DRAFT INITIAL STUDY
SOUTHERN CALIFORNIA EDISON
ALHAMBRA WAREHOUSE PROJECT

Prepared for:

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Community Development Department
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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ALUC	Airport Land Use Commission
AQMP	Air Quality Management Plan
AST	aboveground storage tank
BACM	Best Available Control Measures
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEC	California Energy Commission
CEMP	Comprehensive Emergency Management Plan
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH4	methane
CHL	California Historical Landmarks
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2-equivalents
CPHL	California Points of Historical Interest
CRHR	California Register of Historical Resources
dBA	A-weighted decibels
diesel PM	diesel particulate matter
DRS	Disposal Reporting System
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Authority
GHG	greenhouse gas
GWP	global warming potential
HVAC	heating, ventilation, and air conditioning
in/sec	inches per second
LACSD	Sanitation District of Los Angeles County
LED	light-emitting diode
LID	Low Impact Development MS4
LST	local significance threshold
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	Most Likely Descendant
MT	metric tons
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide

NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
PCB	polychlorinated biphenyl
PM	particulate matter
PM_{10}	particulate matter equal to or less than 10 micrometers in diameter
$PM_{2.5}$	particulate matter equal to or less than 10 micrometers in diameter
ppv	peak particle velocity
RTP	Regional Transportation Plan
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SF	square foot/feet
SO_2	sulfur dioxide
SUSMP	Standard Urban Stormwater Mitigation Program
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TPH	total petroleum hydrocarbon
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
WRP	Water Reclamation Plant

1.0 INTRODUCTION

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with the California Environmental Quality Act (CEQA, Public Resources Code Sections 21000–21177) and pursuant to Section 15063 (Initial Study) of Title 14 of the California Code of Regulations (CCR), the City of Alhambra Community Development Department is the lead agency for the proposed Southern California Edison Alhambra Warehouse Project ("Project") and is responsible for analyzing and approving the CEQA document.

If the lead agency determines that any aspect of a proposed project, either individually or cumulatively, may cause a significant environmental impact, an Environmental Impact Report (EIR) must be prepared. If the lead agency finds no evidence that any aspect of the project would cause a significant environmental impact, either as proposed or as modified by the mitigation measures identified in the Initial Study, the lead agency shall instead prepare a Negative Declaration or Mitigated Negative Declaration, as appropriate.

As the lead agency, the City of Alhambra will approve the document, which is intended to be informational regarding the environmental impacts of the project and associated discretionary actions. Approval does not presuppose or mandate any actions on the part of the agencies from which other permits and approvals would be required.

Under CEQA, the environmental document is subject to a public review period. During this period, comments regarding the environmental analysis in the document can be provided to the City of Alhambra Community Development Department. The Community Development Department will consider and respond to these comments as part of the environmental review process. All comments and responses will be documented in an appendix and, if necessary, reflected in a revised analysis.

1.2 PURPOSE OF INITIAL STUDY

Per Section 15063(c)-(d) of the CEQA Guidelines (Sections 15000–15387 of the CCR), the purpose and required content of an Initial Study are to:

(1) Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration;

(2) Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.

(3) Assist in the preparation of an EIR, if one is required, by:

  (A) Focusing the EIR on the impacts determined to be significant,

  (B) Identifying the impacts determined not to be significant,

  (C) Explaining the reasons for determining that potentially significant impacts would not be significant, and

  (D) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental impacts;

(4) Facilitate environmental assessment early in the design of a project;

(5) Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant impact on the environment;

(6) Eliminate unnecessary EIRs;

(7) Determine whether a previously prepared EIR could be used with the project.

Similarly, the required contents of an Initial Study include:

(1) A description of the project including the location of the project;

(2) An identification of the environmental setting;

(3) An identification of environmental impacts by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found.

(4) A discussion of the ways to mitigate the significant impacts identified, if any;

(5) An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;

(6) The name of the person or persons who prepared or participated in the Initial Study.

1.3 INCORPORATION BY REFERENCE

A list of references is included in Chapter 8.0, References, of this Initial Study. Additionally, the Initial Study has been prepared based on existing condition information specific to the Project documented in the 2019 Alhambra General Plan, Final Environmental Impact Report (SCH# 2017051085, https://drive.google.com/file/d/1y93vwn8lyV59ojk6z81zU67tHPUgpcMB/view.

2.0 ENVIRONMENTAL SUMMARY

2.1 BACKGROUND

1. Project: Southern California Edison Alhambra Warehouse Project

2. Lead Agency: City of Alhambra
Community Development Department
111 S. First Street
Alhambra, CA 91801

3. Contact Person and Phone: Paul Lam
(626) 570-5034

4. Project Location:

The Project is located at 501 South Marengo Avenue, Alhambra, CA (Assessor Parcel Numbers 5342-029-800 and -801). The existing campus is located approximately 7 miles northeast of downtown Los Angeles (Figure 1, Regional/Vicinity Map).

6. Applicant: Southern California Edison
501 Marengo Avenue
Alhambra, CA 91801
Contact: Alba Swalheim
(626) 302-3687

7. General Plan Designation: Industrial

8. Zoning: IPD – Industrial Planned Development

9. Project Description:

Southern California Edison (SCE) is an electricity company that provides electricity and energy for clients throughout Southern California and owns and operates a 35-acre regional operating facility in Alhambra, California. The objective of the proposed Southern California Edison Alhambra Warehouse Project ("Project") is to consolidate storage materials and associated staff from Buildings C, D, and E into a proposed new warehouse. This would better optimize the function and operation of the aged campus, which was built in the 1930s. The Project would include demolition of the approximately 3.3 acres of asphalt and concrete ground cover and the construction of a new approximately 54,000 square foot (SF) warehouse on current yard space bounded by Mission Road and S. Raymond Avenue, in the southwestern corner of the SCE site. Additionally, a new site access gate is proposed at the intersection of S. Raymond Avenue and Chestnut Street (Figure 2, Proposed Site Plan).

The Project would consolidate all indoor storage (11,000 SF from Building C, 27,000 SF from Building D, and 17,300 SF from Building E) and develop a centralized logistics intake, yard consolidation, parking restriping, and physical on-site distribution point to handle all indoor storage for Transmission and IT functions. In the reasonably foreseeable future (within the next 5 years), the vacated space at the site associated with the Project would be utilized as swing space for existing full-time employees as personnel are temporarily relocated to improve and

Source: Digital Globe 2018.

500 250 0 500 Feet

Scale: 1:6,000 ; 1 inch = 500 feet

Figure 1
Regional/Vicinity Map

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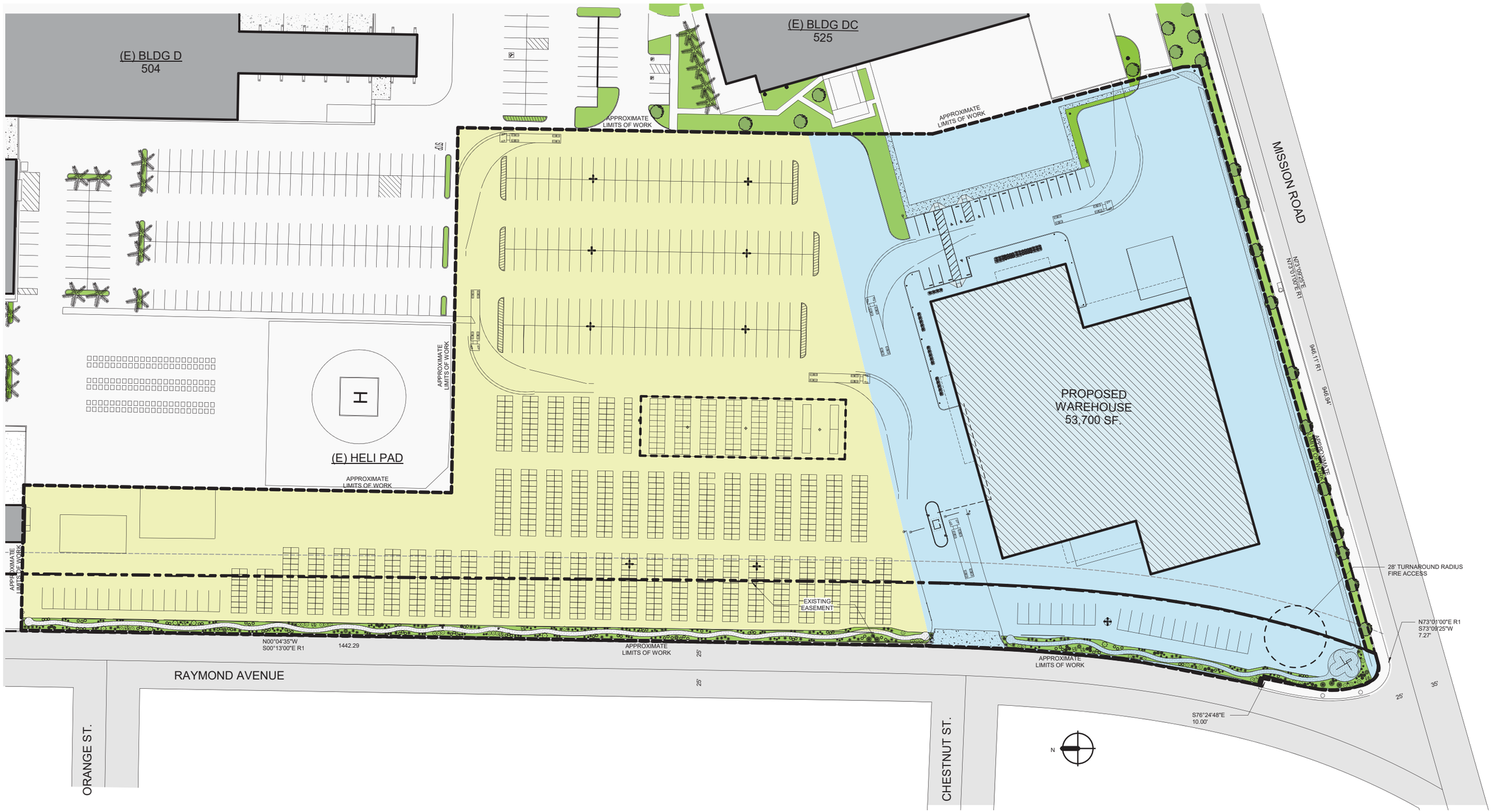

Source: Richard Yen & Associates Architects and Planners 2020

Not to Scale

Figure 2
Proposed Site Plan

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update existing buildings. Prior to operation, the Project's demolition and construction activities would occur in two phases over approximately 12 months. Demolition activities would include removal of approximately 3.30 acres of existing asphalt and concrete, associated utilities, and two non-native trees to prepare the site for the proposed warehouse and new gate. Construction would include the new gate, warehouse structure, underground stormwater treatment basins, landscaping, surface parking restriping, and associated utilities and connections. The proposed gate would have queuing space to accommodate one-semi-truck or two panel trucks and would be secured via card reader, speaker, and security camera, all linked to the main gate or warehouse. All third-party deliveries are proposed to access the site through the new gate, eliminating truck traffic to the main gate. The existing 30-foot easement parallel to S. Raymond Street would be maintained. Table 2.1-1 displays the SF and functions for the existing and proposed office and warehouse space associated with the consolidation Project. Table 2.1-1 does not display shared spaces within the proposed warehouse, which includes conference rooms, loading docks, aisleways, restrooms, etc.

Table 2.1-1
Proposed Warehouse Project Program

Function	Existing (Square Feet [SF])	Approximate Proposed New SF*	Change in Function SF
Administrative	7,790	4,810	-2,980
Warehouse	21,548	30,600	9,052

*Total does not equal the constructed SF of the warehouse (54,000 SF) because the table reflects programming space and does not include shared space, such as conference room, loading dock, aisleways, restrooms.

The following green design features are incorporated in to the Project:

a) **Solar Tubes and Skylights** – would allow the warehouse to partially light the spaces with daylight and supplement with LED (light-emitting diode) technology. Approximately 30 skylights are proposed on the warehouse roof. Natural light reduces the need to use artificial sources of light.

b) **Water saving measures** – would include using recycled water for watering the landscaping.

c) **Energy saving measures** – would include the use of evaporative coolers to condition the warehouse, resulting in an energy savings of approximately 1/3 compared to the amount of power for a standard heating, ventilation, and air conditioning (HVAC) unit. Additionally, the energy savings would be achieved by only heating office space in the warehouse or only about 5 percent of the total warehouse floor area. Finally, variable refrigerant flow (VRF) technology would be implemented, which would allow for simultaneous heating and cooling as well as heat-recovery. Use of VRF systems results in 20–30% greater energy efficiency than conventional HVAC systems.

d) **Pre-Engineered Metal Building** – would be the construction material for the warehouse structure. Using steel allows for repair or recycling of materials. Additionally, greenhouse gas emissions are reduced significantly in the creation of steel and less energy is required to mill steel than other construction materials (wood or concrete). The prefab building is assembled on-site, which reduces construction waste.

e) **Landscaping** – would include drought-tolerant plants. Proposed plants would minimize water loss and maximize water uptake. Native drought-tolerant plants would support local ecology and reinforce the natural habitat beneficial for native wildlife and bird species. Drought-resistant plants have extensive root systems that tap deep into clay types of soil and would result in reduced soil erosion.

f) **Design** – would implement a three-tier roof height, which minimizes the unnecessary volume space and results in less energy needed to cool and heat the space. The warehouse design also includes white panels that would reflect and re-emit solar radiation.

10. Surrounding Land Use(s) and Project Setting:

The Project would take place on an existing entirely fenced SCE industrial facility, on one large relatively flat parcel. Other existing uses near the site include a number of industrial uses (west and east of SCE facility), multi-family residential (north of SCE facility), and commercial facilities (east and south of SCE facility). The Project site is in an urbanized area within the City of Alhambra. Current allowed uses of the IPD Zone include manufacturing, processing or treatment of products, offices, warehousing and distribution facilities, research development and testing facilities, outdoor storage of fleet vehicles, lumber yard with accessory hardware sales, contractor storage yard, plant nurseries, adult businesses, and fitness center. The campus includes buildings AD, AG, AM, C, D, E, K, M, P, R, , data center building, and a helicopter landing area (helipad); employee parking surface lots; and paved open storage areas (see Figure 3, SCE Alhambra Campus Existing Site Plan). The Warehouse (proposed Building W) would be built in the southwest corner of the site. The existing main entrance is in the northeast corner of the property, along Marengo Avenue. Access to the campus is via gated driveways at the east, north, and west sides of the property. No driveways are located along Mission Road to the south. The primary entrance to the campus is on Marengo Avenue, between Lemon and Orange Streets. The other driveways are not active. There are approximately 550 full-time employees at the campus.

11. Other Required Agency Approvals:

The City of Alhambra would serve as lead agency for the proposed Project and would be responsible for approving the environmental document. The City would also be required to approve grading plans and issue building permits for the Project before construction begins.

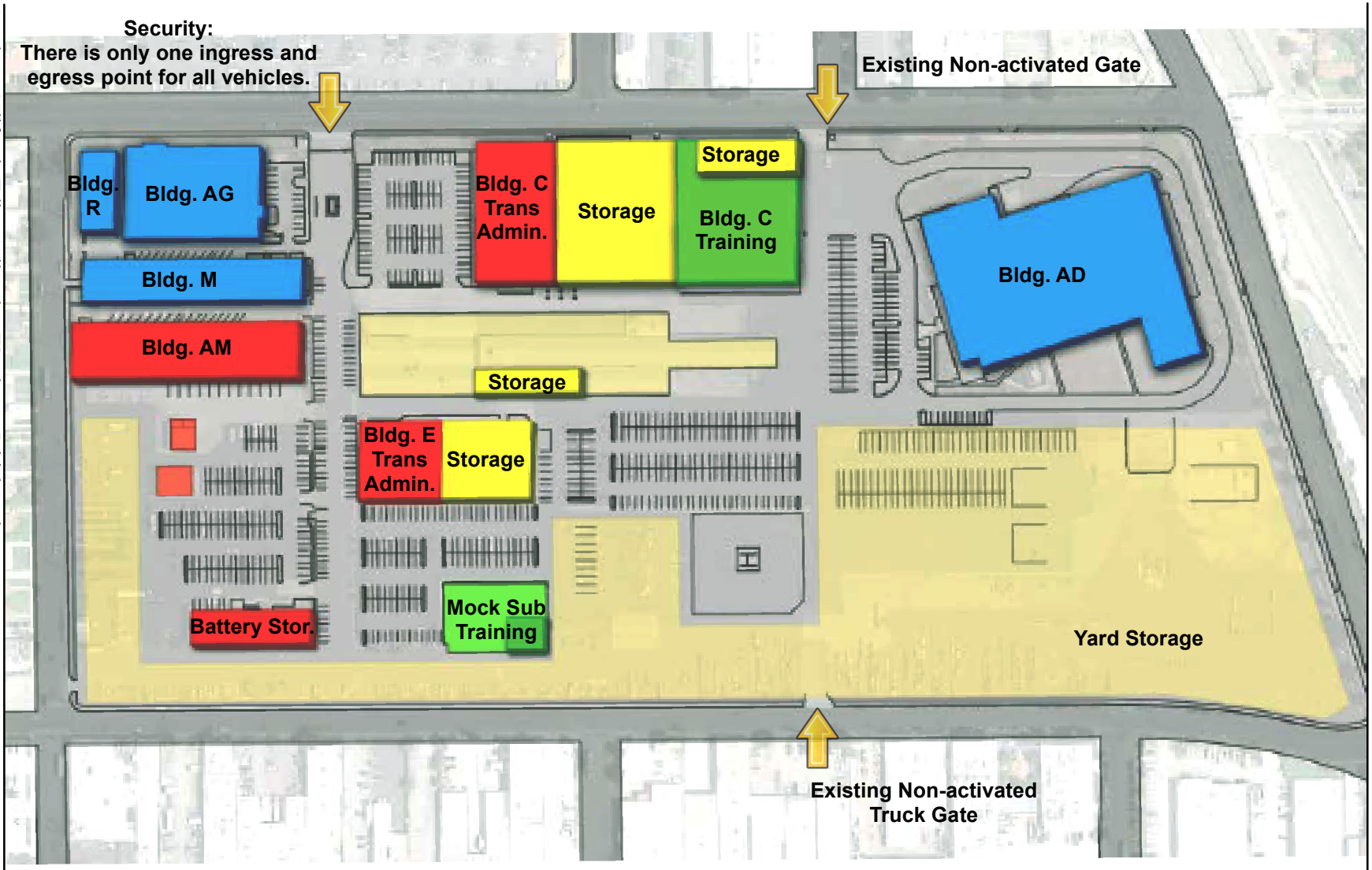
12. Previous Environmental Documentation:

Not Applicable

13. Consultation:

<u>Federal, State, and Other Local Agencies:</u>
Los Angeles Regional Water Quality Control Board
City of Alhambra:

- Community Development Department
- Public Works Department



Source: SCE.

225 0 225 Feet

Scale: 1:2,700; 1 inch = 225 feet

Figure 3
SCE Alhambra Campus Existing Site Plan

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3.0 INITIAL STUDY/ENVIRONMENTAL

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by the Project, involving at least an impact that is "Less Than Significant with Mitigation Incorporated" or a "Potentially Significant Impact" 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

EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts that could result from the Project. Impacts are evaluated by statement of the questions relevant to each section from the Initial Study Checklist, followed by answers determined through the analysis undertaken as part of the Initial Study. Impacts considered in the analysis include potential short-term (construction-related) impacts as well as long-term, operational or day-to-day impacts. For each question, there are four possible conclusions as described below.

1. *No Impact.* Future development arising from the project's implementation will not have any measurable environmental impact on the environment and no additional analysis is required.

2. *Less than Significant Impact.* The development associated with project implementation will have the potential to impact the environment; these impacts, however, will be less than the levels or thresholds that are considered significant, and no additional analysis is required.

3. *Potentially Significant Unless Mitigated*. The development will have the potential to generate impacts that may be considered as a significant impact on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.

4. *Potentially Significant Impact*. Future implementation will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X

No Impact. The Land Use and Community Design Element in the 2019 General Plan sets urban design recommendations in both the maintenance of property values and its aesthetic contribution to the quality of life for residents and visitors (City of Alhambra 2019a). Goals LU-2A through LU-2E encourage enhancement of the commercial and industrial areas. There are no officially designated scenic vistas in the immediate Project vicinity. The site is not considered a scenic vista as it is bordered by an urban setting, including existing transportation and mostly industrial land uses, and does not possess any highly valued scenic resources. Therefore, the Project would not have a substantial adverse impact on a scenic vista, no impacts would occur, and mitigation is not required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X

No Impact. The Project site does not contain any rock outcroppings or historic buildings visible from a state scenic highway. There are no scenic highways within the City of Alhambra (Caltrans 2017). The Project does involve removal of two trees within the industrial campus; however, these trees are no part of a scenic resource. Therefore, no impact would occur to scenic resources and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X

No Impact. As stated in 3.1 (a) and (b), the proposed Project is located in a developed urban and industrial area. The Project is within an existing SCE facility that houses other warehouses, office buildings, a heliport, and other utilities operations. The warehouse is within an industrial zone area of the City of Alhambra. The Project is zoned for industrial use and would be constructed with applicable industrial design guidelines. The Project is in accordance with the goals and policies stated within the City's General Plan regarding Industrial and Commercial developments General Plan policies LU-2a through LU-2E.

Therefore, the Project would not substantially degrade the existing and visual character or quality of the site and its surroundings. No impact would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Less than Significant Impact. The Project site is located within an urbanized setting and on an industrial campus. Light and glare are presently generated on the site from lighting associated with the surface parking lots, street lighting, and existing on-site structures. Lighting impacts also occur from existing surrounding residential, commercial, and industrial uses, as well as from streetlights and vehicles traveling along adjacent roadways. Existing outdoor lighting in the area is generally limited to that necessary for safety and access, security of outdoor areas, and interior and exterior structural lighting.

