a project's impact to drivers (LOS) to measuring the impact of driving (VMT) as it relates to achieving State goals of reducing greenhouse gas (GHG) emissions, encouraging infill development, and improving public health by promoting active transportation. To help lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR) produced a Technical Advisory (*Technical Advisory on Evaluating Transportation Impacts in CEQA*, 2018) and CSU published its current TIS Manual in January 2020.

CSU's guidelines include criteria for screening out projects from full VMT analysis. For CSU projects, examples of projects that would be screened from VMT assessment due to their VMT reducing nature (i.e., no further analysis required) are noted below:

- Local serving retail that is less than 50,000 sq. ft., or retail that is located wholly within the core of a CSU campus;
- Childcare centers that serve students, faculty, and staff families;
- Student services facilities;
- Healthcare centers serving students, faculty, and staff;
- Recreation/fitness/wellness centers that serve students, faculty, and staff;
- On-campus housing serving students, faculty and staff; and
- Projects generating less than 110 vehicle trips per day, as noted in the OPR Technical Advisory.[1]

[1] CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact. (OPR Technical Advisory, 2018)

If a Project meets any of the screening criteria, then no further VMT assessment is required of the operational period.

Project Trip Generation VMT Screening

The screening criteria of projects generating less than 110 vehicle trips per day is applicable to the Project.

The Project will primarily serve the existing students in Jacaranda Hall as well as other students on the CSUN campus. The Project is expected to generate one visit from a K-12 school per day, equaling up to two busloads of students. The Project is also expected to generate visits from non-enrolled students and their families, no more than ten a day. These are expected to primarily be from the San Fernando Valley and other areas that CSUN serves, such as the Santa Clarita Valley and Simi Valley.

As such, the Project is expected to generate two buses per day and ten family visits per day, for a total of 24 daily vehicle trips. Because this is well below the applicable threshold of 110 daily trips, it is concluded that the Project would result in a less than significant transportation impact related to VMT and no further analysis is required.

Appendix D

Notice of Intent to Adopt

Notice of Intent to Adopt
A Mitigated Negative Declaration

Global Hispanic Serving Institution Equity Innovation Hub
California State University Northridge

Pursuant to the State of California Public Resources Code Section 21092, this is to advise you that California State University Northridge (CSUN) has prepared an Initial Study-Mitigated Negative Declaration of environmental impacts for the following project:

Project Title: CSU Northridge Global Hispanic Serving Institution Equity Innovation Hub (HSI EIH)

Project Description: The project will provide a new campus building on the site of an existing surface parking lot on the east side of Jacaranda Hall. The buildable site area is approximately 60,000 square feet (sf) and the new two-story building will be less than 50 feet tall. The primary building entry will be located off of Jacaranda Walk, near its intersection with East University Drive/Lindley Avenue. The architectural style for the Global HSI EIH building will be consistent with Campus Building Guidelines. These Guidelines strive to maintain and enhance the campus as an attractive, accessible, safe and functional environment for learning, living, culture and recreation for students, faculty, and staff (CSUN 2005). The CSUN Master Plan Design Guidelines call for locating buildings of similar functions into one area, focusing on common open space areas and accessible circulation for pedestrian and well as vehicles. The proposed project will be consistent with the principles in the CSUN Master Plan Design Guidelines and the proposed building form and massing will be consistent with development requirements for foreground buildings on campus. Its size, massing, color, architectural features and building materials will serve as a point of reference to Jacaranda Hall. In addition, the project will include site improvements such as outdoor gathering and seating areas, shade trees and landscaping. Outdoor areas will include a "front yard/gathering place" that will include an architectural canopy, porch and outdoor display as well as a "backyard/workspace" that will include hang-out/study spaces and an outdoor lab yard. The project will provide the necessary accessible paths of travel to the new facility as well as maintain or improve access to existing adjacent buildings, parking areas, open spaces and public edges. The proposed building will be built to the standards of IIA Type (Title 24) construction per the California Building Code (CBC). Construction is anticipated to start in January 2023 and will occur over an approximately 18-month period. It is anticipated that soil required for grading will be balanced on-site and no soil import or export is anticipated to be required. The proposed project will have a slab on-grade concrete foundation with no piles required. Per the geotechnical report prepared for the project, existing soil conditions at the site include approximately three to seven feet of fill material underlain with alluvial soils comprised of sand, silt and clay (Geotechnologies Inc, 2021). Since the fill material is not suitable to support the building's foundation, it will be removed/over excavated to a minimum depth of three feet below the foundations and reused for re-compaction.

Project Location: California State University, Northridge (CSUN) campus, located at 18111 Nordhoff Street in the City of Los Angeles (APN 2764-014-906).

Environmental Determination: Based on the findings of the Initial Study-Mitigated Negative Declaration, CSUN has determined that, with mitigation, this project will not result in significant environmental impacts. Mitigation measures for biological resources, cultural resources, noise, and tribal cultural resources will be required to reduce impacts to less than significant. Accordingly, CSUN intends to adopt a Mitigated Negative Declaration, pursuant to Section 21080(c) of the Public Resources Code.

The project site is not included on the list of hazardous materials facilities, hazardous waste properties, or hazardous waste disposal sites enumerated under Section 65962.5 of the California Government Code (Cortese List). A search on the Envirostor database did not identify any hazardous waste facilities or other cleanup within 1,000 feet of the project site. The Envirostor listing nearest to the site is approximately 0.3 miles north at Northridge Academy High School. This property had been identified as having soil contamination due to historic agricultural uses. However, a "No Further Action" was determined by the DTSC for the property as of January 18, 2002 (DTSC 2017).

Public Review/Public Comment Period: Copies of the proposed Mitigated Negative Declaration and Initial Study are available for public review at: University Library, 18111 Nordhoff Street, Northridge, California, 91330; Northridge Public Library, 9051 Darby Avenue, Northridge, California, 91325; and online at https://www.csun.edu/facilities/facilities-planning-services.

A 30-day public review period for the Mitigated Negative Declaration begins on March 9, 2022 and ends April 8, 2022. If you would like to comment, please send written comments to:

Mary Clare Smithson, P.E., Capital Programs Manager
CSUN Facilities Planning, Design & Construction
18111 Nordhoff Street
Northridge, California 91330
(818) 677-2561

Public Hearing: The California State University (CSU) Board May 24 and 25, 2022. To confirm the date, time, and location of the meeting, please check the CSU Board of Trustees website at https://www2.calstate.edu/csu-system/board-of-trustees or contact the California State University Office of the Chancellor at 401 Golden Shore, California, Long Beach 98002, (562) 951-4000.