Construction personnel would limit construction lighting to the minimum necessary to provide adequate lighting for worker safety and would shield and direct lights to minimize potential illumination on surrounding land uses. Since the daily duration of construction would be limited to the hours of construction per the City Noise Ordinance, construction lighting would be limited to early morning hours. Construction personnel would limit illumination of surrounding areas; therefore, construction lighting impacts would be less than significant.

Glare is intense, blinding light, and it can occur in urban areas from sunlight or artificial light reflecting off of a surface. Typical building materials with high potential to create glare impacts may include reflective glass, windows, or metallic elements. The Project does not propose any use of building materials with highly reflective properties such as reflective glass or high-gloss surface colors.

Proposed new light sources would include interior and exterior lighting of the warehouse building and safety lighting for the gate and surface parking. Project lighting would not be out of character with the existing sources of light. The added lighting from the Project would not create substantial light or glare that would adversely affect day or nighttime views. The Project would not change the character or intensity of lighting or glare associated with the existing SCE facility and would adhere to General Plan policy LU-8 to address lighting and glare. Impacts would be less than significant and no mitigation is required.

3.2 AGRICULTURE AND FORESTRY RESOURCES

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

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				X

No Impact. The Project site is developed and does not include land identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on maps prepared pursuant to Farmland Mapping and Monitoring Programs of the California Department of Conservation (2016). The Project would not result in the conversion of any of these land types to non-agricultural use; therefore, no significant impact would occur, and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

No Impact. The proposed Project location is zoned as Industrial Planned Development. The Project would not affect any properties that are zoned for agricultural use or currently under a Williamson Act contract, per the California Department of Conservation (2013). No significant impacts would occur, and no mitigation is required

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) 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))?				X

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

This response applies to Questions 3.2 (c), (d), and (e).

No Impact. As stated above in 3.2 (b), the proposed Project is zoned Industrial Planned Development and located within an urbanized setting. The Project would not cause rezoning of forest land, timberland, or timberland zoned Timberland Production, or loss or conversion of forest land. Therefore, no significant impacts would occur, and no mitigation is required.

3.3 AIR QUALITY

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

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	

Less than Significant Impact. Air quality plans describe the air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. Six air pollutants have been identified by the U.S. Environmental Protection Agency (USEPA) and the CARB as being of concern both on a nationwide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$).

The Project site is located within the South Coast Air Basin (SCAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD monitors air quality within the SCAB, which includes Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAB is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego County line to the south.

The most recent air quality plan developed by the SCAQMD is the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP is the legally enforceable blueprint for how the region will meet and maintain state and federal air quality standards. The 2016 AQMP identifies strategies and control measures needed to achieve attainment of the 8-hour ozone standard and federal annual and 24-hour standard for $PM_{2.5}$ in the SCAB. Consistency with the AQMP is determined through evaluation of whether the Project would exceed the estimated emissions used as the basis of the AQMP, which are based, in part, on population projections developed by the SCAG. The SCAG forecasts are based on local general plans and other related documents, such as housing elements, that are used to develop population projections and traffic projections.

Construction and operation of the Project would involve the use of off-road equipment, haul trucks, and worker commute trips. Assumptions for off-road equipment emissions in air quality plans are developed based on hours of activity and equipment population reported to CARB for rule compliance. The use of construction equipment in the AQMP is estimated for the region on an annual basis, and construction-related emissions are estimated as an aggregate in the AQMP. The Project would not increase the assumptions for off-road equipment use in the AQMP.

In addition, the Project would not involve any uses that would increase population or vehicle trips beyond those considered in the General Plan. As described in Section 3.11, Land Use and Planning, the Project site is currently zoned as Industrial Planned Development and the Project land use is consistent with the General Plan designation (Industrial). Further, the purpose of the Project is to accommodate for existing storage functions and staff. As such, the Project is not anticipated to result in an increase in vehicle trips associated

with staff or warehouse operations. Therefore, the intensity of operational emissions has been accounted for in the AQMP and would not exceed the current assumptions used to develop the AQMP. As such, the Project would not conflict with or obstruct implementation of the applicable air quality plan. This impact would be less than significant and no mitigation required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?			X	

Less than Significant Impact. Construction emissions are short term or temporary but have the potential to result in a significant impact on air quality. Construction activities for the Project would generate temporary emissions of precursors to ozone (volatile organic compounds **[**VOCs] and oxides of nitrogen [NO_X]), CO, PM_{10}, and $PM_{2.5}$. VOCs, NO_X, and CO emissions are associated primarily with mobile equipment exhaust, including off-road construction equipment and on-road motor vehicles. Fugitive PM dust emissions are associated primarily with site preparation and travel on unpaved roads and vary as a function of parameters such as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles.

The SCAQMD significance thresholds were used to assess regional and localized emissions during construction and operation of the Project (SCAQMD 2008, 2019). Demolition activities and construction of the Project are anticipated to begin in 2020 and last approximately 12 months. Emissions generated by these activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. This model allows the user to enter project-specific construction information, such as the development square footage, construction schedule, and material import and export quantities. Construction emissions were estimated for worker commutes, haul trucks, and the use of off-road equipment. The analysis assumed approximately 3,873 cubic yards of material would be exported from the site.

As shown in Table 3.3-1, demolition and construction activities for the Project would generate maximum daily emissions of approximately 31 pounds of VOCs, 47 pounds of NO_X, 22 pounds of CO, 20 pounds of PM_{10}, and 12 pounds of $PM_{2.5}$. Additional modeling assumptions and details are provided in Appendix A.

Table 3.3-1. Maximum Daily Regional Construction-Related Emissions

Description	VOCs (lbs/day	NOx (lbs/day)	CO (lbs/day)	PM_{10}[1] (lbs/day)	$PM_{2.5}$[1] (lbs/day)
Daily Project Emissions	31.48	46.58	22.35	20.46	12.01
SCAQMD Regional Thresholds[2]	75	100	550	150	55
Exceed Regional Threshold?	No	No	No	No	No

Notes: Modeled by AECOM in 2019.
[1] Fugitive dust emission of PM_{10} and $PM_{2.5}$ emissions would be further reduced with implementation of fugitive dust control practices per SCAQMD Rule 403.
[2]SCAQMD 2019
VOCs = volatile organic compounds; NO_X = nitrogen oxides; CO = carbon monoxide; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter.

Localized emissions of criteria air pollutants and precursors were assessed in accordance with SCAQMD's local significance thresholds (LSTs) guidance. For projects less than 5 acres, the SCAQMD has developed look-up tables showing the maximum mass emissions that would not cause an exceedance of any LST for NO_2, CO, PM_{10}, and $PM_{2.5}$ based on distance to the nearest receptor location.

Since the Project site is approximately 4.5 acres, peak daily localized emissions were estimated using the look-up tables for Source Receptor Area 8 (West San Gabriel Valley). The LSTs for a 4.5-acre project site were derived using linear interpolation between the 2-acre and 5-acre LSTs from the look-up tables, as shown in Table 3.3-2. Although SCAQMD LSTs only consider the amount of on-site emissions generated by construction activities, this analysis conservatively compares the total construction-related emissions to the LSTs. Emissions associated with vehicle trips to and from the Project site during construction would be dispersed throughout the region and would have a nominal localized effect in the Project site vicinity.

Table 3.3-2. Maximum Daily Localized Construction-Related Emissions

Source/Description	NOx (lbs/day)	CO (lbs/day)	PM_{10}[2] (lbs/day)	$PM_{2.5}$[2] (lbs/day)
Daily Project On-Site Emissions	46.58	22.35	20.46	12.01
SCAQMD Localized Thresholds[1]	140	1,419	50	13
Exceed Regional Threshold?	No	No	No	No

Notes: Modeled by AECOM in 2019.
[1] Assumes a 4.5-acre project site for Source Receptor Area 8 For PM_{10} and $PM_{2.5}$, which are based on a 24-hour standard, a 100-meter receptor distance was utilized, since the nearest residential uses are approximately 100 meters south of the Project site. For NOx and CO, which are based on a 1-hour and 8-hour threshold, respectively, a 25-meter receptor distance was utilized, since the nearest workers are located in buildings immediately adjacent to the Project site within the SCE operating facility (SCAQMD 2008).
[2] Fugitive dust emission of PM_{10} and $PM_{2.5}$ emissions would be further reduced with implementation of fugitive dust control practices per SCAQMD Rule 403.
VOCs = volatile organic compounds; NOx = nitrogen oxides; CO = carbon monoxide; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter.

As shown in Tables 3.3-1 and 3.3-2, the peak daily construction emissions would not exceed any of the SCAQMD daily or LST thresholds. The Project would also be required to comply with SCAQMD Rule 403 Best Available Control Measures (BACM), which would further reduce fugitive dust emissions during construction activities. Therefore, construction of the Project would not 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.

As described previously, the purpose of the Project is to consolidate existing storage functions and staff. As such, the Project is not anticipated to result in an increase in vehicle trips and off-road equipment usage associated with staff or warehouse operations. Therefore, Project operational emissions would be limited to emissions from area sources and energy consumption. Area sources include sources such as the use of consumer products (e.g., cleaning products, aerosols), landscape maintenance equipment, and periodic architectural coatings. Energy-source emissions would primarily involve natural gas combustion for water and space heating. As shown in Table 3.3-3, operational criteria air pollutant emissions beyond existing conditions would be minimal.

Table 3.3-3. Maximum Daily Operational Emissions

Source/Description	VOCs (lbs/day	NOx (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Daily Project Emissions	1.20	0.04	0.04	<0.01	<0.01
SCAQMD Regional Thresholds[1]	55	55	550	150	55
SCAQMD Localized Thresholds[2,3]	N/A	140	1,419	12	4
Exceed Thresholds?	No	No	No	No	No

Notes:
Modeled by AECOM in 2018.
[1]SCAQMD 2019
[2]Assumes a 4.5-acre project site for Source Receptor Area 8 for PM_{10} and $PM_{2.5}$, which are based on a 24-hour standard, a 100-meter receptor distance was utilized, since the nearest residential uses are approximately 100 meters south of the Project site. For NOx and CO, which are based on a 1-hour and 8-hour threshold, respectively, a 25-meter receptor distance was utilized, since the nearest workers are located in buildings immediately adjacent to the Project site within the SCE operating facility.
[3]No LST threshold is available for VOC emissions.
VOCs = volatile organic compounds; NOx = nitrogen oxides; CO = carbon monoxide; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter.
N/A = not applicable

As shown in Tables 3.3-1 through 3.3-3, the maximum daily construction-related and operational emissions would not exceed any of the SCAQMD regional or localized thresholds. Therefore, construction and operation of the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This impact would be less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?			X	

Less than Significant Impact. Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. Sensitive receptors for air pollution are generally considered to be children, elderly, athletes, and individuals with cardiovascular and chronic respiratory diseases. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours (SCAQMD 2008). The nearest sensitive receptors to the Project site are residences approximately 328 feet south of the Project site across W. Mission Road.

As shown in Tables 3.3-1 through 3.3-3, construction-related and operational activities would result in emissions of criteria air pollutants, but at levels that would not exceed the SCAQMD regional and localized thresholds of significance. The regional thresholds of significance were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards, which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. In addition, the LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance

of the most stringent applicable federal or state ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source receptor area. As such, the criteria air pollutant emissions associated with the Project would not expose sensitive receptors to substantial criteria pollutant concentrations.

In addition to criteria air pollutants, USEPA and CARB regulate hazardous air pollutants, also known as toxic air contaminants (TACs). The greatest potential for TAC emissions during construction would be related to diesel particulate matter (diesel PM) emissions associated with heavy-duty equipment operations. The Office of Environmental Health Hazard Assessment (OEHHA) developed a Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). According to OEHHA methodology, health effects from carcinogenic TACs are usually described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs. As stated previously, construction activities for the Project are anticipated to last approximately 12 months and would cease following completion of the Project. Construction emissions would occur intermittently throughout the day and would not occur as a constant plume of emissions from the Project site.

Because off-road, heavy-duty equipment would be used for a relatively short time period and would not be in the immediate proximity of sensitive receptors, construction activities would not be anticipated to expose sensitive receptors to substantial TAC concentrations. In addition, the Project involves the construction of a pre-engineered metal building, which would reduce the number of construction equipment and duration of the construction activities from typical construction phases.

As discussed in more detail in Section 3.9, Hazards and Hazardous Materials, the SCE facility is also within Operable Unit 3 of the San Gabriel Valley Superfund Site. A soil vapor assessment concluded that VOCs were detected at low levels. As a cautionary measure, SCE would incorporate a vapor barrier into the warehouse foundation design, which would reduce exposure to sensitive receptors (SCE 2019b). Additionally, SCAQMD Rule 1166 (Volatile Organic Compound Emissions from Decontamination of Soil) would be applicable to the Project. Rule 1166 requires monitoring at 15-minute intervals with required actions to suppress VOC vapors (such as water or other VOC suppressants). Specific actions are implemented according to a mitigation plan that would be authorized by SCAQMD to reduce exposure to VOCs. As such, construction activities would not expose sensitive receptors to substantial pollutant concentrations.

As discussed previously, following construction, the Project would consolidate existing functions. As such, the Project is not anticipated to result in an increase in vehicle trips and off-road equipment usage associated with staff or warehouse operations. Therefore, the Project would not result in an increase in TAC emissions beyond existing conditions and the Project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Less than Significant Impact. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory

agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Construction activities associated with the Project could result in short-term odor emissions from diesel exhaust associated with construction equipment. The Project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Since the purpose of the Project is to consolidate existing functions, operation of the Project would not add any new odor sources. As a result, the Project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant and no mitigation is required.

3.4 BIOLOGICAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X

This response applies to Questions 3.4 (a), (b), and (c).

No Impact. The proposed Project would occur on a developed industrial site within an urbanized setting. The proposed Project would not alter habitat, and implementation of the proposed Project would not result in substantial adverse effect on species identified as candidate, sensitive, or special-status species 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. There are no riparian habitats or other sensitive habitats within the Project site as it is in a heavily industrialized area. As the Project site is developed and separated by development and infrastructure from open space, the Project would have no significant impact on riparian habitat or other sensitive natural communities. There is no wetland vegetation on the site. Therefore, no significant impact would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?		X		

Less than Significant Impact with Mitigation. No native vegetation or biological resources are present within the Project work area. Additionally, the lack of wildlife corridor or habitat areas in the immediate vicinity and urbanized setting indicates the industrial site with a helicopter landing pad is likely not

conducive to migratory wildlife species use. However, removal of the existing ornamental vegetation associated with the developed area within the limits of work is recommended to occur outside the avian breeding season (February 1 through September 15) to avoid impacts to nesting birds protected under the Migratory Bird Treaty Act (MBTA). If vegetation removal would take place within the avian breeding season, a pre-construction nest survey would be required no more than 3 days prior to vegetation removal. However, the removal of the two non-native trees associated with the Project would be in compliance with the MBTA, per Mitigation Measure BR-1 below.

MM BR-1 Should vegetation removal occur within the breeding season (February 1 through September 15), a qualified biologist[1] shall be retained no more than 3 days prior to vegetation removal to survey the trees and other vegetation for nests. If nests are found, no vegetation removal shall occur until the Applicant and biologist consult with the CDFW regarding the appropriate buffer that should be established until the nestlings fledge. The Applicant shall comply with CDFW guidance. If nesting birds are not detected during the survey, then no further mitigation is required.

Implementation of Mitigation Measure BR-1 would reduce the potential construction-related impacts associated with nesting birds to a less than significant impact for the Project.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	

Less than Significant Impact. The proposed Project would occur on a developed industrial site, located within an urbanized setting. The proposed Project would not alter habitat, and implementation of the proposed Project would not result in substantial adverse effect on species identified as candidate, sensitive, or special-status species 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. Two trees would be removed from the SCE Alhambra campus to prepare the area for construction. Pursuant to Alhambra Municipal Code Chapter 23.87, a Tree Removal Permit is needed for removal of native and protected trees. Native and protected trees are defined in the Tree Preservation Ordinance Chapter 23.87. However, the two non-native trees located on the site are not listed in the Tree Preservation Ordinance and a Tree Removal Permit is not required. Additionally, implementation of Mitigation Measure BR-1 would reduce the potential construction-related impacts associated with nesting birds during the breeding season, in accordance with the MBTA. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, less than significant impacts would occur, and mitigation is not required.

[1] A qualified biologist is defined as having a bachelor's degree in biology or a closely related field with appropriate areas of study to understand Alhambra's local avian species; sufficient local field experience in identification of avian species; experience in habitat evaluation and in quantifying environmental impacts; and familiarity with suitable mitigation methods, including revegetation design and implementation.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?				X

No Impact. As documented in the General Plan, the City is fully developed, and retains no suitable natural habitat for special-status species; no rare, endangered, or special-status plant and animal species are known or suspected to exist in the City or on the site. The City does not have a Habitat Conservation Plan and/or Natural Community Conservation Plan. Therefore, there would be no significant impact to approved local, regional, or state habitat conservation plans and no mitigation required.

3.5 CULTURAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				X

No Impact. A desktop review of archaeological and built environment resources within 100 feet of the proposed warehouse site on the SCE Alhambra campus (see Figure 2, Proposed Site Plan) occurred August through October 2019, which included review of a records search conducted by AECOM staff of the records at the South Central Coastal Information Center (SCCIC). The SCCIC records search area consisted of the proposed Project area parcels (Assessor Parcel Numbers 5342-029-800 and -801) and a 100-foot buffer. No previously recorded sites were identified within the records search area. One previously conducted cultural resource investigation was identified within the records search area but outside of the Project parcels: LA-04835, Cultural Resources Inventory Report for Williams Communications Ins., Proposed Fiber Optic Cable System Installation Project, Los Angeles to Riverside, Los Angeles and Riverside Counties (Ashkar 1999). This report covers an area south of the Project parcels.

To supplement the research completed at the SCCIC, the following repositories were also reviewed: National Register of Historic Places (NRHP), California Points of Historical Interest (CPHI), California Historical Landmarks (CHL), California Historical Resources Inventory, California Department of Transportation (Caltrans) Historic Bridge Survey, California Register of Historical Resources (CRHR), local City registry, *SurveyLA* and *HistoricPlacesLA* databases, and general internet research. No potentially historic resources were identified within 100 feet of the proposed warehouse site location on the SCE Alhambra campus. The Project area does not contain any historic resources. Therefore, no significant impact to historic resources would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	

Less than Significant Impact. Based on data from the SCCIC, there are no previously recorded archaeological sites within the Project parcels. A cultural resources survey is not possible as the entire area is paved or developed. The Project parcels are highly disturbed due to a long history of continuous industrial use by SCE, with the first buildings constructed in the early 1920s (SWCA Environmental Consultants 2018). The proposed warehouse site location on the SCE Alhambra campus (see Figure 2, Proposed Site Plan), located in the southwest portion of parcel 5342-029-800, has not had a building or structure on it; SCE used the area for pole storage until transitioning the area into a parking lot between 1953 and 1964 (Sanborn Map Company 1925; HistoricAerials.com 1948, 1953, 1964). A Southern Pacific Company railway spur was also present in that location on the SCE Alhambra campus. However, the railway spur was removed sometime prior to the conversion of that area to a parking lot.

AECOM contacted the Native American Heritage Commission (NAHC) to perform a Sacred Lands File check. An email was sent to the NAHC on September 3, 2019, requesting a search of its Sacred Lands File and a list of Native American individuals and organizations that might have knowledge of or concerns regarding cultural resources in the proposed Project area or vicinity. A response from the NAHC was received on September 23, 2019, indicating that the results of its Sacred Lands File check were negative. The NAHC identified five Native American representatives that are culturally affiliated with the Project area, and letters were sent to these representatives on September 24, 2019. To date, one representative, Chairperson Andrew Salas, has responded to the letter. Chairperson Salas stated that while the proposed Project is within the Ancestral Tribal Territory of the Gabrieleno Band of Mission Indians – Kizh Nation, their tribal government is currently undergoing AB52 consultation with the City, which is ongoing and described further in response to Question 3.18(a) below.

While the possibility of undiscovered resources cannot be completely ruled out, the potential for the discovery of significant intact buried archaeological resources is low. All ground disturbance related to the Project would be within prior disturbed soil related to industrial use. No further archaeological investigation is recommended, and the potential for a substantial adverse change in the significance of an archaeological resource is determined to be less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Less than Significant Impact. No known cemeteries, or previously recorded Native American or other human remains are within 100 feet or directly adjacent to the proposed warehouse site location on the SCE Alhambra campus. The probability of unanticipated discoveries for the Project is judged to be low for most areas, given the highly developed nature of the area, the setting, the level of prior ground disturbance, and the likelihood of fill soils in roadbeds. The Project is unlikely to cause unanticipated impacts to human remains. However, if any human remains are encountered during ground-disturbing activities, they are required to be treated in accordance with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA), which states the mandated procedures of conduct following the discovery of human remains. If human remains are discovered during any construction activities, all ground-disturbing activity within 50 feet of the remains must be halted immediately, and the County Coroner must be notified immediately. If the remains are determined by the County Coroner to be Native American, the NAHC would be notified within 24 hours. The NAHC would identify a Most Likely Descendant (MLD), who would be designated to cooperate with the owner of the land on which the remains were discovered. The MLD would complete an inspection, if they receive permission from the land owner, and make recommendations for the treatment of the remains within 48 hours of being granted access to the site. If an agreement cannot be reached, the landowner shall reinter the human remains with appropriate dignity on the property in a location that will not be subject to further disturbance. Through the regulatory procedures described above, impacts to human remains would be less than significant and no mitigation is required.

3.6 ENERGY

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	

Less than Significant Impact. Project construction would occur for approximately 12 months. The construction is anticipated to begin in the second quarter of 2020 and end in the first quarter of 2021. Waste management reduction features described in Section 3.19(d) and green design features described in Section 2.1 would limit wasteful, inefficient, or unnecessary consumption of energy use during construction. The objective of the Project is to consolidate storage facilities to better optimize the function and operation of the aged campus. Additionally, operational green design features for the Project include solar tubes and skylights, water saving measures, energy saving measures, and landscaping and design, as described in Section 2.0. Neither construction nor operation of the proposed Project would result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, less than significant impacts would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Less than Significant Impact. In April 2011, the Governor of California signed SB 2X requiring California to generate 33 percent of its electricity from renewable energy by 2020. As stated above, the Project incorporates green design features related to energy efficiency. Title 24 of the California Administrative Code mandates uniform energy conservation standards for new construction. New development projects are required to incorporate green building standards, which promote environmentally responsible and resource-efficient design through siting, construction, operation, maintenance, renovation, and de-construction. Per General Plan Goals R-3A and 3-B, green project design features have been incorporated into the warehouse construction and operation. SCE provides energy to the City of Alhambra and throughout Southern California and has a portfolio of renewable energy, with some of their energy generation coming from solar, wind, and hydroelectric power. The construction of the warehouse would result in increased energy efficiency at the SCE Alhambra campus. Therefore, the Project is in accordance with state and local plans for renewable energy and efficiency, resulting in a less than significant impact and no mitigation is required.

3.7 GEOLOGY AND SOILS

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X

a)i) **Less than Significant Impact** The Project is located within a seismically active portion of Southern California. Several faults within the vicinity of the Project are considered active. However, the Project site is not within an Alquist-Priolo Earthquake fault zone.

Although there are a number of Alquist-Priolo Earthquake Fault Zones within Los Angeles County, none pass within 1/8 of a mile of the Project site. Project activities would comply with all seismic requirements of the California Building Code (CBC) and would incorporate recommended design measures, as applicable, to reduce potential damage from a seismic event. Compliance with these standards will reduce hazards associated with fault-related ground shaking, and impacts related to rupture of an Alquist-Priolo Earthquake Fault Zone are considered less than significant. No mitigation is required.

ii) **Less than Significant Impact.** As described in response 3.7(a)i, the Project is not located within an Alquist-Priolo Earthquake Fault Zone and no known active faults are believed to cross through the property. The Los Angeles region has experienced seismic activity in the past, and potential hazards associated with a seismic event include ground rupture, liquefaction, seismic compaction/settlement, and/or ground shaking. A major earthquake at any nearby faults could result in moderate to severe ground shaking at the site. Damage to the proposed facilities could be expected as a result of this ground shaking, but hazards would be limited by compliance with seismic requirements of the CBC and recommended engineering design measures. Impacts would be less than significant and no mitigation is required.

iii) **No Impact.** Liquefaction occurs when unconsolidated material and saturated soils change to a near-liquid state during ground shaking. Per the Alhambra General Plan, there are no areas of high potential for liquefaction in the City. The Project area is generally flat and poses low risk for liquefaction. Additionally, the Project would comply with all applicable CBC requirements and recommended engineering design. Therefore, the Project would not result in an increased risk of seismic-related ground failure or liquefaction, no significant impact associated with liquefaction would occur, and no mitigation is required.

iv) **No Impact**. Per the Alhambra General Plan, the Project site is not located within a landslide hazard zone. The Project site is relatively flat with no slopes immediately adjacent. Therefore, landslides are not likely to occur; there would be no significant impact and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or loss of topsoil?			X	

Less than Significant Impact. Activities associated with Project demolition and construction could temporarily disturb soils at the Project site. The Los Angeles Regional Water Quality Control Board requires erosion control best management practices (BMPs) are implemented for demolition and construction projects; examples include silt fences, slope stabilization, etc. Implementation of these BMPs would therefore prevent significant soil erosion from occurring (RWQCB 2006). Additionally, standard erosion control measures would be implemented during construction. Implementation of these measures would reduce any potential impacts to less than significant and no mitigation measure is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	

Less than Significant Impact. The Project site is located on alluvial gravel and sand at the base of hill areas. According to the Soil Vapor Assessment (SCE 2019b) completed for the Project, the lithology of the site consists of interbedded sands, silty sand, sandy silt, sand, gravelly sand, and some silt with interbedded gravel to 165 feet below ground surface (bgs). From depths of approximately 258 feet bgs to 302 feet bgs, the lithology consists of more sand, silty sands, silts and interbedded gravel, and silt and clay. The Project would comply with CBC requirements and applicable engineering design recommendations, and this compliance would ensure on-site soils can support the proposed renovations. The Project would not be subject to potential for on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts related to unstable soils are less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X

No Impact. Expansive soils are typically characterized by clayey material that shrinks as it dries and swells as it becomes wet. The lithology of the site consists of interbedded sands, silty sand, sandy silt, sand, gravelly sand, and some silt with interbedded gravel (SCE 2019a). The soil at the Project site is Urban land-Azuvina- Montebello complex (NRCS 2019). This soil type contains alluvium and does not contain clays that would shrink or swell. No significant impact would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

No Impact. The existing facility and several nearby businesses have an existing sewer system that removes and treats wastewater off-site. Septic tanks or alternative wastewater disposal systems are not present on the site. The Project does not include construction of a septic tank or alternative wastewater disposal system. No significant impact would occur, and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Less than Significant Impact with Mitigation. The City's General Plan does not identify paleontological resources in the Project area; however, sub-surface paleontological resources have been found throughout Southern California, and therefore such resources may also potentially exist within the City of Alhambra. However, the Project site is located on a previously developed area and it is unlikely that paleontological resources would be discovered. During any construction-related ground disturbance, although chances are remote, undiscovered paleontological resources could possibly be uncovered in the underlying geologic formations. Unlike discovering cultural resources during ground disturbance activities, there is no regulatory protection of unknown paleontological resources. Therefore, implementation of Mitigation Measure GEO-1 would reduce impacts to paleontological resources to less than significant.

MM GEO-1 To avoid potential impacts to unknown (i.e., buried) paleontological resources, mitigation in the form of monitoring during construction-related ground disturbance activities shall be required. Monitoring shall be performed by qualified paleontological[2] monitors. In the event that previously unidentified potentially significant paleontological resources are discovered, the monitor(s) shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery until such time that the sensitivity of the resource can be determined.

[2] A qualified paleontologist is defined as a practicing scientist who is recognized in the paleontological community as a professional and can demonstrate familiarity and proficiency with paleontology in a stratigraphic context.

3.8 GREENHOUSE GAS EMISSIONS

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

Less than Significant Impact. Certain gases in Earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining Earth's surface temperature. A portion of the solar radiation that enters Earth's atmosphere is absorbed by Earth's surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation is absorbed by GHGs; therefore, infrared radiation released from Earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. The following GHGs are widely accepted as the principal contributors to human-induced global climate change that would be relevant to the Project: carbon dioxide (CO_2); methane (CH_4); and nitrous oxide (N_2O). Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4 is the main component of natural gas and is associated with agricultural practices and landfills. N_2O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere atmospheric lifetime. The concept of CO_2-equivalents (CO_2e) is used to account the different GWP potentials of GHG to absorb infrared radiation. For example, 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 28 tons of CO_2. GHGs with lower emissions rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP).

Heavy-duty off-road equipment, materials transport, and worker commutes during construction of the Project would result in exhaust-related GHG emissions. Construction-related and operational GHG emissions were estimated using the methodology discussed earlier under Section 3.3, Air Quality.

As the City of Alhambra has not established screening thresholds for GHG emissions, the analysis uses the applicable significance thresholds developed by the SCAQMD. The SCAQMD has adopted a significance threshold of 10,000 metric tons (MT) of CO_2e per year for industrial (stationary source) projects. The GHG CEQA Significance Threshold Stakeholder Working Group also recommended options for evaluating non-industrial projects, including thresholds for residential and commercial projects. These draft thresholds include a threshold 3,000 MT CO_2e per year for residential and commercial projects.

The SCAQMD recommends that construction emissions associated with a project be amortized over the life of the project (typically assumed to be 30 years). Therefore, this analysis includes a quantification of the total modeled construction-related GHG emissions. Those emissions are then amortized and evaluated over the life of the project (assumed to be 30 years). The Project type is closest to an industrial project

(i.e., doesn't include residential and commercial land uses); therefore, this analysis compares the construction-related and operational emissions to the SCAQMD threshold of 10,000 MT CO_2e per year. It is not the intent of this CEQA document to cause the adoption of this threshold as a mass emissions limit for this or other projects, but rather provide this additional information to put the project-generated GHG emissions in the appropriate statewide context.

Total GHG emissions associated with construction of the Project would be approximately 372 MT CO_2e. Amortized over the 30-year life of the Project, annual construction emissions would be approximately 12 MT CO_2e per year.

As described previously, the Project includes accommodating for existing storage functions and staff. As such, the Project is not anticipated to result in an increase in vehicle trips associated with staff or warehouse operations. Therefore, Project operational emissions would be limited to emissions from area, waste, water, and energy sources. Table 3.8-1 summarizes the operational emissions and amortized construction GHG emissions associated with the Project.

Table 3.8-1. Annual GHG Emissions

Emissions Category	Metric Tons CO_2e
Total Construction Emissions	372
Amortized Construction Emissions per year [1]	12
Operations	203
Total GHG Emissions [2]	215
SCAQMD GHG Threshold	10,000
Exceed Threshold?	No

Notes: Modeled by AECOM in 2019.
[1]Amortized emissions calculated assuming a 30-year project lifetime.
[2]Total GHG emissions calculated using sum of amortized construction emissions and operations.

As shown in Table 3.8-1, the total construction-related and operational emissions of 215 MT CO_2e associated with the Project would not exceed the SCAQMD threshold of 10,000 MT CO_2e per year. Therefore, the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This impact is less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?			X	

Less than Significant Impact. The State of California and SCAQMD have adopted plans or policies to reduce GHG emissions. In September 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. It requires that statewide GHG emissions be reduced to 1990 levels by 2020. In 2016, the state legislature passed Senate Bill (SB) 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels.

In 2008 and 2014, CARB approved the Scoping Plan and the first update to the Scoping Plan, respectively (CARB 2008, 2014). In response to SB 32 and the companion legislation of AB 197, CARB approved the Final Proposed 2017 Scoping Plan Update: The Strategy for Achieving California's 2030 GHG Target in November 2017 (CARB 2017).

While the Scoping Plan updates include measures that would indirectly address GHG emissions associated with construction and operational activities, including the phasing in of cleaner technology for diesel engine fleets (including construction equipment) and Low Carbon Fuel Standard, successful implementation of these measures predominantly depends on the development of laws and policies at the state level. As such, none of these statewide plans or policies constitute a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. Thus, it is assumed that any requirements or policies formulated under the mandate of AB 32 and SB 32 that would be applicable to the Project, either directly or indirectly, would be implemented consistent with statewide policies and laws.

Further, as an effort to meet the goals of AB 32 to reduce statewide GHG emissions, the California Building Standards Code established the California Green Building Standards Code (*CALGreen*). *CALGreen* encourages sustainable construction practices and building design in the categories of planning and design, including energy efficiency and water efficiency. The Project would comply with the most recent 2019 *CALGreen* requirements, which become effective January 1, 2020. The 2019 *CALGreen* requirements include mandatory measures for all new building construction, which would result in energy conservation and make a major contribution in meeting the state's goals established by AB 32 and SB 32 for reduction in GHG emissions (CEC 2018). The Project would be built to 2019 *CALGreen* requirements and incorporate green design features that would further reduce indirect GHG emissions from energy and water consumption. For example, the warehouse would include solar tubes, skylights, and LED lighting in the design. The use of natural light reduces the need to use electricity consumption for artificial sources of light. Further, the Project would include drought-tolerant landscaping and utilize recycled water for landscaping, which would reduce outdoor water usage and the associated indirect GHG emissions. In addition, the Project would include energy saving measures such as variable refrigerant flow technology, which would allow for simultaneous heating and cooling as well as heat-recovery, resulting in 20 to 30 percent greater energy efficiency than conventional HVAC systems. Therefore, it is anticipated that Project construction and operation would not conflict with the Scoping Plan updates.

In January 2019, the City of Alhambra released the draft General Plan: Vision 2040, which includes policies to address issues related to energy resources, air quality, and climate change. The green building design features of the Project would be consistent with Policy R-3B of General Plan, which encourages the use of energy saving designs, systems, and innovations in public and private building construction (City of Alhambra 2019a).

Thus, the Project would not conflict with the City of Alhambra General Plan; AB 32 and SB 32 Scoping Plan; or any other plans, policies, or regulations for the purpose of reducing GHG emissions. The impact would be less than significant and no mitigation is required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	

Less than Significant Impact. Hazardous materials are defined by the California Health and Safety Code 25501 as any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

The Project site is categorized as a Hazardous Waste Generator, according to the SCE Alhambra Hazardous Materials Business Plan (SCE 2019a). The SCE Alhambra campus includes numerous hazardous materials stored on-site in underground storage tanks (USTs) and aboveground storage tanks (ASTs). Hazardous materials stored on-site include waste oils, waste antifreeze, argon, acetylene, antifreeze, diesel exhaust fluid, engine oil, oxygen, diesel fuel No.2, lead acid batteries, waste non-PCB (polychlorinated biphenyl) capacitors, and gasoline. Additionally, at the SCE Alhambra campus, greater than 1,320 gallons of petroleum products are stored in ASTs. These hazardous materials are housed within buildings and adhere to all local, state, and federal laws regarding transport, use, and disposal of hazardous materials. Furthermore, tanks and pipes that store hazardous materials are monitored, and monitoring is performed on-site by trained personnel (SCE 2019a).

There is also a Hazardous Waste Accumulation Area at the SCE Alhambra campus, including waste electrical equipment with oil, waste oily water, universal waste electronics, universal waste lamps, waste used oil and fuel metal and paper filters, waste mixed flammable, waste oily soil and debris, waste oils, universal waste batteries, and waste lead acid batteries. The accumulation of these materials adheres to all local, state, and federal laws regarding transport, use, and disposal of hazardous materials; therefore, no employee or general public is placed at substantial risk (SCE 2019a).

The Project construction would require the transport, temporary storage, and use of asphalt fuels, paints, and solvents. Standard construction materials would be used to implement the Project. Although limited amounts of hazardous materials may be transported to the Project site for construction or used during the construction phase (e.g., certain building materials, equipment, diesel engines, engine oil, etc.), this would be temporary and short term. Disposal of site materials would occur off-site in a proper disposal facility. The operation of the warehouse would be similar to that of the existing SCE Alhambra campus uses and would be consistent with applicable federal, state, and local regulations pertaining to the handling of hazardous substances. Therefore, the Project would not create hazardous conditions or result in significant impacts and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?			X	

Less than Significant Impact. The Project would construct a new warehouse and gate at the existing SCE Alhambra campus and demolish concrete and asphalt associated with outdoor storage. Although limited amounts of hazardous materials may be transported to the Project site for construction or used during the construction phase (e.g., certain building materials, equipment, diesel engines, engine oil, etc.), this would be temporary and short term. During construction of the Project, standard construction BMPs and safety procedures would be implemented to minimize the risk of accidental release. Operation of the warehouse functions would be the same as those existing functions at the SCE Alhambra campus. Therefore, impacts would be less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

Less than Significant Impact. The closest school is Century High School, located within a one-quarter mile of the Project. The Project would not emit hazardous emissions or require the handling of hazardous or acutely hazardous materials, substances, or waste because of the nature of the proposed use and consideration of typical daily operation requirements. Therefore, impacts would be less than significant, and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials 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?			X	

Less than Significant Impact. The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List," compiled with data from Department of Toxic Substances Control (DTSC), State Department of Health Services, State Water Resources Control Board, and California Integrated Waste Management. There is one active hazardous materials site within 1,000 feet of the Project. The active cleanup site is identified by Geotracker (2019) and is an ongoing superfund cleanup, monitored and surveyed by the DTSC.

Total petroleum hydrocarbon (TPH)-contaminated soil has been identified at the SCE Alhambra Campus and has been discarded at three landfills within the County of Los Angeles. During construction of the Project, TPH-impacted soil would be disposed of at these landfills as well. A Soil Vapor Assessment Report (SCE 2019b) for the Project concluded that VOCs were detected at low levels. As a cautionary measure, SCE would incorporate a vapor barrier into the warehouse foundation design. Per response to Question 3.3(c) above, the soil vapor risk for construction workers would be addressed through the implementation of SCAQMD Rule 1166. The potential risk associated with soil vapor during operation of the warehouse would be less than significant as a result of a foundation barrier applied to the warehouse structure. Therefore, the Project would result in a less than significant impact with no mitigation required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No 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 private use airport, would the project result in a safety hazard for people residing or working in the project area?			X	

Less than Significant Impact. The nearest public airport to the Project site is El Monte Airport, which is located approximately 8 miles east in the City of El Monte. The Project is located within the California Airport Land Use Compatibility Plan, which describes orderly growth of an airport and the area surrounding the airport within the jurisdiction of the Airport Land Use Commission (ALUC), excluding existing land uses. No airports or Runaway Protection Zones are located within the City of Alhambra. The Project's design would be consistent with Federal Aviation Administration and/or other laws and regulations, if applicable, aimed at ensuring continued public safety and the avoidance of interference with airport operations. Therefore, the Project would not result in a safety hazard for people residing or working in the Project area.

On the SCE Alhambra campus, located north of the Project location, is a private use heliport used by SCE and other personnel (Figure 3, Site Plan). The helicopter approach and departure zone requires a 228-footradius around the helipad. Location of the proposed warehouse is over 500 feet from the helipad and outside of the approach and departure zone. The helipad is used once or twice a year to transport grid control staff to and from the SCE Saddleback location for emergency situations only. Additionally, warehouse construction activities would be at least 228 feet from the helipad. Therefore, a less than significant impact would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

No Impact. The City Comprehensive Emergency Management Plan (CEMP), consistent with local and state guidelines, establishes a basis for the coordination, management, and operation of critical resources.

The construction and operation of the Project would be contained within the SCE Alhambra campus and would not conflict with the CEMP. Therefore, no significant impact would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

No Impact. The Project is located on an existing industrial campus and is not within or adjacent to any wildland areas. Surrounding land uses include industrial, commercial, and multi-family residential. There would be no significant impact and no mitigation is required.

3.10 HYDROLOGY AND WATER QUALITY

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	

Less than Significant Impact. The Project would include grading, repaving, utility installation, and building construction, which could result in generation of water quality pollutants such as silt, debris, chemicals, paints, and other solvents that could affect water quality. During construction, the construction contractor would remove the existing concrete and asphalt ground cover, stockpile soil, and grade the site. Site preparation may expose loose soil to potential erosion and potential movement off-site. Activities such as soil disturbance, paving, and on-site stockpiling of materials and construction equipment could occur.

The Project would disturb greater than 1 acre of land and require compliance with National Pollutant Discharge Elimination System (NPDES) Construction General Permit 2009-0009-DWQ. The Construction General Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) in order to obtain grading and building permits. The SWPPP would identify site-specific construction BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater runoff from the Project area. Construction BMPs would include, but are not limited to, the following:

- Minimization of disturbed areas to the portion of the Project site necessary for construction
- Stabilization of exposed or stockpiled soils (if greater than 14 days)
- Establishment of permanent revegetation or landscaping as early as feasible
- Removal of sediment from surface runoff before it leaves the Project site by silt fences or other similar devices around the site perimeter
- Diversion of upstream runoff around disturbed areas of the Project site
- Protection of all storm drain inlets on-site or downstream of the Project site to eliminate entry of sediment
- Prevention of tracking of soil through use of a gravel and shaker plates at exits from the Project area
- Proper storage, use, and disposal of construction materials
- Continual inspection and maintenance of all specified BMPs through the duration of construction

BMPs required as part of the local SWPPP would ensure that short-term water quality impacts during construction are not significant. The Project would result in hard structure areas and impervious surfaces that would generate urban runoff with the potential to degrade groundwater or surface water quality. However, implementation of BMPs required by the local Standard Urban Stormwater Mitigation Program (SUSMP) and Storm Water Standards would reduce the Project's long-term impacts. Thus, adherence to the state and local water quality controls would ensure that direct impacts to groundwater and surface water quality would not be significant. Therefore, the impacts would be less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	

Less than Significant Impact. The Project would not use groundwater for any purpose, and implementation of the proposed bioretention basins at the site would provide for groundwater recharge during small storm events. In addition, the Project does not involve operations that would interfere substantially with groundwater recharge including, but not limited to, not involving activities and operations that can substantially affect rates of groundwater recharge, including regional diversion of water to another groundwater basin; or diversion or channelization of a stream course or waterway with impervious layers, such as concrete lining or culverts, for substantial distances (e.g., ¼ mile). Therefore, impacts to groundwater resources are anticipated to be less than significant and no mitigation is required.

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 a substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
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			X	
iv) impede or redirect flood flows?			X	

This response applies to Question 3.10(c)i–iv.

Less than Significant Impact. See responses to Questions 3.7(b) and 3.10(a). The site is located at an existing industrial campus in an urban environment, and operation of the Project would maintain this industrial use. The Project would not alter the course of a stream or river. The potential for erosion and sedimentation could increase during the short term during site preparation and other construction activities.

The Project would disturb greater than 1 acre of land and require compliance with NPDES Construction General Permit 2009-0009-DWQ. The Construction General Permit requires the preparation and implementation of a SWPPP in order to obtain grading and building permits. The SWPPP would identify site-specific construction BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater runoff from the Project area. These measures would enable the Project to meet the City adopted Municipal Code Chapter 16.36 Stormwater Low Impact Development (LID) Standards, which contain requirements for construction activities and facility operations of development and redevelopment projects to comply with the current Municipal NPDES permit.

The Project would implement bioretention basins that would slow down and temporarily retain surface runoff on the site before releasing it to the existing City of Alhambra Multiple Separate Storm Sewer System (MS4). The storm drain collection system within Alhambra is predominantly owned by the City, although Los Angeles County Sanitation District sewer lines that receive flow from the City's collection system are not City-owned. Wastewater generated in the City is treated by the Sanitation District of Los Angeles County (LACSD) at one or more of the following: the Whittier Narrows Water Reclamation Plant (WRP) near the City of South El Monte, which has a capacity of 15 million gallons per day (mgd) and currently produces an average recycled water flow of 7.1 mgd; the Los Coyotes WRP in the City of Cerritos, which has a capacity of 37.5 mgd and currently produces an average recycled water flow of 20.6 mgd; or the Joint Water Pollution Control Plan in the City of Carson, which has a capacity of 400 mgd and currently produces an average flow of 252.7 mgd. The treatment plants have enough storage to meet future growth. The Project would not exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Municipal Code Sections 16.34 through 16.36 include drainage design standards and procedures. Any development that could potentially alter absorption rates, drainage patterns, or rates of surface runoff would be required to implement design measures per the Municipal Code to maintain pre-construction flow patterns. Therefore, the construction and operation of the Project would result in a less than significant alteration of the existing drainage pattern or increate the rate or amount of surface runoff. No mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

No Impact. The Project site is not within a 100- or 500- year Federal Emergency Management Agency (FEMA) flood zone. The Project site is not located in the vicinity of a water body large enough to present a risk of inundation by seiche or tsunami. No significant impacts would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Less than Significant Impact. Management of the water resources associated with the Project is based upon two Watermaster Services: the San Gabriel River Watermaster (River Watermaster) and the Main San Gabriel Basin Watermaster (Basin Watermaster). These Watermaster Services resulted from two Court Judgements: the Long Beach Judgement and the Main Basin Judgement. The City was a defendant in the Long Beach Judgement and as such has significant participation. In addition, Alhambra was a plaintiff in the court action that resulted in the creation of the Basin Watermaster. Alhambra is also included in the Main Basin Judgement. The two Judgments (Long Beach Judgement and Main Basin Judgement) and the Five-Year Water Quality and Supply Plan make up the groundwater management plan for the Main Basin, in which the Project is located. The management structures of the Basins ensure a reliable water supply for

future water demand. See responses to Questions 3.10(a) and (b). Construction of the proposed Project would adhere to the project design features outlined in 3.10(a) and BMPs so that the Project would not conflict with or obstruct implementation of the groundwater management plan. The Project would not overdraft groundwater resources nor would it prohibit groundwater recharge beyond what is existing at the SCE Alhambra campus. Therefore, impacts would be less than significant and no mitigation is required.

3.11 LAND USE AND PLANNING

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Physically divide an established community?				X

No Impact. Physical division of a community can occur from the placement of major infrastructure (e.g., roadways or transmission lines) through an established community. The Project would not physically divide the surrounding community as it would occur within the property line of an existing industrial campus. Existing roadways would serve the Project and no new roadways or expansion of roadways would be required to accommodate the Project. No significant extension of public utilities would be required, as existing pipelines for water and wastewater are located on the Project site. As a result, the Project would not physically divide an established community, would result in no significant impact, and no mitigation would be required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?				X

No Impact. The following plan, policy, or regulation overlies the Project site: City of Alhambra General Plan (amended 2019), City of Alhambra Zoning Ordinances (updated 2019) within the City's Municipal Code. The Project land use is consistent with the General Plan designation (Industrial). This site has been used for SCE purposes since the 1920s and has been captured in City planning and zoning documents accordingly. The proposed construction and operation associated within the Project would not be inconsistent with the land use for the site.

The zoning for the Project site is IPD, Industrial Planned Development. The implementation of the Project would be consistent with the goals and policies laid out within the Industrial Zone area. The height of the warehouse is within the allowable height for the City and would not result in an environmental impact or conflict with a land use plan, policy, or as described in the responses of this Initial Study. Therefore, the Project would result in no significant impact and no mitigation required.

3.12 MINERAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state?				X
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?				X

This response applies to Questions 3.12(a) and (b) above.

No Impact. The City of Alhambra's Mineral Resources are described in the 2010 California Department of Conservation in the San Gabriel Valley P-C Region Showing Mineral Resource Zones-2 Areas and Active Mine Operations. The Project site is not classified by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources as a Mineral Resource Area (CGS 2010). Soil types found in the City, such as gravely loams, sandy loams, and clays, do not contain any significant mineral resources No significant impact to known local, regional, or state mineral resources of value would occur because the site is an existing industrial campus and all ground-disturbing activities would occur within the fence line of the existing facility. The Project would result in no significant impact to mineral resources and no mitigation is required.

3.13 NOISE AND VIBRATION

Would the Project result in:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?			X	

Less than Significant Impact. Project construction activities and equipment would generate noise from site demolition, grading, excavating, and trenching; building construction; and site paving. The operation of heavy construction equipment would include, but not limited to, heavy-duty trucks, backhoes, front-end loaders, excavators, and pacing equipment, which generate maximum noise levels of 80 to 89 decibels (dBA) maximum sound level 50 feet from the source (FTA 2018). However, Project construction noise levels averaged over time (typically 1 hour) would be lower than louder short-term instantaneous, peak noise events due to construction equipment repositioning, or stationary and idling during workers' breaks and other delays, which reduce the equipment's maximum load and duration of operation. In addition, construction activity would be phased.

The City of Alhambra General Plan Noise Element (2019a) provides guidance and policies for various noise sources and abatement. Per the Noise Element, construction activities are necessary and noise control of these activities is limited. Industrial land uses may generate a decibel level of 70 dBA. The Noise and Vibration Control Ordinance (City Municipal Code Section 18.02.050) addresses and limits excessive noise. The construction activities for the Project are exempted from the ordinance, per Section 18.02.060(C).[3]

There are no noise-sensitive receptors (e.g., residences, educational facilities, or hospitals) located on or adjacent to the Project site. The closest noise-sensitive receptors (multi-family homes) are south of the SCE Alhambra campus, approximately 300 feet from the southern edge of the Project construction area. Industrial and commercial land uses are located west and south and multi-family homes are north of the Project area. Construction noise activities would occur on the days and times allowable per City Noise Abatement and Control Ordinances. During operation of the warehouse and new gate, noise sources would be generated primarily by vehicular traffic to and from the site, which is an existing noise source at the SCE Alhambra campus and would not exceed noise levels associated with industrial land uses defined by the City Municipal Code. Impacts would be less than significant and no mitigation is required.

[3] Noise sources associated with or vibration created by construction, repair, remodeling, or grading of any real property or during authorized seismic surveys, provided the activities do not take place between the hours of 7 p.m. and 7 a.m. on weekdays including Saturday, or at any time on Sunday or a federal holiday, and provided any vibration created does not endanger the public health, welfare and safety.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	

Less than Significant Impact. The Project would generate vibration from construction activities and equipment during site demolition, excavation, trenching, and surface grading. Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration, and therefore vibration issues are usually confined to short distances from the source. Potential building damage from vibration is assessed in terms of peak particle velocity (ppv), typically in units of inches per second (in/sec). Groundborne vibration generated by construction projects is usually highest during pile driving, soil compacting, jackhammering, and demolition-related activities. The proposed demolition and construction of facilities would be located in proximity to existing and proposed structures and humans (e.g., employees present at the SCE facility). As shown in Table 3.13-1, vibration levels would be below the thresholds of human annoyance and risk of structural damage (0.2 in/sec ppv) for structures 25 feet or farther from construction equipment and City vibration thresholds per Municipal Code Section 18.02.100 (0.5 in/sec ppv). The nearest structure is approximately 100 feet east of the demolition and construction activities at the SCE Alhambra campus (see Figure 2, Proposed Site Plan).

Table 3.13-1
Estimated Construction Vibration Levels and Impact Criteria

Typical Construction Equipment	FTA Vibration Levels at 25 Feet[1]		Estimated Vibration Levels at Various Distances,[2] VdB			
	PPV (in/sec)	VdB	50 Feet	100 Feet	200 Feet	300 Feet
Pile Driver—Impact	1.518	112	103	94	85	80
Pile Driver—Sonic	0.734	105	98	89	80	75
Vibratory Roller	0.210	94	85	76	67	62
Caisson Drilling	0.089	87	78	69	60	55
Large Bulldozer	0.089	87	78	69	60	55
Loaded Trucks	0.076	86	77	68	59	54
Jackhammer	0.035	79	70	61	52	47
Small Bulldozer	0.003	58	49	40	31	26
Guidance-based Impact Criteria						
Building Damage Risk (typical structures)	0.20	94	94	94	94	94
Building Damage Risk (historic structures)	0.12	90	90	90	90	90
Human Annoyance (occupants of NSLU)	n/a	80	80	80	80	80

Source: FTA 2006.
Notes: FTA = Federal Transit Administration; in/sec = inches per second; PPV = peak particle velocity; VdB = vibration velocity decibels
[1] FTA reference vibration levels at a distance of 25 feet.
[2] Calculated vibration levels using procedures, provided in *Transit Noise and Vibration Impact Assessment* Manual (FTA 2018).

In addition to construction equipment, heavy trucks transporting materials to and from the site have the potential to generate groundborne vibration. However, heavy trucks generally operate at very low speeds on-site and groundborne vibration induced by heavy truck traffic is not anticipated to be perceptible at distances greater than 25 feet. Vibration levels from roadway traffic would not be expected to generate substantial levels of vibration or ground-borne noise. Therefore, vibration-related impacts would be less than significant and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No 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?			X	

Less than Significant Impact. The Project is not located within an airport land use plan or within 2 miles of a publicly used airport. As stated in response to Question 3.9(e), El Monte airport is a public use airport located approximately 8 miles from the Project. Additionally, the helipad at the SCE Alhambra campus is utilized once or twice a year for emergency operations only and the Project proposes no changes in helipad operation. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels related to airport operations. The impact would be less than significant and no mitigation is required.

3.14 POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X

No Impact. The Project would include demolition and construction of specific areas within the existing SCE Alhambra campus. The Project does not propose the construction of new homes or businesses, nor would it require the extension of roads or other infrastructure. The Project would not induce substantial population growth either directly or indirectly, nor would it remove any preexisting barriers to growth.

Further, workers involved with the construction phase of the Project would be temporary and would likely be drawn from the existing labor pool in the region. Therefore, their presence would not result in an increase for housing, goods, or services over existing conditions. No significant impacts would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

No Impact. Construction related to the Project would not directly affect or displace any existing residential units. Therefore, it would not displace any people or homes, and would not necessitate the construction of any replacement housing. No significant impact would occur and no mitigation is required.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant Impact with Mitigation	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, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?				X

No Impact. The Project is a consolidation of storage materials and associated staff from Buildings C, D, and E within an existing industrial campus in an urbanized setting. No additional fire or police protection would be required with the implementation of the Project, and service ratios and response times would not be affected. No additional fire or police protection facilities or expansion of existing facilities would need to be constructed; therefore, no significant impact would occur and no mitigation is required.

The Project would not build housing and would not bring youth to the area, resulting in no increase in enrollment at nearby schools. Therefore, it would not increase the need for public education services in the area and no significant impacts would occur. No mitigation is required.

The Project is not considered growth inducing and would not affect the use of parks in the area. Therefore, the Project would not result in the need for new park facilities. There would be no significant impact and no mitigation is required.

The Project would not include construction of new private housing or buildings that would result in increased demand in public facilities. Therefore, the Project would not result in an increased demand for public services, and no significant impacts would occur.

3.16 RECREATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?				X
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?				X

This response applies to Questions 3.16(a) and (b).

No Impact. The Project does not propose any public residential use including, but not limited to, a residential subdivision, mobile home park, or construction for a single-family residence that may increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. Rather, the Project would be a consolidation of storage materials and associated staff from Buildings C, D, and E within an existing industrial campus in an urbanized setting. The Project would not have significant impacts related to use of recreational facilities and no mitigation is required.

3.17 TRANSPORTATION

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X

No Impact. Alhambra is represented by SCAG's Metropolitan Planning Organization, which works to reduce regional vehicle miles traveled and GHGs generated from passenger vehicles. SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range plan to balance future mobility and housing needs with economic, environmental, and public health goals. The RTP outlines growth strategies to integrate regional land use and transportation planning to reduce GHG emissions. The Project proposes a new gate at Chestnut Street and Raymond Street that would allow queuing space for one semi-truck or two panel trucks. However, this will not impact existing transit, roadway, bicycle, or pedestrian facilities, per City traffic regulations pertaining to vehicle movement. The Project would not conflict with a program, plan, ordinance, or policy regarding circulation and there would be no significant impact. No mitigation would be required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	

Less than Significant Impact. The Project includes the construction of a new warehouse on the existing SCE campus. However, there will be no increase of employees present at the SCE facility from existing conditions. The Project would result in a short-term increase in vehicle miles traveled during construction and would not increase the number of trips during operation to the Project site. Further, the Project would not create an increase in vehicle miles traveled, as trips to the Project site would not change as a result of the proposed Project. The Project would not include road widening or other improvements that would induce travel or increase vehicle miles traveled. Therefore, the Project would be consistent with CEQA Guidelines Section 15064.3, subdivision (b) and would result in less than significant impacts with no mitigation required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	

Less than Significant Impact. As stated in response 3.17(a), the Project does not involve changes to roadways or introduce incompatible uses to the area surrounding the Project site. The Project proposes adding a gate at the facility entrance of Chestnut Street and Raymond Street. The proposed gate would have queuing space to accommodate one-semi-truck or two panel trucks and would be secured via card reader, speaker, and security camera, all linked to the main gate or warehouse. All third-party deliveries are proposed to access the site through the new gate, eliminating truck traffic to the main gate. The existing 30-foot easement parallel to S. Raymond Street would be maintained. A Sight Distance Memo (Appendix B) was conducted for the Project, which concluded that the proposed driveway associated with the new gate does not meet with the minimum corner sight distance and stopping sight distance requirements per Caltrans Highway Design Manual(2018). This is due to parked cars, as well as the property fence, currently located at the site of the proposed Project driveway reducing the line of sight. However, prohibiting parking (removal of a total of 18 parking spaces) and removing the existing property fence, as well as clearing any other objects in the line of sight before any traffic activity takes place in the Project driveway would allow for adequate sight distance at the proposed driveway site. City of Alhambra Department of Public Works consultant, Transtech, performed a peer review of the Sight Distance Memo and agrees with the methodology and analysis therein (Transtech 2019). The Project would be reviewed by the City Department of Public Works for consistency with traffic safety design features during the permit process. City approval of the proposed new gate would occur prior to Project initiation. Therefore, the Project would not substantially increase hazards due to a geometric design feature and would result in less than significant impact and no mitigation would be required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?			X	

Less than Significant Impact. The proposed Project would not impede emergency access to the Project site. The new gate would be designed per City design standards to allow for continued adequate emergency access to the campus. Therefore, the Project would result in a less than significant impact and no mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a)Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			X	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

This response applies to Questions 3.18(a) i and ii.

Less than Significant Impact. The City is currently undergoing AB52 consultation with interested parties. To date, it is unknown if there are any Tribal Cultural Resources that are listed or eligible for listing in the CRHR or in a local register that would undergo substantial adverse change as a result of the Project. This would be determined during AB52 consultation.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the Project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	

Less than Significant Impact. See response to Question 3.10(c). The Project site receives its water from the SGVMWD. According to the 2015 City of Alhambra Urban Water Management Plan (UWMP), the City's potable water supply is sufficient for expected demand through 2040 (City of Alhambra 2015). All wastewater is treated off-site at three regional treatment plants. No wastewater is treated or disposed of within the City of Alhambra boundaries. All wastewater collected through the City MS4 is conveyed to the LACSD, where it is transferred to one of three reclamation plants. The Joint Water Pollution Control Plant, Whittier Narrows WRP, and the Los Coyotes WRP treat approximately 253.4 mgd, 7.3 mgd, and 20.4 mgd, of wastewater, respectively. Therefore, the quantity and type of water and wastewater facilities associated with the Project would not require expansion.

The Project site is an existing industrial campus that is entirely fenced and consists of transmission and IT services, including general maintenance activities. The campus includes 11 buildings, employee parking surface lots, and paved open storage areas. The campus has storm water drainage connections, electric power, and telecommunication facilities in place. The Project would not require the construction of new, or relocation of existing, water or wastewater treatment facilities. Additionally, construction and operation of the Project would not require the construction or relocation of electric power, natural gas, or telecommunications facilities in the public right-of-way. There would be less than significant impacts and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	

Less than Significant Impact. As stated in response 3.19(a), the City potable water supply is sufficient for expected demand through 2040. The Project would be served from existing entitlements and resources and would not require new or expanded entitlement. Therefore, the Project would have less than significant impacts to water supply and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Result in a determination by the waste water 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?			X	

Less than Significant Impact. As stated in response 3.19(a), the City wastewater treatment providers have sufficient capacity to serve the Project demands and projected City wastewater needs. The Project would be served from existing wastewater treatment resources and would not require new or expanded facilities. Therefore, the Project would have less than significant impacts to water wastewater demand and commitments, and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	

Less than Significant Impact The City of Alhambra contracts with Republic Services to provide residential and commercial trash, solid waste, and recycling services. According to CalRecycle's Disposal Reporting System (DRS), in the fourth quarter of 2016, solid waste generated in Alhambra is disposed of at 14 different landfills, recycling centers, and waste recovery and conversion facilities. In 2016, the City's residential and commercial contract haulers delivered recyclables and mixed waste for processing (i.e., recyclables recovery) at the following facilities: Allied/BFI Waste Systems Falcon, American Waste Transfer Station, Bel-Art Waste Transfer Station, Burbank Recycle Center, City Fibers, City Terrace Recycling Transfer Station, CVT Regional Material Recovery and Transfer Station, Direct Disposal, East Los Angeles Recycling & Transfer Station, East Valley Diversion, Innovative Waste Control, Recology Los Angeles Transfer Station, Sun Valley Paper Stock Material Recovery Facility and Transfer Station, and Waste Transfer & Recycling. Construction activities, including demolition, associated with the Project would generate a limited amount of construction waste, and operation of the warehouse would generate waste. As documented in the 2019 General Plan Final Environmental Impact Report (City of Alhambra 2019b), these facilities have adequate capacity to accept the waste generated by projects such as this within the City. Therefore, a less than a significant impact would occur and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Less than Significant Impact. As stated in Section 3.19(c), the Project is adequately served by the waste facilities used to service the area. The City of Alhambra must meet the solid waste diversion mandates established by the California Integrated Waste Management Board under AB 939 in 1989. AB 939 mandates that all cities reduce annual waste per capita by 50 percent, a goal that the City has achieved on a consistent basis. According to the General Plan, Alhambra complies with all state recycling requirements, including legislation that imposes Mandatory Commercial Recycling on all businesses that generate at least 4 cubic yards of trash per week. The SCE campus currently complies with all recycling and diversion rates set forth by the state and the City. The Project would comply with all federal, state, and local statutes and regulations related to solid waste. Impacts associated with solid waste would be less than significant and no mitigation is required.

3.20 WILDFIRE

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X

No Impact. As stated in response to Question 3.9(f), the Project would not impair an adopted emergency response plan or emergency evacuation plan. There would be no significant impact and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	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?				X

No Impact. As a built-out community in an urbanized area, the City of Alhambra is not subject to substantial wildfire risk. Therefore, the implementation of the Project would not expose site occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. There would be no significant impact and no mitigation is required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	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?				X

No Impact. The Project would need power lines, water and sewer lines, and other infrastructure. However, these would be constructed and maintained in a built-out urban environment, on an existing industrial property, and in accordance with all federal, state, and local regulations. As stated in response 3.20(b), the City of Alhambra is not exposed to any risk of wildfire. Therefore, the installation of utilities associated with the Project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. There would be no significant impact and no mitigation required.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

No Impact. As stated in response to Question 3.7(a)iv, the Project site is not located within a landslide hazard zone. The Project site is relatively flat with no slopes in or around the Project area. The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. There would be no significant impact and no mitigation required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?		X		

Less than Significant Impact with Mitigation. As documented in this Initial Study, the proposed Project could degrade the quality of the environment as a result of impacts to special-status avian species and/or common birds protected by the MBTA. Mitigation Measure BR-1 has been proposed to reduce these impacts to less than significant.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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.)		X		

Less than Significant Impact with Mitigation. As documented in this Initial Study, the proposed Project could degrade the quality of the environment as a result of impacts to biological resources and geology/soils. These impacts could be cumulatively considerable without mitigation; however, the proposed mitigation measures for these impact areas reduce the impact and the Project's potential contribution to cumulative impacts to less than significant.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Less than Significant Impact. It is anticipated that compliance with applicable federal, state, and local regulations would result in the proposed Project having no substantial adverse impacts on human beings. Project design features and existing uniformly applied regulatory standards would reduce potential impacts to human beings (e.g., visual, noise, and air quality impacts) to less than significant.

4.0 PREPARATION

The Initial Study for the subject Project was prepared by:

Krista Ellis
Senior Environmental Planner

5.0 DETERMINATION

(To be completed by lead agency) Based on this initial evaluation:

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

☒ I find that although the proposed project could have a significant impact on the environment, there will not be a significant impact in this case because the mitigation measures described herein have been included in this project. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

6.0 DE MINIMIS FEE DETERMINATION

(Chapter 1706, Statutes of 1990-AB 3158)

☐ It is hereby found that this project involves no potential for any adverse impact, either individually or cumulatively, on wildlife resources and that a "Certificate of Fee Exemption" shall be prepared for this project.

☒ It is hereby found that this project could potentially impact wildlife, individually or cumulatively, and therefore fees shall be paid to the State of California Governor's Office of Planning and Research (OPR) in accordance with Section 711.4(d) of the Fish and Game Code.

7.0 ENVIRONMENTAL DETERMINATION

The Initial Study for the Project has been reviewed and the environmental determination, contained in Section 5.0 preceding, is hereby approved:

Paul Lam, Principal Planner

8.0 REFERENCES

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APPENDIX A

AIR QUALITY MODELING RESULTS

Alhambra Warehouse Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	42.66	1000sqft	3.44	42,655.00	0
General Office Building	11.05	1000sqft	0.89	11,045.00	0
Parking Lot	7.36	1000sqft	0.17	7,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Alhambra Warehouse Project - Los Angeles-South Coast County, Winter

Project Characteristics -

Land Use - Project specific land uses, based on 4.5 project acreage.

Construction Phase - Default construction schedule scaled assuming a Q2 2020 start date and Q1 2021 end date.

Grading - Material export assumed to be approx. 3,873 CY based on shed, asphalt, concrete paving, curb/gutter, and tree removal.

Demolition - Demolition of existing asphalt/concrete included in material export during grading.

Trips and VMT - Default worker, vendor, and haul trips.

Vehicle Trips - No increase in operational trips associated with the new warehouse project.

Energy Use - Default energy use inputs - actual energy use anticipated to be less due to solar tubes, skylights, and design.

Construction Off-road Equipment Mitigation - Assumes fugitive dust control per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	16.00
tblConstructionPhase	NumDays	230.00	203.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	8.00	7.00
tblConstructionPhase	NumDays	18.00	16.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	PhaseEndDate	5/24/2021	4/5/2021
tblConstructionPhase	PhaseEndDate	4/2/2021	2/18/2021
tblConstructionPhase	PhaseEndDate	4/28/2020	4/24/2020
tblConstructionPhase	PhaseEndDate	5/15/2020	5/11/2020
tblConstructionPhase	PhaseEndDate	4/28/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	5/5/2020	4/30/2020
tblConstructionPhase	PhaseStartDate	4/29/2021	3/13/2021
tblConstructionPhase	PhaseStartDate	5/16/2020	5/12/2020
tblConstructionPhase	PhaseStartDate	5/6/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	4/3/2021	2/19/2021

tblConstructionPhase	PhaseStartDate	4/29/2020	4/25/2020
tblGrading	AcresOfGrading	3.50	4.00
tblGrading	MaterialExported	0.00	3,873.00
tblLandUse	LotAcreage	0.98	3.44
tblLandUse	LotAcreage	0.25	0.89
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1685	46.5790	22.3547	0.0850	18.2675	2.1991	20.4666	9.9840	2.0232	12.0072	0.0000	8,854.1629	8,854.1629	1.3517	0.0000	8,887.9549
2021	31.4832	18.4825	17.7766	0.0321	0.3435	0.9629	1.3064	0.0925	0.9053	0.9979	0.0000	3,088.7722	3,088.7722	0.6412	0.0000	3,104.8012
Maximum	**31.4832**	**46.5790**	**22.3547**	**0.0850**	**18.2675**	**2.1991**	**20.4666**	**9.9840**	**2.0232**	**12.0072**	**0.0000**	**8,854.1629**	**8,854.1629**	**1.3517**	**0.0000**	**8,887.9549**

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					
2020	4.1685	46.5790	22.3547	0.0850	8.3310	2.1991	10.5301	4.5222	2.0232	6.5453	0.0000	8,854.1629	8,854.1629	1.3517	0.0000	8,887.9549
2021	31.4832	18.4825	17.7766	0.0321	0.3435	0.9629	1.3064	0.0925	0.9053	0.9979	0.0000	3,088.7722	3,088.7722	0.6412	0.0000	3,104.8012
Maximum	**31.4832**	**46.5790**	**22.3547**	**0.0850**	**8.3310**	**2.1991**	**10.5301**	**4.5222**	**2.0232**	**6.5453**	**0.0000**	**8,854.1629**	**8,854.1629**	**1.3517**	**0.0000**	**8,887.9549**

	ROG	NOx	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**	**53.39**	**0.00**	**45.64**	**54.20**	**0.00**	**42.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2034	6.0000e-005	6.2600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0134	0.0134	4.0000e-005		0.0143
Energy	4.4900e-003	0.0409	0.0343	2.5000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003		49.0212	49.0212	9.4000e-004	9.0000e-004	49.3125
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.2079**	**0.0409**	**0.0406**	**2.5000e-004**	**0.0000**	**3.1200e-003**	**3.1200e-003**	**0.0000**	**3.1200e-003**	**3.1200e-003**		**49.0346**	**49.0346**	**9.8000e-004**	**9.0000e-004**	**49.3268**

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	1.2034	6.0000e-005	6.2600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0134	0.0134	4.0000e-005		0.0143
Energy	4.4900e-003	0.0409	0.0343	2.5000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003		49.0212	49.0212	9.4000e-004	9.0000e-004	49.3125
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.2079**	**0.0409**	**0.0406**	**2.5000e-004**	**0.0000**	**3.1200e-003**	**3.1200e-003**	**0.0000**	**3.1200e-003**	**3.1200e-003**		**49.0346**	**49.0346**	**9.8000e-004**	**9.0000e-004**	**49.3268**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/24/2020	5	18	
2	Site Preparation	Site Preparation	4/25/2020	4/30/2020	5	4	
3	Grading	Grading	5/1/2020	5/11/2020	5	7	
4	Building Construction	Building Construction	5/12/2020	2/18/2021	5	203	
5	Paving	Paving	2/19/2021	3/12/2021	5	16	
6	Architectural Coating	Architectural Coating	3/13/2021	4/5/2021	5	16	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 80,550; Non-Residential Outdoor: 26,850; Striped Parking Area: 442 (Architectural Coating – sqft)

OffRoad Equipment

Alhambra Warehouse Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	484.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

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	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**		**1.6587**	**1.6587**		**1.5419**	**1.5419**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

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	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**		**1.6587**	**1.6587**		**1.5419**	**1.5419**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.0920**	**0.0652**	**0.7218**	**2.0000e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**199.3357**	**199.3357**	**6.2800e-003**		**199.4927**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**8.1298**	**2.1974**	**10.3272**	**4.4688**	**2.0216**	**6.4904**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.0920**	**0.0652**	**0.7218**	**2.0000e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**199.3357**	**199.3357**	**6.2800e-003**		**199.4927**

3.4 Grading - 2020

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					6.6907	0.0000	6.6907	3.3851	0.0000	3.3851			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.6907**	**1.2734**	**7.9641**	**3.3851**	**1.1716**	**4.5567**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

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	0.6186	20.1387	4.6820	0.0537	1.2089	0.0644	1.2734	0.3314	0.0616	0.3930		5,815.5647	5,815.5647	0.4174		5,826.0003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.6953**	**20.1931**	**5.2836**	**0.0553**	**1.3766**	**0.0658**	**1.4424**	**0.3759**	**0.0629**	**0.4388**		**5,981.6778**	**5,981.6778**	**0.4227**		**5,992.2443**

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					3.0108	0.0000	3.0108	1.5233	0.0000	1.5233			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**3.0108**	**1.2734**	**4.2842**	**1.5233**	**1.1716**	**2.6949**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

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	0.6186	20.1387	4.6820	0.0537	1.2089	0.0644	1.2734	0.3314	0.0616	0.3930		5,815.5647	5,815.5647	0.4174		5,826.0003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.6953**	**20.1931**	**5.2836**	**0.0553**	**1.3766**	**0.0658**	**1.4424**	**0.3759**	**0.0629**	**0.4388**		**5,981.6778**	**5,981.6778**	**0.4227**		**5,992.2443**

3.5 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0372	1.0635	0.3074	2.5200e-003	0.0640	5.0900e-003	0.0691	0.0184	4.8700e-003	0.0233		269.4491	269.4491	0.0180		269.8995
Worker	0.1278	0.0906	1.0025	2.7800e-003	0.2794	2.3400e-003	0.2818	0.0741	2.1500e-003	0.0763		276.8551	276.8551	8.7300e-003		277.0733
Total	**0.1649**	**1.1541**	**1.3099**	**5.3000e-003**	**0.3435**	**7.4300e-003**	**0.3509**	**0.0925**	**7.0200e-003**	**0.0996**		**546.3042**	**546.3042**	**0.0268**		**546.9728**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0372	1.0635	0.3074	2.5200e-003	0.0640	5.0900e-003	0.0691	0.0184	4.8700e-003	0.0233		269.4491	269.4491	0.0180		269.8995
Worker	0.1278	0.0906	1.0025	2.7800e-003	0.2794	2.3400e-003	0.2818	0.0741	2.1500e-003	0.0763		276.8551	276.8551	8.7300e-003		277.0733
Total	**0.1649**	**1.1541**	**1.3099**	**5.3000e-003**	**0.3435**	**7.4300e-003**	**0.3509**	**0.0925**	**7.0200e-003**	**0.0996**		**546.3042**	**546.3042**	**0.0268**		**546.9728**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204		267.3455	267.3455	0.0173		267.7770
Worker	0.1192	0.0815	0.9206	2.6900e-003	0.2794	2.2600e-003	0.2817	0.0741	2.0800e-003	0.0762		268.0628	268.0628	7.8900e-003		268.2600
Total	**0.1511**	**1.0504**	**1.2014**	**5.1900e-003**	**0.3435**	**4.3100e-003**	**0.3478**	**0.0925**	**4.0400e-003**	**0.0966**		**535.4083**	**535.4083**	**0.0252**		**536.0370**

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204		267.3455	267.3455	0.0173		267.7770
Worker	0.1192	0.0815	0.9206	2.6900e-003	0.2794	2.2600e-003	0.2817	0.0741	2.0800e-003	0.0762		268.0628	268.0628	7.8900e-003		268.2600
Total	**0.1511**	**1.0504**	**1.2014**	**5.1900e-003**	**0.3435**	**4.3100e-003**	**0.3478**	**0.0925**	**4.0400e-003**	**0.0966**		**535.4083**	**535.4083**	**0.0252**		**536.0370**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342		1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.0278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1218**	**10.8399**	**12.2603**	**0.0189**		**0.5788**	**0.5788**		**0.5342**	**0.5342**		**1,804.5523**	**1,804.5523**	**0.5670**		**1,818.7270**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342	0.0000	1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.0278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1218**	**10.8399**	**12.2603**	**0.0189**		**0.5788**	**0.5788**		**0.5342**	**0.5342**	**0.0000**	**1,804.5523**	**1,804.5523**	**0.5670**		**1,818.7270**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.2405					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**31.4594**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0238	0.0163	0.1841	5.4000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.2000e-004	0.0152		53.6126	53.6126	1.5800e-003		53.6520
Total	**0.0238**	**0.0163**	**0.1841**	**5.4000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.2000e-004**	**0.0152**		**53.6126**	**53.6126**	**1.5800e-003**		**53.6520**

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	31.2405					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**31.4594**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0238	0.0163	0.1841	5.4000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.2000e-004	0.0152		53.6126	53.6126	1.5800e-003		53.6520
Total	**0.0238**	**0.0163**	**0.1841**	**5.4000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.2000e-004**	**0.0152**		**53.6126**	**53.6126**	**1.5800e-003**		**53.6520**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Parking Lot	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Unrefrigerated Warehouse-No Rail	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.4900e-003	0.0409	0.0343	2.5000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003		49.0212	49.0212	9.4000e-004	9.0000e-004	49.3125
NaturalGas Unmitigated	4.4900e-003	0.0409	0.0343	2.5000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003		49.0212	49.0212	9.4000e-004	9.0000e-004	49.3125

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					
General Office Building	315.009	3.4000e-003	0.0309	0.0259	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003		37.0599	37.0599	7.1000e-004	6.8000e-004	37.2802
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	101.671	1.1000e-003	9.9700e-003	8.3700e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		11.9613	11.9613	2.3000e-004	2.2000e-004	12.0324
Total		**4.5000e-003**	**0.0409**	**0.0343**	**2.5000e-004**		**3.1100e-003**	**3.1100e-003**		**3.1100e-003**	**3.1100e-003**		**49.0212**	**49.0212**	**9.4000e-004**	**9.0000e-004**	**49.3125**

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					
General Office Building	0.315009	3.4000e-003	0.0309	0.0259	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003		37.0599	37.0599	7.1000e-004	6.8000e-004	37.2802
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.101671	1.1000e-003	9.9700e-003	8.3700e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		11.9613	11.9613	2.3000e-004	2.2000e-004	12.0324
Total		**4.5000e-003**	**0.0409**	**0.0343**	**2.5000e-004**		**3.1100e-003**	**3.1100e-003**		**3.1100e-003**	**3.1100e-003**		**49.0212**	**49.0212**	**9.4000e-004**	**9.0000e-004**	**49.3125**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2034	6.0000e-005	6.2600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0134	0.0134	4.0000e-005		0.0143
Unmitigated	1.2034	6.0000e-005	6.2600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0134	0.0134	4.0000e-005		0.0143

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	0.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0134	0.0134	4.0000e-005		0.0143
Total	**1.2034**	**6.0000e-005**	**6.2600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0134**	**0.0134**	**4.0000e-005**		**0.0143**

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	0.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0134	0.0134	4.0000e-005		0.0143
Total	**1.2034**	**6.0000e-005**	**6.2600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0134**	**0.0134**	**4.0000e-005**		**0.0143**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alhambra Warehouse Project

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	42.66	1000sqft	3.44	42,655.00	0
General Office Building	11.05	1000sqft	0.89	11,045.00	0
Parking Lot	7.36	1000sqft	0.17	7,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Alhambra Warehouse Project - Los Angeles-South Coast County, Annual

Project Characteristics -

Land Use - Project specific land uses, based on 4.5 project acreage.

Construction Phase - Default construction schedule scaled assuming a Q2 2020 start date and Q1 2021 end date.

Grading - Material export assumed to be approx. 3,873 CY based on shed, asphalt, concrete paving, curb/gutter, and tree removal.

Demolition - Demolition of existing asphalt/concrete included in material export during grading.

Trips and VMT - Default worker, vendor, and haul trips.

Vehicle Trips - No increase in operational trips associated with the new warehouse project.

Energy Use - Default energy use inputs - actual energy use anticipated to be less due to solar tubes, skylights, and design.

Construction Off-road Equipment Mitigation - Assumes fugitive dust control per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	16.00
tblConstructionPhase	NumDays	230.00	203.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	8.00	7.00
tblConstructionPhase	NumDays	18.00	16.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	PhaseEndDate	5/24/2021	4/5/2021
tblConstructionPhase	PhaseEndDate	4/2/2021	2/18/2021
tblConstructionPhase	PhaseEndDate	4/28/2020	4/24/2020
tblConstructionPhase	PhaseEndDate	5/15/2020	5/11/2020
tblConstructionPhase	PhaseEndDate	4/28/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	5/5/2020	4/30/2020
tblConstructionPhase	PhaseStartDate	4/29/2021	3/13/2021
tblConstructionPhase	PhaseStartDate	5/16/2020	5/12/2020
tblConstructionPhase	PhaseStartDate	5/6/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	4/3/2021	2/19/2021

tblConstructionPhase	PhaseStartDate	4/29/2020	4/25/2020
tblGrading	AcresOfGrading	3.50	4.00
tblGrading	MaterialExported	0.00	3,873.00
tblLandUse	LotAcreage	0.98	3.44
tblLandUse	LotAcreage	0.25	0.89
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2404	2.2592	1.8464	3.4600e-003	0.0945	0.1185	0.2129	0.0411	0.1111	0.1522	0.0000	304.2096	304.2096	0.0646	0.0000	305.8243
2021	0.2972	0.4234	0.4315	7.6000e-004	8.0900e-003	0.0223	0.0303	2.1700e-003	0.0209	0.0231	0.0000	66.2937	66.2937	0.0145	0.0000	66.6558
Maximum	**0.2972**	**2.2592**	**1.8464**	**3.4600e-003**	**0.0945**	**0.1185**	**0.2129**	**0.0411**	**0.1111**	**0.1522**	**0.0000**	**304.2096**	**304.2096**	**0.0646**	**0.0000**	**305.8243**

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					
2020	0.2404	2.2592	1.8464	3.4600e-003	0.0617	0.1185	0.1802	0.0237	0.1111	0.1348	0.0000	304.2094	304.2094	0.0646	0.0000	305.8240
2021	0.2972	0.4234	0.4315	7.6000e-004	8.0900e-003	0.0223	0.0303	2.1700e-003	0.0209	0.0231	0.0000	66.2936	66.2936	0.0145	0.0000	66.6557
Maximum	**0.2972**	**2.2592**	**1.8464**	**3.4600e-003**	**0.0617**	**0.1185**	**0.1802**	**0.0237**	**0.1111**	**0.1348**	**0.0000**	**304.2094**	**304.2094**	**0.0646**	**0.0000**	**305.8240**

	ROG	NOx	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**	**31.94**	**0.00**	**13.47**	**40.27**	**0.00**	**9.95**	**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	4-1-2020	6-30-2020	1.0117	1.0117
2	7-1-2020	9-30-2020	0.7426	0.7426
3	10-1-2020	12-31-2020	0.7434	0.7434
4	1-1-2021	3-31-2021	0.6787	0.6787
5	4-1-2021	6-30-2021	0.0590	0.0590
		Highest	1.0117	1.0117

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	0.2196	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5200e-003	1.5200e-003	0.0000	0.0000	1.6200e-003
Energy	8.2000e-004	7.4600e-003	6.2600e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	107.6550	107.6550	4.2600e-003	1.0000e-003	108.0593
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	10.2247	0.0000	10.2247	0.6043	0.0000	25.3312
Water						0.0000	0.0000		0.0000	0.0000	3.7523	53.3259	57.0782	0.3876	9.5600e-003	69.6156
Total	**0.2204**	**7.4700e-003**	**7.0400e-003**	**4.0000e-005**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**13.9769**	**160.9824**	**174.9593**	**0.9961**	**0.0106**	**203.0076**

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	0.2196	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5200e-003	1.5200e-003	0.0000	0.0000	1.6200e-003
Energy	8.2000e-004	7.4600e-003	6.2600e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	107.6550	107.6550	4.2600e-003	1.0000e-003	108.0593
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	10.2247	0.0000	10.2247	0.6043	0.0000	25.3312
Water						0.0000	0.0000		0.0000	0.0000	3.7523	53.3259	57.0782	0.3876	9.5600e-003	69.6156
Total	**0.2204**	**7.4700e-003**	**7.0400e-003**	**4.0000e-005**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**13.9769**	**160.9824**	**174.9593**	**0.9961**	**0.0106**	**203.0076**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Alhambra Warehouse Project - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/24/2020	5	18	
2	Site Preparation	Site Preparation	4/25/2020	4/30/2020	5	4	
3	Grading	Grading	5/1/2020	5/11/2020	5	7	
4	Building Construction	Building Construction	5/12/2020	2/18/2021	5	203	
5	Paving	Paving	2/19/2021	3/12/2021	5	16	
6	Architectural Coating	Architectural Coating	3/13/2021	4/5/2021	5	16	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 80,550; Non-Residential Outdoor: 26,850; Striped Parking Area: 442 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	484.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

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	0.0298	0.2988	0.1958	3.5000e-004		0.0149	0.0149		0.0139	0.0139	0.0000	30.5988	30.5988	8.6400e-003	0.0000	30.8147
Total	**0.0298**	**0.2988**	**0.1958**	**3.5000e-004**		**0.0149**	**0.0149**		**0.0139**	**0.0139**	**0.0000**	**30.5988**	**30.5988**	**8.6400e-003**	**0.0000**	**30.8147**

3.2 Demolition - 2020

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	6.2000e-004	5.0000e-004	5.5600e-003	2.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3788	1.3788	4.0000e-005	0.0000	1.3799
Total	**6.2000e-004**	**5.0000e-004**	**5.5600e-003**	**2.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.3788**	**1.3788**	**4.0000e-005**	**0.0000**	**1.3799**

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	0.0298	0.2988	0.1958	3.5000e-004		0.0149	0.0149		0.0139	0.0139	0.0000	30.5987	30.5987	8.6400e-003	0.0000	30.8147
Total	**0.0298**	**0.2988**	**0.1958**	**3.5000e-004**		**0.0149**	**0.0149**		**0.0139**	**0.0139**	**0.0000**	**30.5987**	**30.5987**	**8.6400e-003**	**0.0000**	**30.8147**

3.2 Demolition - 2020

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	6.2000e-004	5.0000e-004	5.5600e-003	2.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3788	1.3788	4.0000e-005	0.0000	1.3799
Total	**6.2000e-004**	**5.0000e-004**	**5.5600e-003**	**2.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.3788**	**1.3788**	**4.0000e-005**	**0.0000**	**1.3799**

3.3 Site Preparation - 2020

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					0.0361	0.0000	0.0361	0.0199	0.0000	0.0199	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1500e-003	0.0848	0.0430	8.0000e-005		4.3900e-003	4.3900e-003		4.0400e-003	4.0400e-003	0.0000	6.6861	6.6861	2.1600e-003	0.0000	6.7402
Total	**8.1500e-003**	**0.0848**	**0.0430**	**8.0000e-005**	**0.0361**	**4.3900e-003**	**0.0405**	**0.0199**	**4.0400e-003**	**0.0239**	**0.0000**	**6.6861**	**6.6861**	**2.1600e-003**	**0.0000**	**6.7402**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.4800e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3677	0.3677	1.0000e-005	0.0000	0.3680
Total	**1.7000e-004**	**1.3000e-004**	**1.4800e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**4.0000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3677**	**0.3677**	**1.0000e-005**	**0.0000**	**0.3680**

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					0.0163	0.0000	0.0163	8.9400e-003	0.0000	8.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1500e-003	0.0848	0.0430	8.0000e-005		4.3900e-003	4.3900e-003		4.0400e-003	4.0400e-003	0.0000	6.6861	6.6861	2.1600e-003	0.0000	6.7402
Total	**8.1500e-003**	**0.0848**	**0.0430**	**8.0000e-005**	**0.0163**	**4.3900e-003**	**0.0207**	**8.9400e-003**	**4.0400e-003**	**0.0130**	**0.0000**	**6.6861**	**6.6861**	**2.1600e-003**	**0.0000**	**6.7402**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.4800e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3677	0.3677	1.0000e-005	0.0000	0.3680
Total	**1.7000e-004**	**1.3000e-004**	**1.4800e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**4.0000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3677**	**0.3677**	**1.0000e-005**	**0.0000**	**0.3680**

3.4 Grading - 2020

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					0.0234	0.0000	0.0234	0.0119	0.0000	0.0119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-003	0.0924	0.0562	1.0000e-004		4.4600e-003	4.4600e-003		4.1000e-003	4.1000e-003	0.0000	9.1206	9.1206	2.9500e-003	0.0000	9.1943
Total	**8.5000e-003**	**0.0924**	**0.0562**	**1.0000e-004**	**0.0234**	**4.4600e-003**	**0.0279**	**0.0119**	**4.1000e-003**	**0.0160**	**0.0000**	**9.1206**	**9.1206**	**2.9500e-003**	**0.0000**	**9.1943**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1400e-003	0.0719	0.0158	1.9000e-004	4.1600e-003	2.2000e-004	4.3800e-003	1.1400e-003	2.1000e-004	1.3600e-003	0.0000	18.6529	18.6529	1.3000e-003	0.0000	18.6854
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	2.0000e-004	2.1600e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.5362	0.5362	2.0000e-005	0.0000	0.5366
Total	**2.3800e-003**	**0.0721**	**0.0180**	**2.0000e-004**	**4.7400e-003**	**2.2000e-004**	**4.9600e-003**	**1.2900e-003**	**2.1000e-004**	**1.5200e-003**	**0.0000**	**19.1891**	**19.1891**	**1.3200e-003**	**0.0000**	**19.2220**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0105	0.0000	0.0105	5.3300e-003	0.0000	5.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-003	0.0924	0.0562	1.0000e-004		4.4600e-003	4.4600e-003		4.1000e-003	4.1000e-003	0.0000	9.1206	9.1206	2.9500e-003	0.0000	9.1943
Total	**8.5000e-003**	**0.0924**	**0.0562**	**1.0000e-004**	**0.0105**	**4.4600e-003**	**0.0150**	**5.3300e-003**	**4.1000e-003**	**9.4300e-003**	**0.0000**	**9.1206**	**9.1206**	**2.9500e-003**	**0.0000**	**9.1943**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1400e-003	0.0719	0.0158	1.9000e-004	4.1600e-003	2.2000e-004	4.3800e-003	1.1400e-003	2.1000e-004	1.3600e-003	0.0000	18.6529	18.6529	1.3000e-003	0.0000	18.6854
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	2.0000e-004	2.1600e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.5362	0.5362	2.0000e-005	0.0000	0.5366
Total	**2.3800e-003**	**0.0721**	**0.0180**	**2.0000e-004**	**4.7400e-003**	**2.2000e-004**	**4.9600e-003**	**1.2900e-003**	**2.1000e-004**	**1.5200e-003**	**0.0000**	**19.1891**	**19.1891**	**1.3200e-003**	**0.0000**	**19.2220**

3.5 Building Construction - 2020

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	0.1781	1.6116	1.4153	2.2600e-003		0.0938	0.0938		0.0882	0.0882	0.0000	194.5524	194.5524	0.0475	0.0000	195.7390
Total	**0.1781**	**1.6116**	**1.4153**	**2.2600e-003**		**0.0938**	**0.0938**		**0.0882**	**0.0882**	**0.0000**	**194.5524**	**194.5524**	**0.0475**	**0.0000**	**195.7390**

3.5 Building Construction - 2020

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	3.0500e-003	0.0910	0.0246	2.2000e-004	5.2900e-003	4.2000e-004	5.7100e-003	1.5300e-003	4.0000e-004	1.9300e-003	0.0000	20.8678	20.8678	1.3300e-003	0.0000	20.9010
Worker	9.6900e-003	7.8200e-003	0.0864	2.4000e-004	0.0230	2.0000e-004	0.0232	6.1100e-003	1.8000e-004	6.2900e-003	0.0000	21.4484	21.4484	6.8000e-004	0.0000	21.4653
Total	**0.0127**	**0.0989**	**0.1111**	**4.6000e-004**	**0.0283**	**6.2000e-004**	**0.0289**	**7.6400e-003**	**5.8000e-004**	**8.2200e-003**	**0.0000**	**42.3162**	**42.3162**	**2.0100e-003**	**0.0000**	**42.3662**

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	0.1781	1.6116	1.4153	2.2600e-003		0.0938	0.0938		0.0882	0.0882	0.0000	194.5522	194.5522	0.0475	0.0000	195.7388
Total	**0.1781**	**1.6116**	**1.4153**	**2.2600e-003**		**0.0938**	**0.0938**		**0.0882**	**0.0882**	**0.0000**	**194.5522**	**194.5522**	**0.0475**	**0.0000**	**195.7388**

3.5 Building Construction - 2020

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	3.0500e-003	0.0910	0.0246	2.2000e-004	5.2900e-003	4.2000e-004	5.7100e-003	1.5300e-003	4.0000e-004	1.9300e-003	0.0000	20.8678	20.8678	1.3300e-003	0.0000	20.9010
Worker	9.6900e-003	7.8200e-003	0.0864	2.4000e-004	0.0230	2.0000e-004	0.0232	6.1100e-003	1.8000e-004	6.2900e-003	0.0000	21.4484	21.4484	6.8000e-004	0.0000	21.4653
Total	**0.0127**	**0.0989**	**0.1111**	**4.6000e-004**	**0.0283**	**6.2000e-004**	**0.0289**	**7.6400e-003**	**5.8000e-004**	**8.2200e-003**	**0.0000**	**42.3162**	**42.3162**	**2.0100e-003**	**0.0000**	**42.3662**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0333	0.3051	0.2901	4.7000e-004		0.0168	0.0168		0.0158	0.0158	0.0000	40.5365	40.5365	9.7800e-003	0.0000	40.7810
Total	**0.0333**	**0.3051**	**0.2901**	**4.7000e-004**		**0.0168**	**0.0168**		**0.0158**	**0.0158**	**0.0000**	**40.5365**	**40.5365**	**9.7800e-003**	**0.0000**	**40.7810**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4000e-004	0.0173	4.6800e-003	4.0000e-005	1.1000e-003	4.0000e-005	1.1400e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	4.3137	4.3137	2.6000e-004	0.0000	4.3203
Worker	1.8800e-003	1.4700e-003	0.0165	5.0000e-005	4.7900e-003	4.0000e-005	4.8300e-003	1.2700e-003	4.0000e-005	1.3100e-003	0.0000	4.3265	4.3265	1.3000e-004	0.0000	4.3297
Total	**2.4200e-003**	**0.0187**	**0.0212**	**9.0000e-005**	**5.8900e-003**	**8.0000e-005**	**5.9700e-003**	**1.5900e-003**	**7.0000e-005**	**1.6600e-003**	**0.0000**	**8.6402**	**8.6402**	**3.9000e-004**	**0.0000**	**8.6500**

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	0.0333	0.3051	0.2901	4.7000e-004		0.0168	0.0168		0.0158	0.0158	0.0000	40.5365	40.5365	9.7800e-003	0.0000	40.7810
Total	**0.0333**	**0.3051**	**0.2901**	**4.7000e-004**		**0.0168**	**0.0168**		**0.0158**	**0.0158**	**0.0000**	**40.5365**	**40.5365**	**9.7800e-003**	**0.0000**	**40.7810**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4000e-004	0.0173	4.6800e-003	4.0000e-005	1.1000e-003	4.0000e-005	1.1400e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	4.3137	4.3137	2.6000e-004	0.0000	4.3203
Worker	1.8800e-003	1.4700e-003	0.0165	5.0000e-005	4.7900e-003	4.0000e-005	4.8300e-003	1.2700e-003	4.0000e-005	1.3100e-003	0.0000	4.3265	4.3265	1.3000e-004	0.0000	4.3297
Total	**2.4200e-003**	**0.0187**	**0.0212**	**9.0000e-005**	**5.8900e-003**	**8.0000e-005**	**5.9700e-003**	**1.5900e-003**	**7.0000e-005**	**1.6600e-003**	**0.0000**	**8.6402**	**8.6402**	**3.9000e-004**	**0.0000**	**8.6500**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7500e-003	0.0867	0.0981	1.5000e-004		4.6300e-003	4.6300e-003		4.2700e-003	4.2700e-003	0.0000	13.0965	13.0965	4.1100e-003	0.0000	13.1994
Paving	2.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9700e-003**	**0.0867**	**0.0981**	**1.5000e-004**		**4.6300e-003**	**4.6300e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**13.0965**	**13.0965**	**4.1100e-003**	**0.0000**	**13.1994**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.4000e-004	6.0500e-003	2.0000e-005	1.7500e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5823	1.5823	5.0000e-005	0.0000	1.5834
Total	**6.9000e-004**	**5.4000e-004**	**6.0500e-003**	**2.0000e-005**	**1.7500e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.5823**	**1.5823**	**5.0000e-005**	**0.0000**	**1.5834**

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	8.7500e-003	0.0867	0.0981	1.5000e-004		4.6300e-003	4.6300e-003		4.2700e-003	4.2700e-003	0.0000	13.0965	13.0965	4.1100e-003	0.0000	13.1994
Paving	2.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9700e-003**	**0.0867**	**0.0981**	**1.5000e-004**		**4.6300e-003**	**4.6300e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**13.0965**	**13.0965**	**4.1100e-003**	**0.0000**	**13.1994**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.4000e-004	6.0500e-003	2.0000e-005	1.7500e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5823	1.5823	5.0000e-005	0.0000	1.5834
Total	**6.9000e-004**	**5.4000e-004**	**6.0500e-003**	**2.0000e-005**	**1.7500e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.5823**	**1.5823**	**5.0000e-005**	**0.0000**	**1.5834**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7500e-003	0.0122	0.0145	2.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	2.0426	2.0426	1.4000e-004	0.0000	2.0461
Total	**0.2517**	**0.0122**	**0.0145**	**2.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**2.0426**	**2.0426**	**1.4000e-004**	**0.0000**	**2.0461**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.5100e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3956	0.3956	1.0000e-005	0.0000	0.3959
Total	**1.7000e-004**	**1.3000e-004**	**1.5100e-003**	**0.0000**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3956**	**0.3956**	**1.0000e-005**	**0.0000**	**0.3959**

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	0.2499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7500e-003	0.0122	0.0145	2.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	2.0426	2.0426	1.4000e-004	0.0000	2.0461
Total	**0.2517**	**0.0122**	**0.0145**	**2.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**2.0426**	**2.0426**	**1.4000e-004**	**0.0000**	**2.0461**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.5100e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3956	0.3956	1.0000e-005	0.0000	0.3959
Total	**1.7000e-004**	**1.3000e-004**	**1.5100e-003**	**0.0000**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3956**	**0.3956**	**1.0000e-005**	**0.0000**	**0.3959**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Parking Lot	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Unrefrigerated Warehouse-No Rail	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	99.5389	99.5389	4.1100e-003	8.5000e-004	99.8951
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	99.5389	99.5389	4.1100e-003	8.5000e-004	99.8951
NaturalGas Mitigated	8.2000e-004	7.4600e-003	6.2600e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	8.1160	8.1160	1.6000e-004	1.5000e-004	8.1642
NaturalGas Unmitigated	8.2000e-004	7.4600e-003	6.2600e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	8.1160	8.1160	1.6000e-004	1.5000e-004	8.1642

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					
General Office Building	114978	6.2000e-004	5.6400e-003	4.7300e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	6.1357	6.1357	1.2000e-004	1.1000e-004	6.1722
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37109.8	2.0000e-004	1.8200e-003	1.5300e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9803	1.9803	4.0000e-005	4.0000e-005	1.9921
Total		**8.2000e-004**	**7.4600e-003**	**6.2600e-003**	**4.0000e-005**		**5.7000e-004**	**5.7000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**8.1160**	**8.1160**	**1.6000e-004**	**1.5000e-004**	**8.1642**

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					
General Office Building	114978	6.2000e-004	5.6400e-003	4.7300e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	6.1357	6.1357	1.2000e-004	1.1000e-004	6.1722
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37109.8	2.0000e-004	1.8200e-003	1.5300e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9803	1.9803	4.0000e-005	4.0000e-005	1.9921
Total		**8.2000e-004**	**7.4600e-003**	**6.2600e-003**	**4.0000e-005**		**5.7000e-004**	**5.7000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**8.1160**	**8.1160**	**1.6000e-004**	**1.5000e-004**	**8.1642**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	143475	45.7141	1.8900e-003	3.9000e-004	45.8776
Parking Lot	2576	0.8208	3.0000e-005	1.0000e-005	0.8237
Unrefrigerated Warehouse-No Rail	166355	53.0041	2.1900e-003	4.5000e-004	53.1937
Total		**99.5390**	**4.1100e-003**	**8.5000e-004**	**99.8951**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	143475	45.7141	1.8900e-003	3.9000e-004	45.8776
Parking Lot	2576	0.8208	3.0000e-005	1.0000e-005	0.8237
Unrefrigerated Warehouse-No Rail	166355	53.0041	2.1900e-003	4.5000e-004	53.1937
Total		**99.5390**	**4.1100e-003**	**8.5000e-004**	**99.8951**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2196	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5200e-003	1.5200e-003	0.0000	0.0000	1.6200e-003
Unmitigated	0.2196	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5200e-003	1.5200e-003	0.0000	0.0000	1.6200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1945					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5200e-003	1.5200e-003	0.0000	0.0000	1.6200e-003
Total	**0.2196**	**1.0000e-005**	**7.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5200e-003**	**1.5200e-003**	**0.0000**	**0.0000**	**1.6200e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1945					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5200e-003	1.5200e-003	0.0000	0.0000	1.6200e-003
Total	**0.2196**	**1.0000e-005**	**7.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5200e-003**	**1.5200e-003**	**0.0000**	**0.0000**	**1.6200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	57.0782	0.3876	9.5600e-003	69.6156
Unmitigated	57.0782	0.3876	9.5600e-003	69.6156

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	1.96218 / 1.20263	13.0203	0.0645	1.6200e-003	15.1130
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.86513 / 0	44.0579	0.3231	7.9400e-003	54.5026
Total		**57.0782**	**0.3876**	**9.5600e-003**	**69.6156**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	1.96218 / 1.20263	13.0203	0.0645	1.6200e-003	15.1130
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.86513 / 0	44.0579	0.3231	7.9400e-003	54.5026
Total		**57.0782**	**0.3876**	**9.5600e-003**	**69.6156**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.2247	0.6043	0.0000	25.3312
Unmitigated	10.2247	0.6043	0.0000	25.3312

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	10.27	2.0847	0.1232	0.0000	5.1648
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40.1	8.1399	0.4811	0.0000	20.1664
Total		**10.2247**	**0.6043**	**0.0000**	**25.3312**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	10.27	2.0847	0.1232	0.0000	5.1648
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40.1	8.1399	0.4811	0.0000	20.1664
Total		**10.2247**	**0.6043**	**0.0000**	**25.3312**

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

SITE DISTANCE MEMO

TO:	Krista Ellis, AECOM
FROM:	Jonathan Sanchez, Chen Ryan Associates
DATE:	9/19/2019
RE:	Southern California Edison Alhambra Warehouse Expansion – Sight Distance Study

1. Introduction

The purpose of this memorandum is to document the findings of the sight distance study performed for a proposed new driveway at the Southern California Edison (SCE) facility in the City of Alhambra, California. The SCE facility is located to the northeast of the South Raymond Ave/Mission Road intersection. The proposed new driveway is located to the east of the South Raymond Avenue/Chestnut Street intersection. **Figure 1.1** displays the proposed driveway location while **Figure 1.2** displays the project site plan.

PROJECT BACKGROUND

The objective of the proposed project is to consolidate storage materials and associated staff from Buildings C, D and E into a proposed new warehouse. This will better optimize the function and operation of the aged campus, which was built in the 1930s. The Project would include demolition of the approximately 3.3 acres of asphalt and concrete buildings and the construction of a new approximately 52,700 square-foot (SF) warehouse on current yard space land bounded by Mission Road and South Raymond Avenue, in the southwestern corner of the SCE site. Additionally, a new site access is proposed at the intersection of South Raymond Avenue and Chestnut Street as seen in Figure 1.1 and Figure 1.2.

The proposed project would consolidate all indoor storage (11,000 SF from Building C and 27,000 SF from Building D), develop a centralized logistics intake, yard consolidation, parking restriping, and physical on-site distribution point to handle all indoor storage for Transmission and IT functions. The Project would occur in two phases, demolition and construction, over approximately 12 months. Demolition activities would include removal of approximately 3.30 acres of existing asphalt and concrete, associated utilities, and two non-native trees to prepare the site for the proposed warehouse and new gate. Construction would include the new gate, warehouse structure, underground stormwater treatment, and associated utilities and connections. The new warehouse would be approximately 40 feet in height and built to accommodate approximately 11,045 SF office and 42,655 SF warehouse space. The proposed gate would have queuing space to accommodate one-semi-truck or two panel trucks and would be secured via card reader, speaker, and security camera, all linked to the main gate or warehouse. All third-party deliveries are proposed to access the site through the new gate, eliminating truck traffic to the main gate. The existing 30-foot easement parallel to South Raymond Street would be maintained.

MEMORANDUM ORGANIZATION

Following this introduction, the remainder of this memorandum is organized as follows:

- **Section 2** highlights the methodology used to arrive at a sight distance.
- **Section 3** describes the existing conditions of study area.
- **Section 4** describes the existing line of sight distances at the proposed driveway location.
- **Section 5** describes mitigation recommendations.
- **Section 6** provides a conclusion based on the findings/analysis described in this memorandum.

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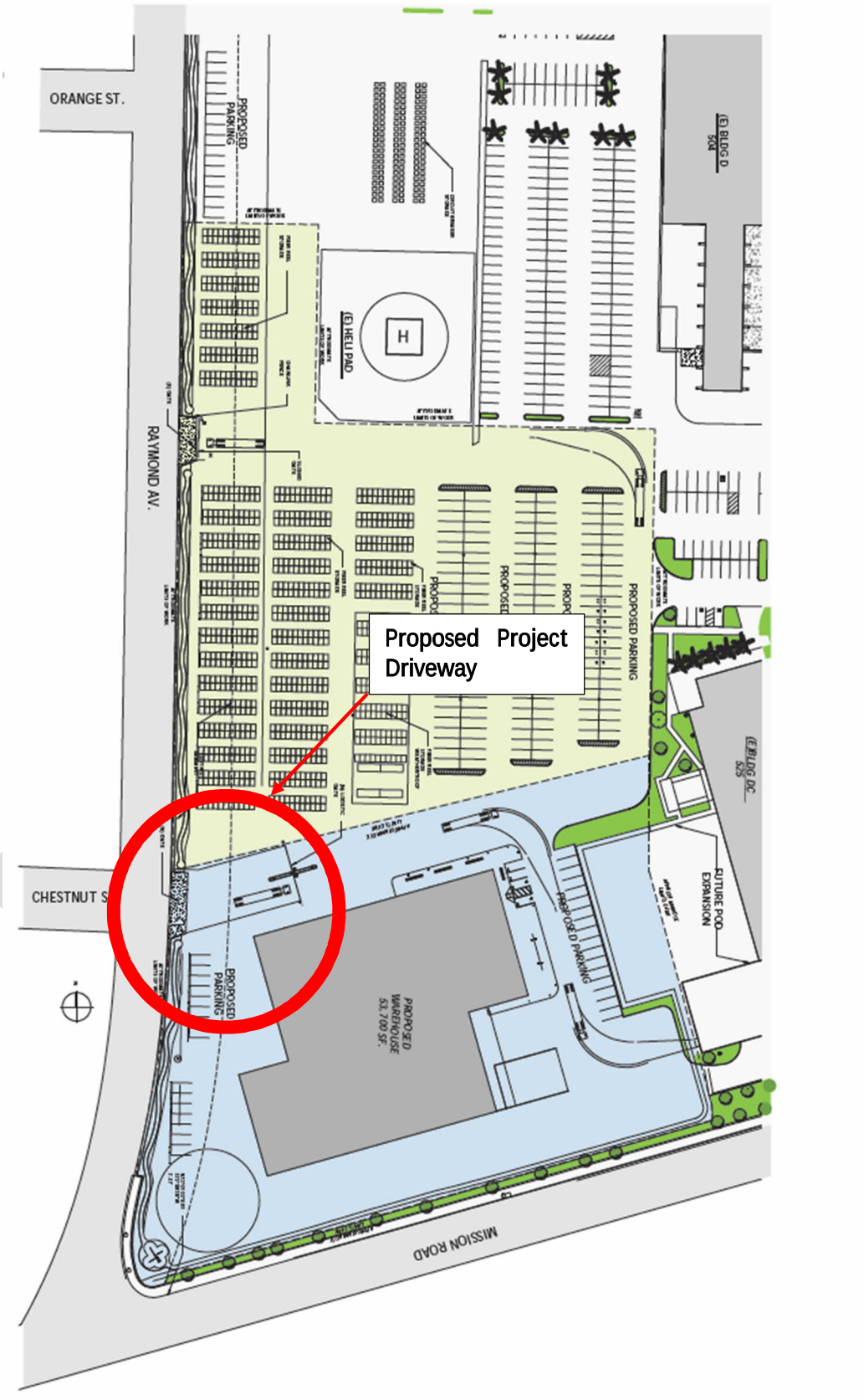
Figure 1.1 Project Driveway Location

Figure 1.2 Site Plan



2. Methodology

Since the proposed project site is located in the City of Alhambra, the Caltrans Highway Design Manual was utilized to evaluate both corner and stopping sight distance.

- Corner Sight Distance - is measured along the direction of travel from a point on the minor road at least 10 feet from the edge of the major road pavement. It is measured from an eye height of 3.5-feet on the minor road to the height of a 4.25-foot tall object on the major road.

- Stopping Sight Distance - is measured from the driver's eye height, which is assumed to be 3.5-feet above the pavement surface, to an object ½-foot high on the road.

- Speed - the roadway design speed is used to determine the minimum sight distance requirement, which shall be the greater than the current prevailing speed (if known) and the minimum design speed of the respective road classification.

The Caltrans Highway Design Manual states that corner and stopping sight distance requirements at all intersections shall conform to the intersection sight distance criteria shown in **Table 2.1** and **Table 2.2**.

Table 2.1

Standard Corner Sight Distance at Intersections

Design Speed (mph)	Minimum Corner Intersection Sight Distance (ft)
25	275
30	**330**
35	385
40	440
45	495
50	550
55	605
60	660
65	715
70	770

Source: Caltrans Highway Design Manual, July 2018

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Table 2.2

Standard Stopping Sight Distance at Intersections

Design Speed (mph)	Minimum Stopping Sight Distance (ft)
10	50
15	100
20	125
25	150
30	**200**
35	250
40	300
45	360
50	430
55	500
60	580
65	660
70	750
75	840
80	930

Source: Caltrans Highway Design Manual, July 2018

3. Project Study Area

The proposed project driveway is to be located directly east of the intersection of South Raymond Avenue and Chestnut Avenue, off of South Raymond Avenue. Both of these roadways are described below:

South Raymond Avenue, between Orange Street and West Mission Road, is a two-lane roadway with no median and has a posted speed limit of 25 miles per hour (MPH). Sidewalks (6-8 feet wide) are present on the west side of the roadway, while on the east side of the roadway the sidewalk ranges between 3 feet and 4 feet in width. Bicycle facilities are not present on either side of the roadway. Parking is generally permitted on both sides of the roadway, except for commercial vehicles. The land uses surrounding the roadway are industrial. Raymond Avenue is classified as a Local Street in the City of Alhambra's General Plan.

Chestnut Street, between Date Avenue and Raymond Avenue, is a two-lane roadway with no median and has a no posted speed limit. Sidewalks are present on both sides of the roadway. Bicycle facilities are not present on either side of the roadway. Parking is generally permitted on both sides of the roadway. Chestnut Street is classified as a Local Street in the City of Alhambra's General Plan.

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4. Field Review and Calculations

An engineering field study was conducted for this site, utilizing the aforementioned methods in Section 2.0, to determine the corner and stopping sight distances. As mentioned previously, South Raymond Avenue is a two-lane roadway with 12-foot wide travel lanes in each direction and a posted speed limit of 25 MPH.

The current site of the proposed driveway has a reduced line of sight due to an existing property fence and permitted parking along the east side of South Raymond Avenue. Therefore, two different points of view were analyzed:

- Sight distance from inside the property – Represents existing conditions of the proposed project driveway; and
- Sight distance from the edge of travel way – Represents the point of view without property fence and parking, which are assumed to be removed with the construction of the proposed project driveway.

However, the sight distances measured from **inside the property** were used to determine whether the proposed project driveway site has adequate sight distance. **Figure 4.3** through **Figure 4.6** display the driver's view from the driveway looking towards the north-south directions along Raymond Avenue, as well as the view of a driver approaching the intersection of South Raymond Avenue and Chestnut Street/Proposed Project Driveway under existing conditions.

Table 4.1 displays the measured sight distance, the design speed, as well as the respective minimum corner and stopping sight distance requirements.

Table 4.1 Sight Distance Analysis Results

Location	Design Speed (mph)[1]	Corner Sight Distance		
		Measured (ft)[2]	Required (ft)	Adequate?
South Raymond Avenue / Proposed Project Driveway / Chestnut Street	30	53 / 26	330	**No / No**
Location	**Design Speed (mph)[1]**	**Stopping Sight Distance**		
		Measured (ft)[2]	Required (ft)	Adequate?
Raymond Avenue / Proposed Project Driveway / Chestnut Street	30	23 / 47	200	**No / No**

Source: Chen Ryan Associates, September 2019.

Notes:

[1] Based on traffic engineering standards assuming posted speed limit is the 85th percentile of design speed. Posted speed limit on South Raymond Avenue is 25 MPH, therefore, the design speed is 30 MPH (25 MPH / 0.85 = 30 MPH).

[2] XX / XX = Looking North / Looking South

As shown in Table 4.1, the analyzed location for the proposed driveway does not meet the line of sight distance requirements. This is due to parked cars as well as the property fence currently located at the site of the proposed project driveway.

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Figure 4.3 South Raymond Ave – Corner Sight Distance Looking North from Inside the Property = 53 feet

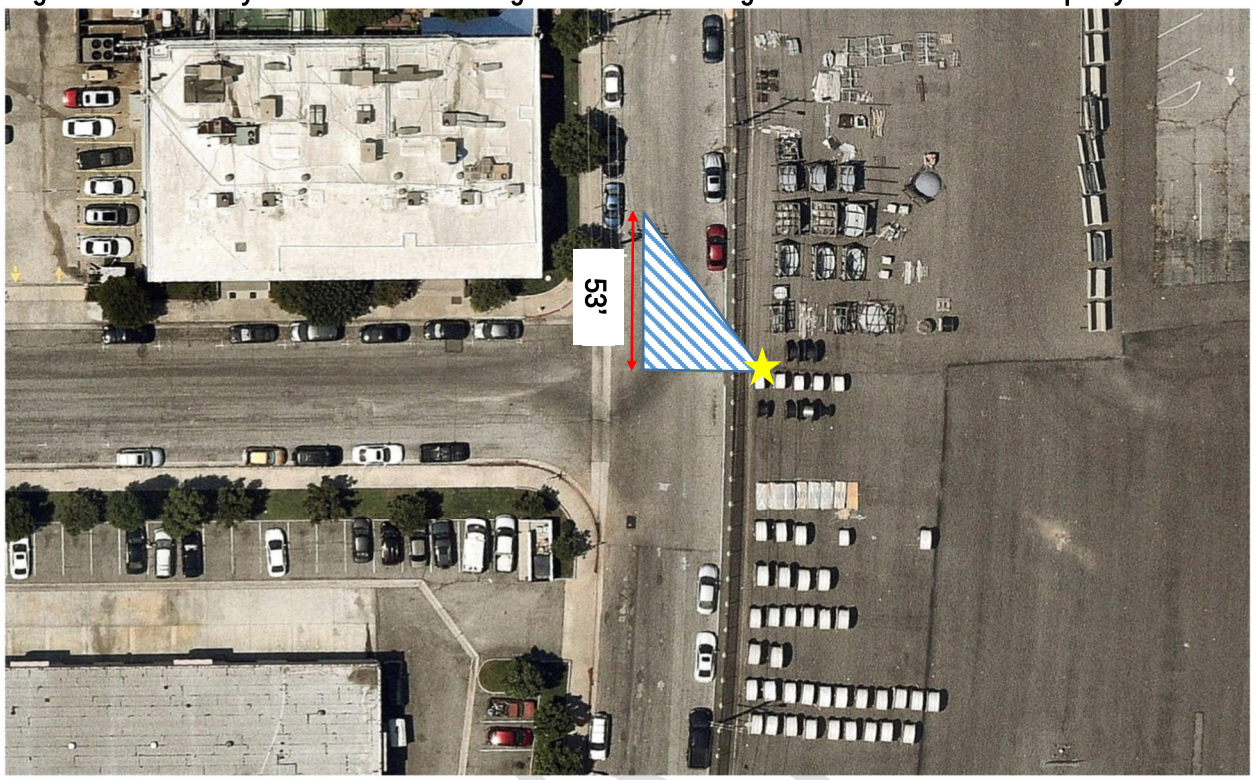


Figure 4.4 South Raymond Ave – Corner Sight Distance Looking South from Inside the Property = 26 feet

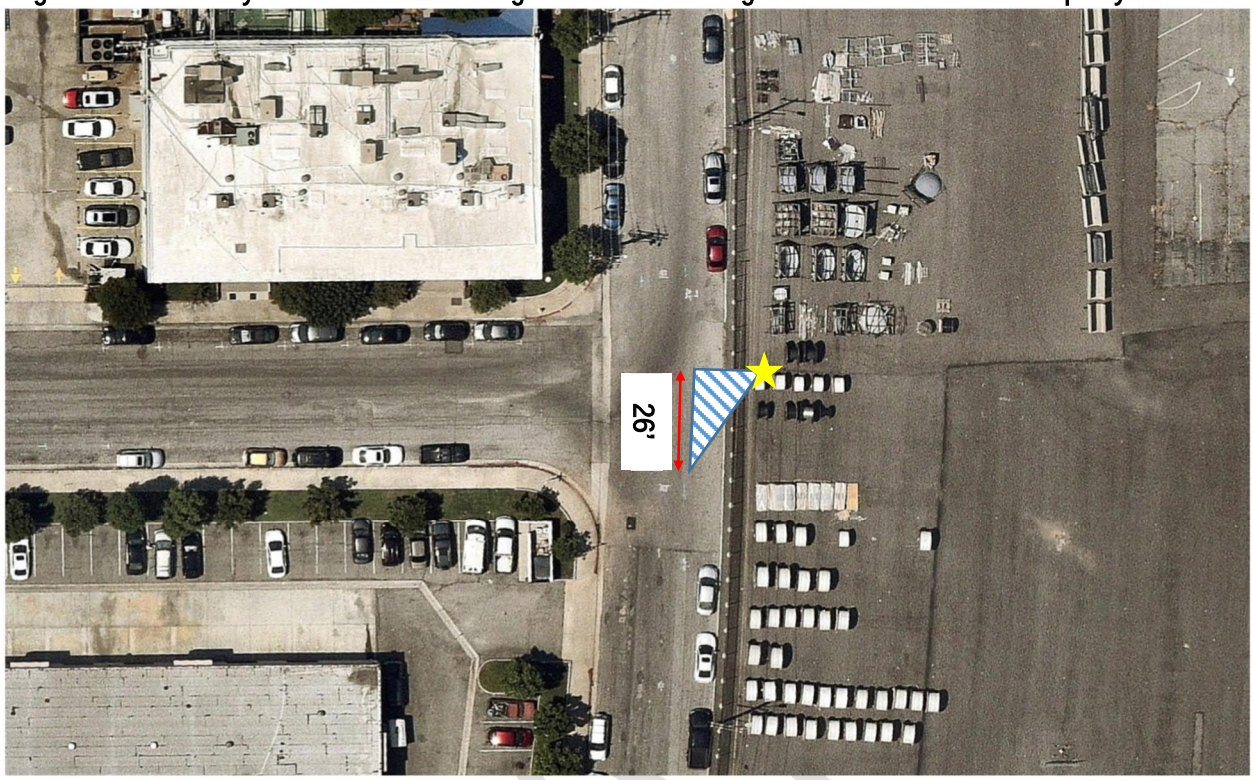


Figure 4.5 South Raymond Ave – Stopping Sight Distance Approaching Driveway from South = 23 feet

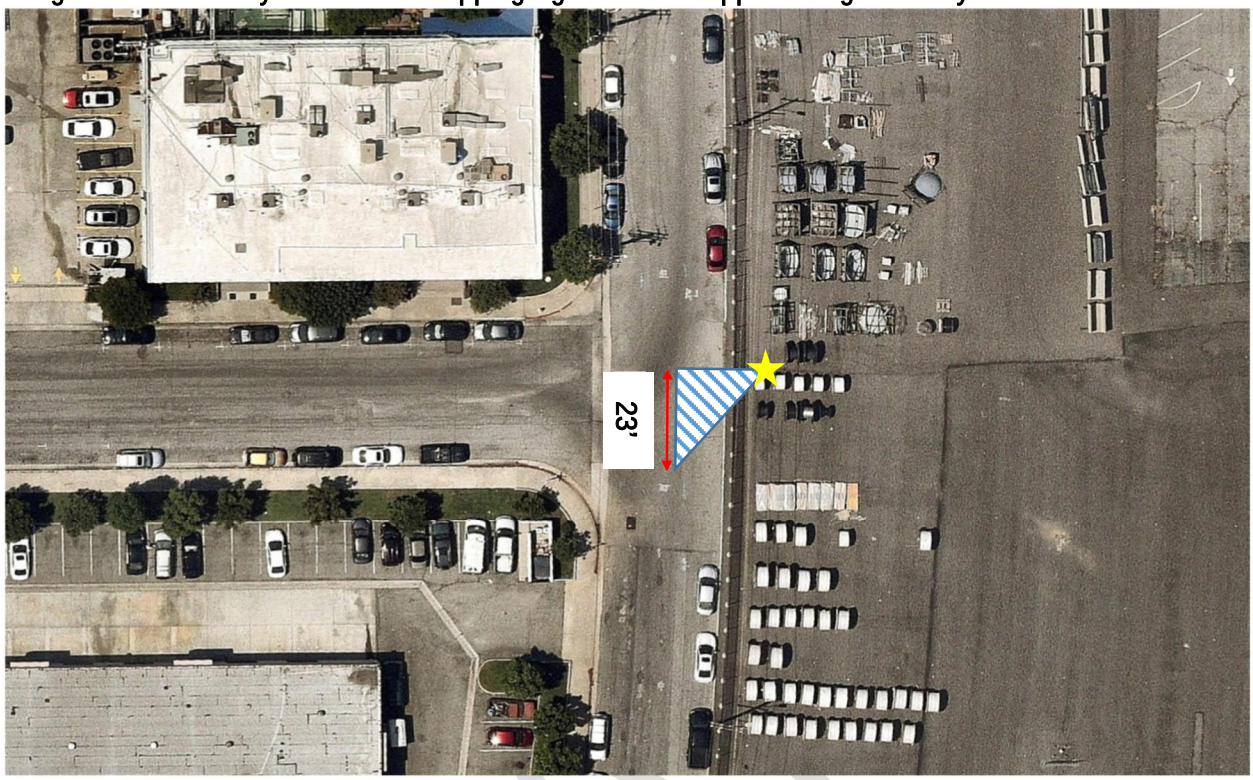
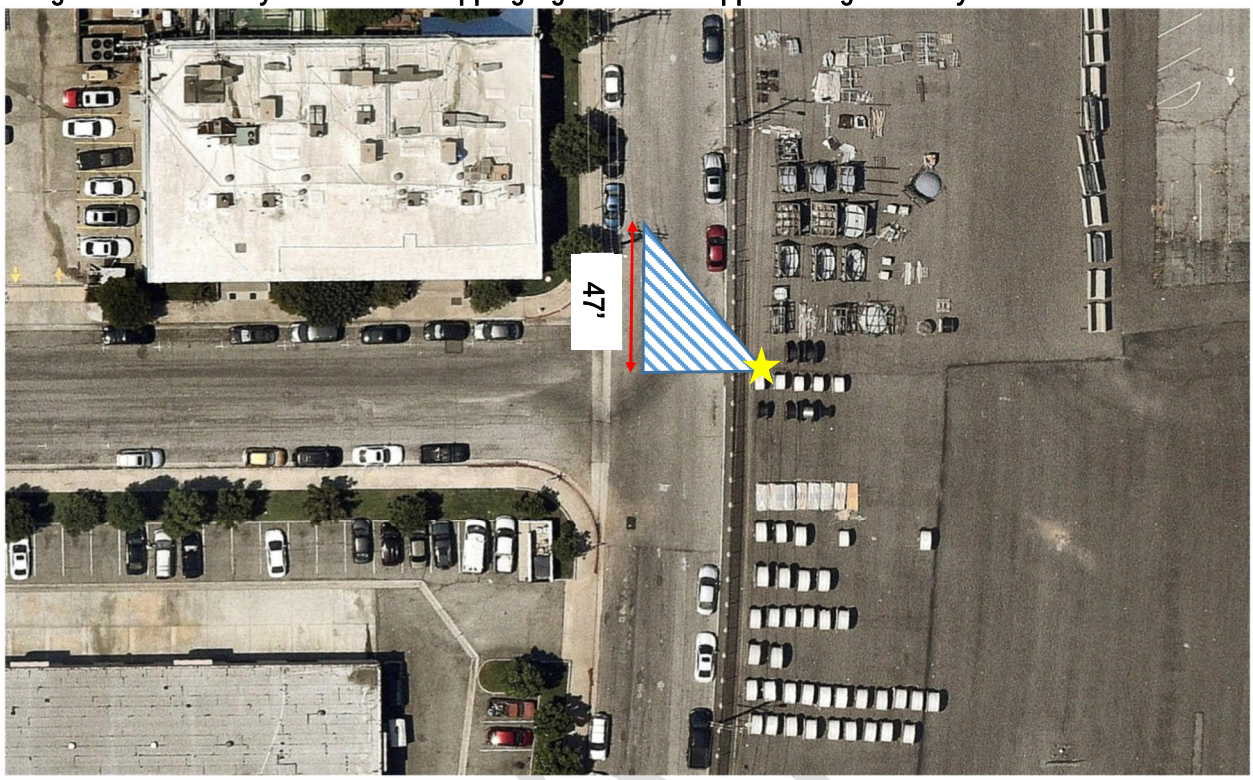


Figure 4.6 South Raymond Ave – Stopping Sight Distance Approaching Driveway from North = 47 feet



5. Mitigation Recommendations

The proposed project driveway does not meet the minimum requirements for corner sight distance nor stopping sight distance. This is due to parked cars as well as the property fence currently located at the site of the proposed project driveway reducing the line of sight. Therefore, it is recommended that parking is prohibited and that the fence as well as any other objects in the line of sight are removed before any traffic activity takes place in the project driveway.

Figure 5.1 through **Figure 5.8** display the minimum corner sight distance and stopping sight distance required, as well as the recommended lengths of on-street parking to prohibit to meet sight distance standards.

The construction of the proposed driveway is anticipated to remove on-street parking at the location of the proposed driveway. Using a standard of 21 feet per parking space, the proposed driveway would remove approximately **3 parking spaces** (60-foot wide driveway). Additionally, to meet the line of sight distance requirements described above, the following measures are recommended:

- Prohibit parking at least 190 feet north of the driveway on the east side of South Raymond Avenue. This would remove approximately **10 parking spaces**.

- Prohibit parking at least 100 feet south of the driveway on the east side of South Raymond Avenue. This would remove approximately **5 parking spaces**.

The proposed driveway would require prohibiting a total of approximately **18 parking spaces** to provide enough space for the driveway and clear line of sight distances. It is important to note that the length of parking to be prohibited was obtained from the **corner sight distance** measurements as these are more conservative.

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Figure 5.1 Required Minimum Corner Sight Distance Looking North from Inside the Property = 300 feet

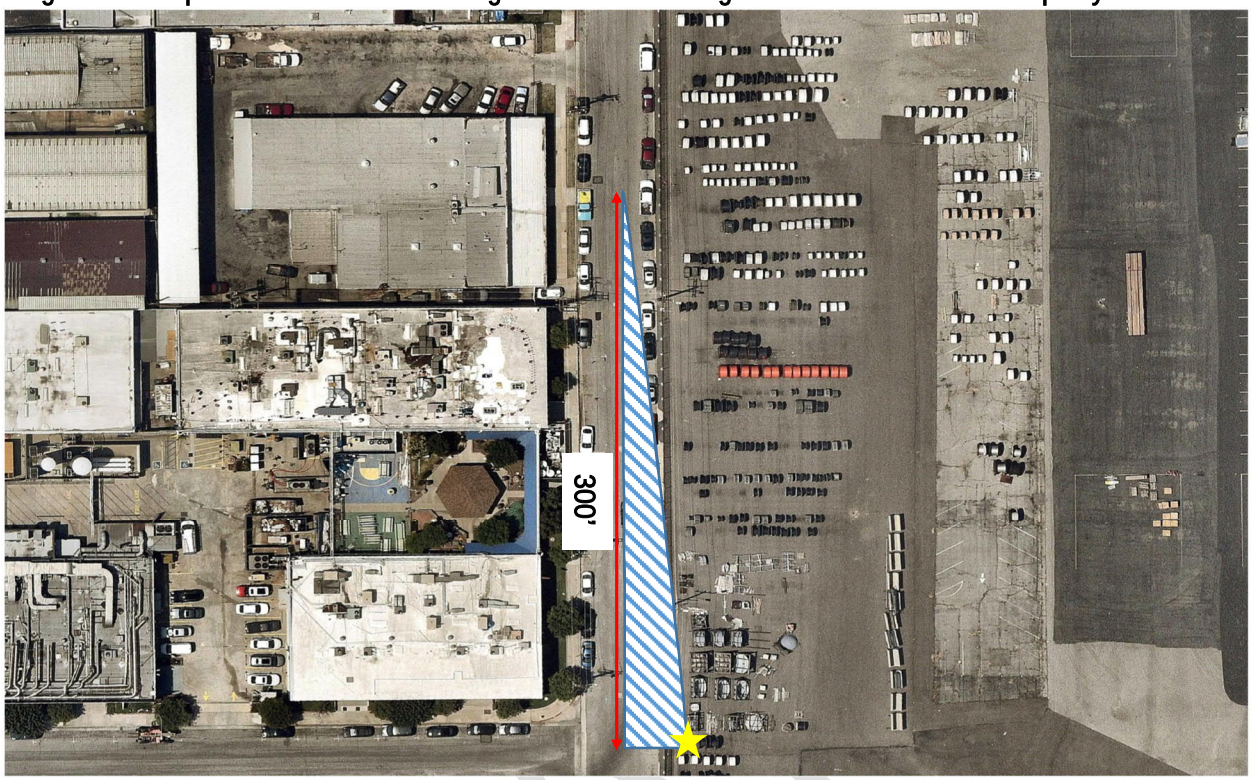

Figure 5.2 Recommended Minimum Length of Parking Prohibition = 190 feet

Figure 5.3 Minimum Corner Sight Distance Looking South from Inside the Property

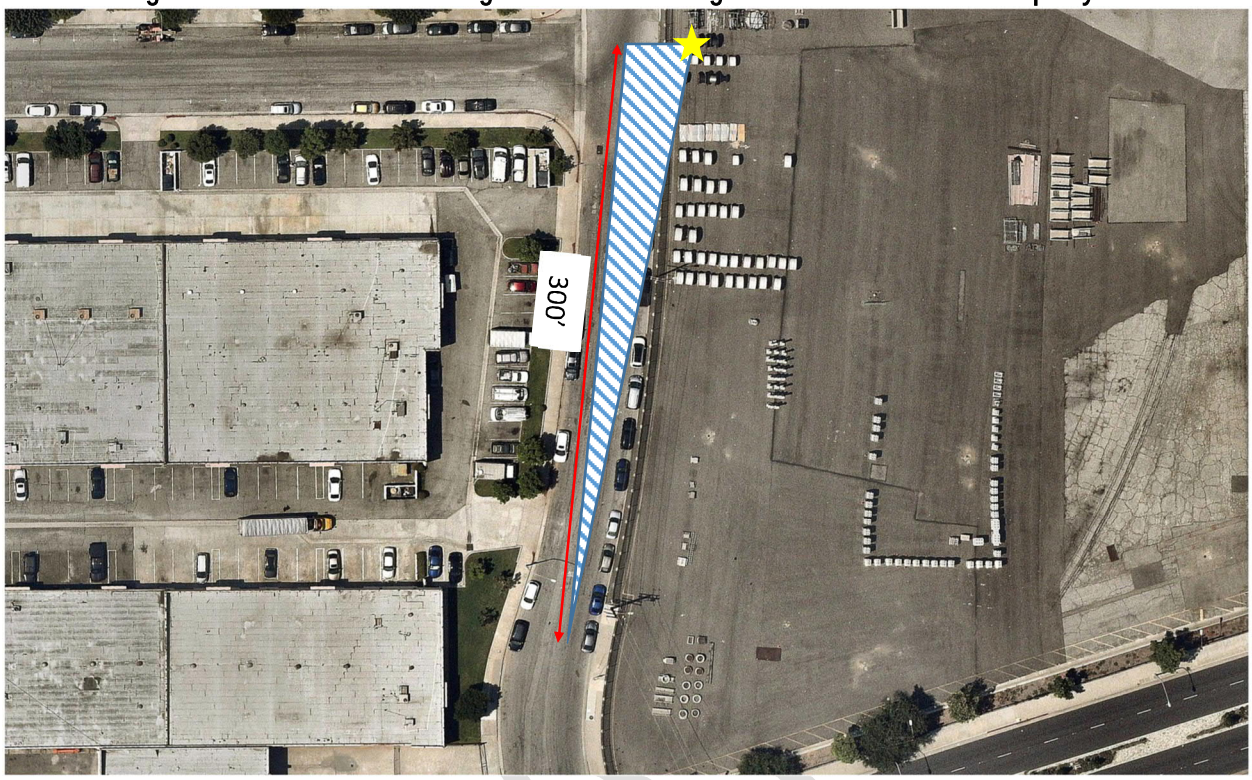

Figure 5.4 Recommended Minimum Length of Parking Prohibition = 100 feet

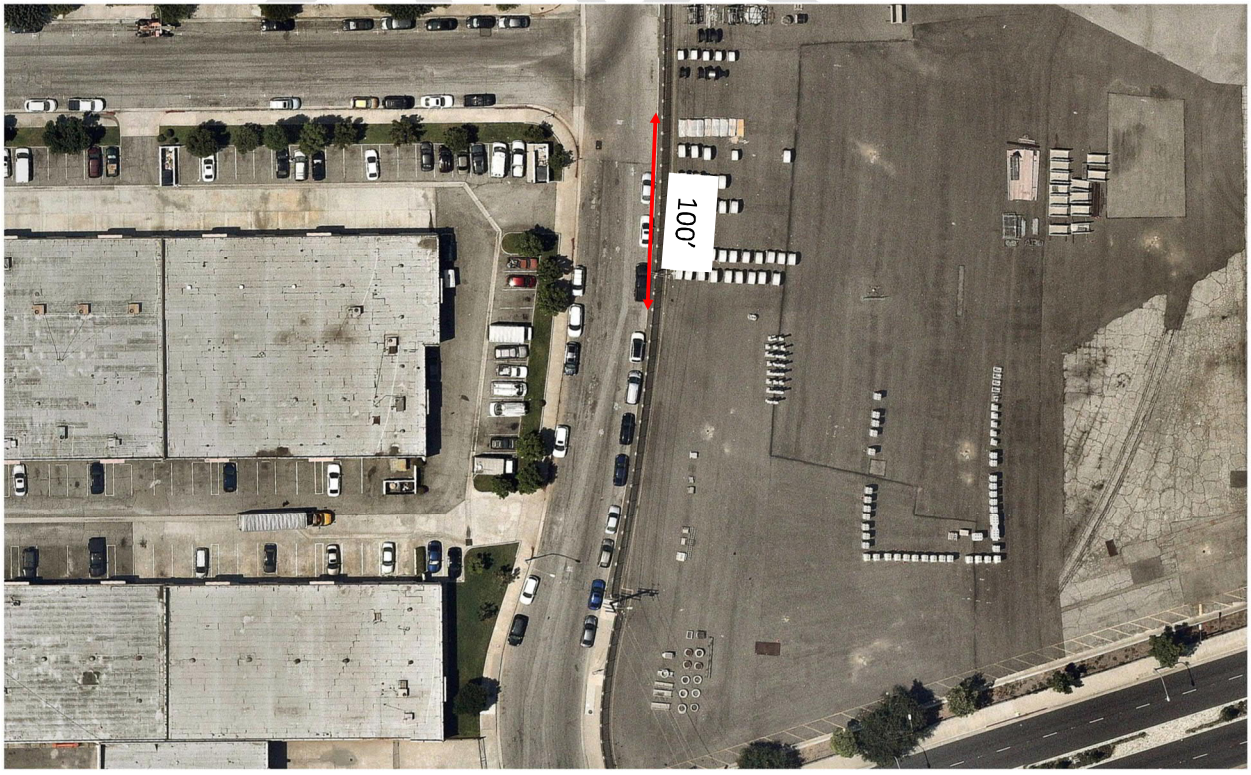

Figure 5.5 Required Minimum Stopping Sight Distance Approaching Driveway from South

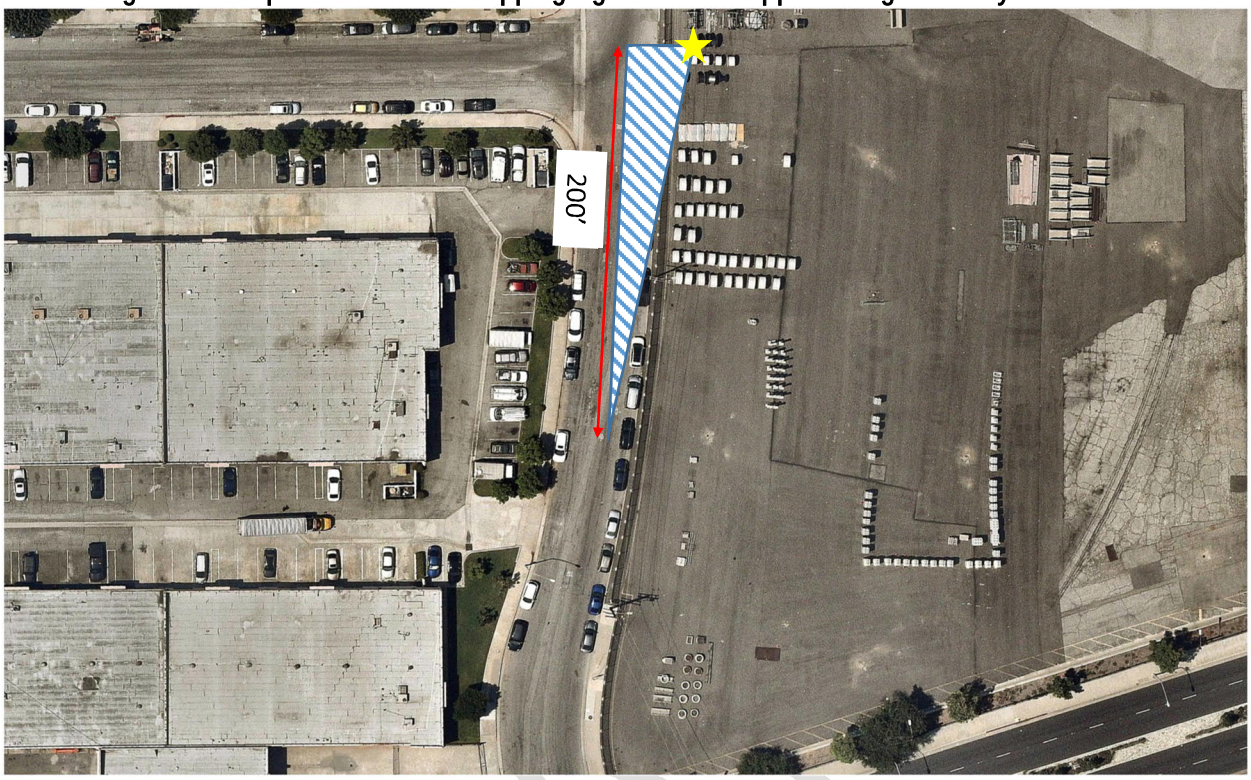

Figure 5.6 Minimum Length of Parking Prohibition = 100 feet

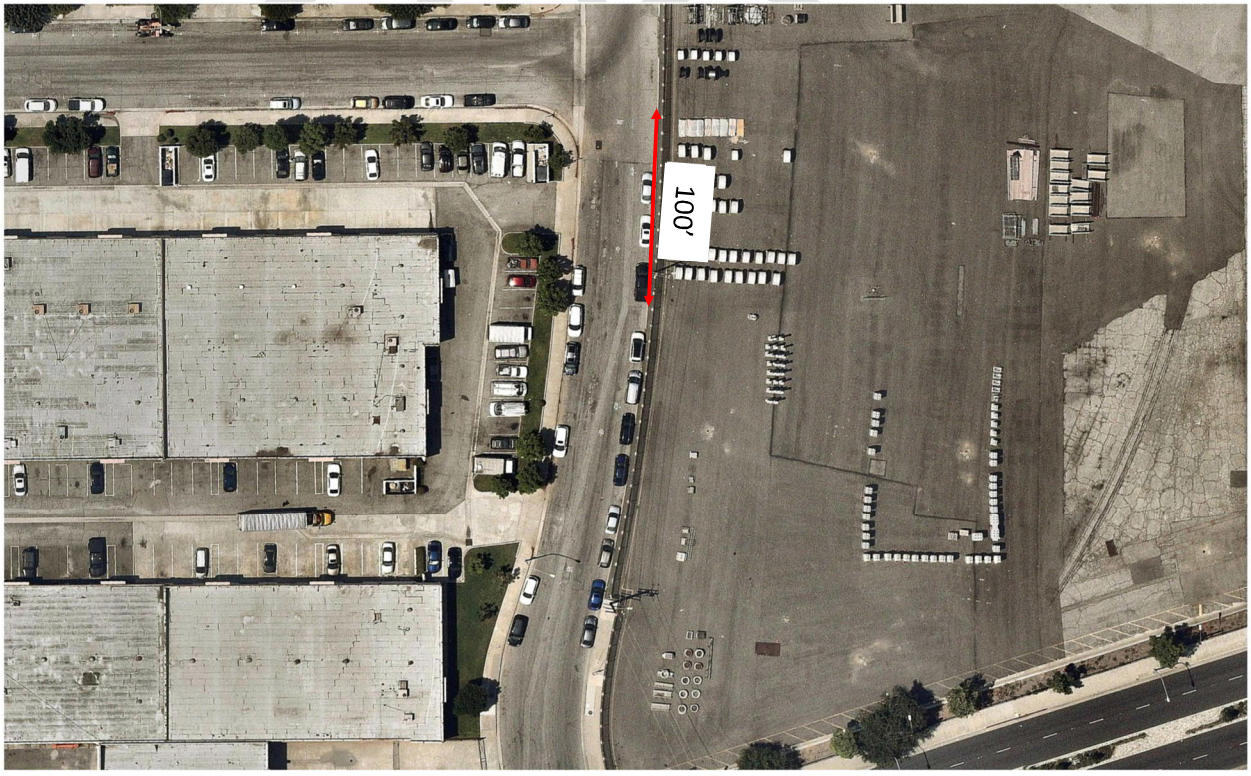

Figure 5.7 Required Minimum Stopping Sight Distance Approaching Driveway from North

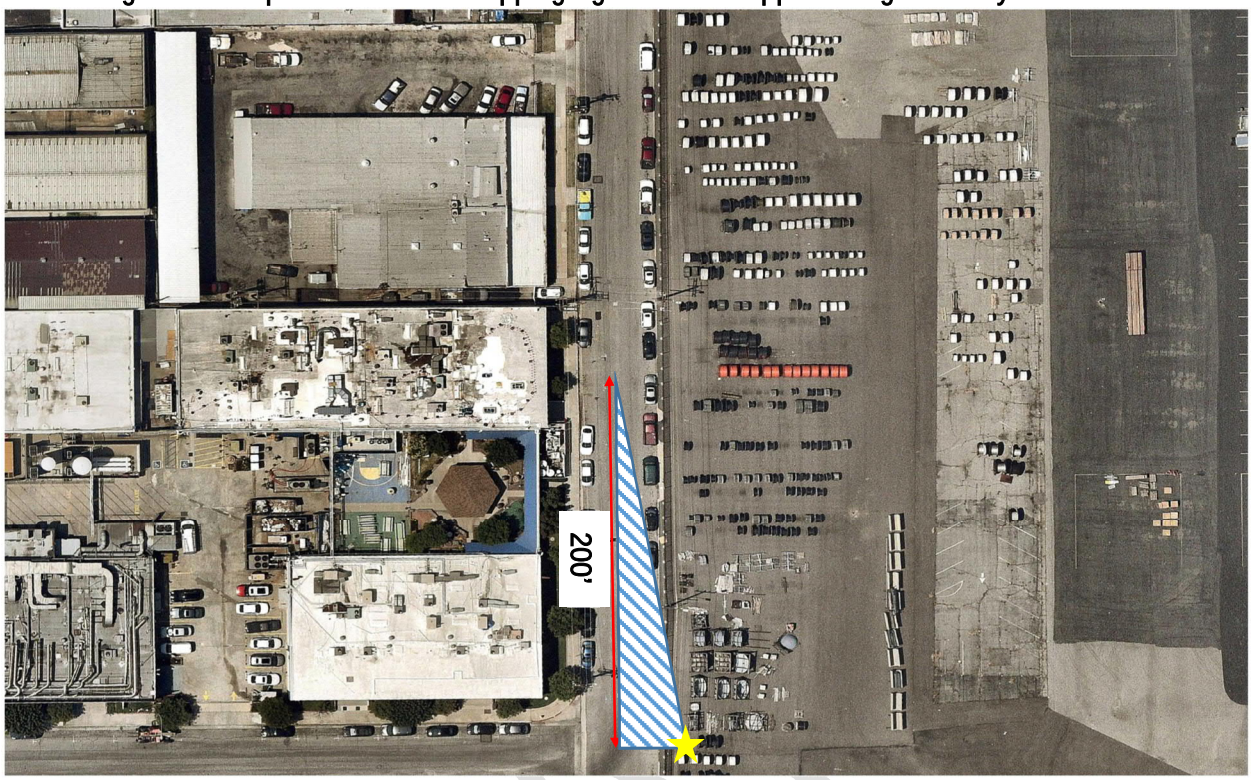

Figure 5.8 Minimum Length of Parking Prohibition = 100 feet

Figure 5.9 through **Figure 5.12** display the anticipated driver's view from the driveway while assuming the recommended mitigation measures (prohibition of parking and removal of obstructions from line of sight) were to be implemented.

Table 5.2 displays the measured sight distance, the design speed, as well as the respective minimum corner and stopping sight distance requirements with the recommended mitigation measures.

Table 5.2 Sight Distance Analysis Results – With Mitigation Measures

Location	Design Speed (mph)[1]	Corner Sight Distance		
		Measured (ft)[2]	Required (ft)	Adequate?
South Raymond Avenue / Proposed Project Driveway / Chestnut Street	30	400 / 367	330	**Yes / Yes**
Location	**Design Speed (mph)[1]**	**Stopping Sight Distance**		
		Measured (ft)[2]	Required (ft)	Adequate?
South Raymond Avenue / Proposed Project Driveway / Chestnut Street	30	400 / 365	200	**Yes / Yes**

Source: Chen Ryan Associates, September 2019.

Notes:

[1] Based on traffic engineering standards assuming posted speed limit is the 85th percentile of design speed. Posted speed limit on South Raymond Avenue is 25 MPH, therefore, the design speed is 30 MPH (25 MPH / 0.85 = 30 MPH).

[2] XX / XX = Looking North / Looking South

As shown in Table 5.2, the proposed project driveway would meet the required minimum corner sight distance and stopping sight distance with implementation of the recommended mitigation measures.

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Figure 5.9 South Raymond Ave–Corner Sight Distance Looking North from Edge of Travel Way = 400 feet

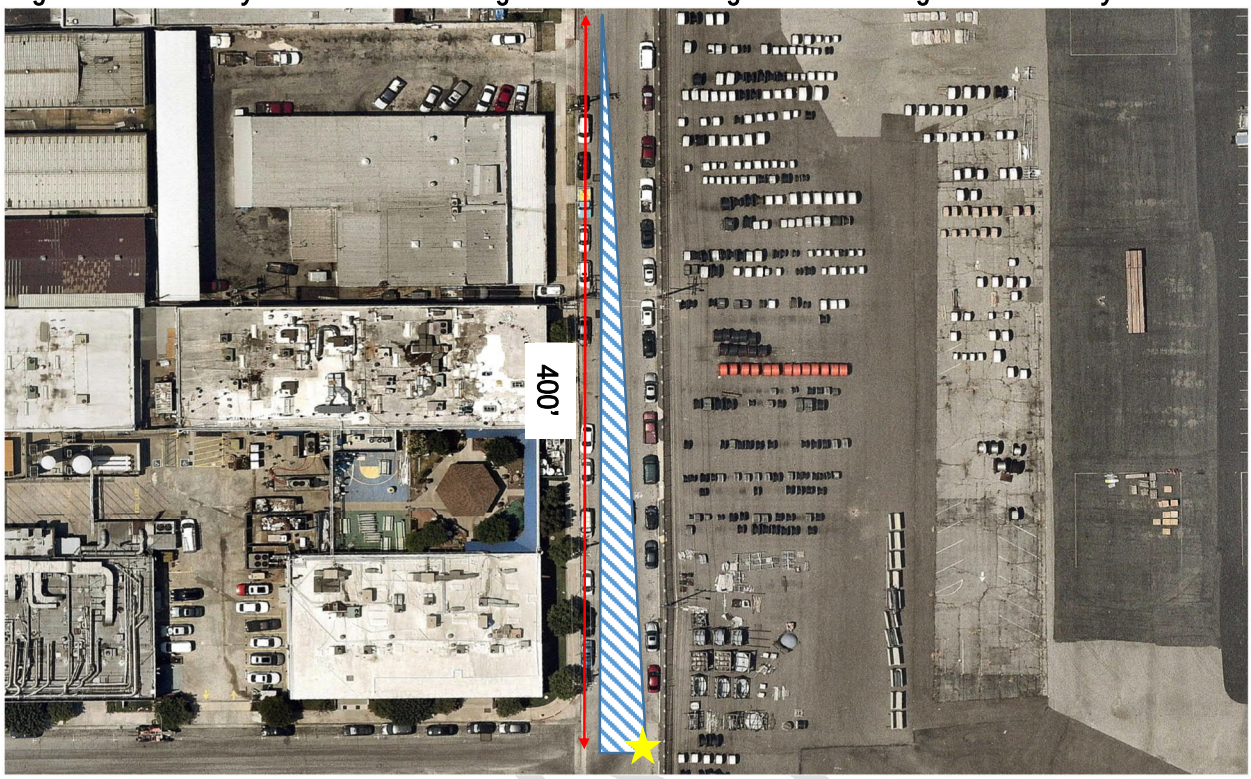


Figure 5.10 South Raymond Ave–Corner Sight Distance Looking South from Edge of Travel Way = 367 feet

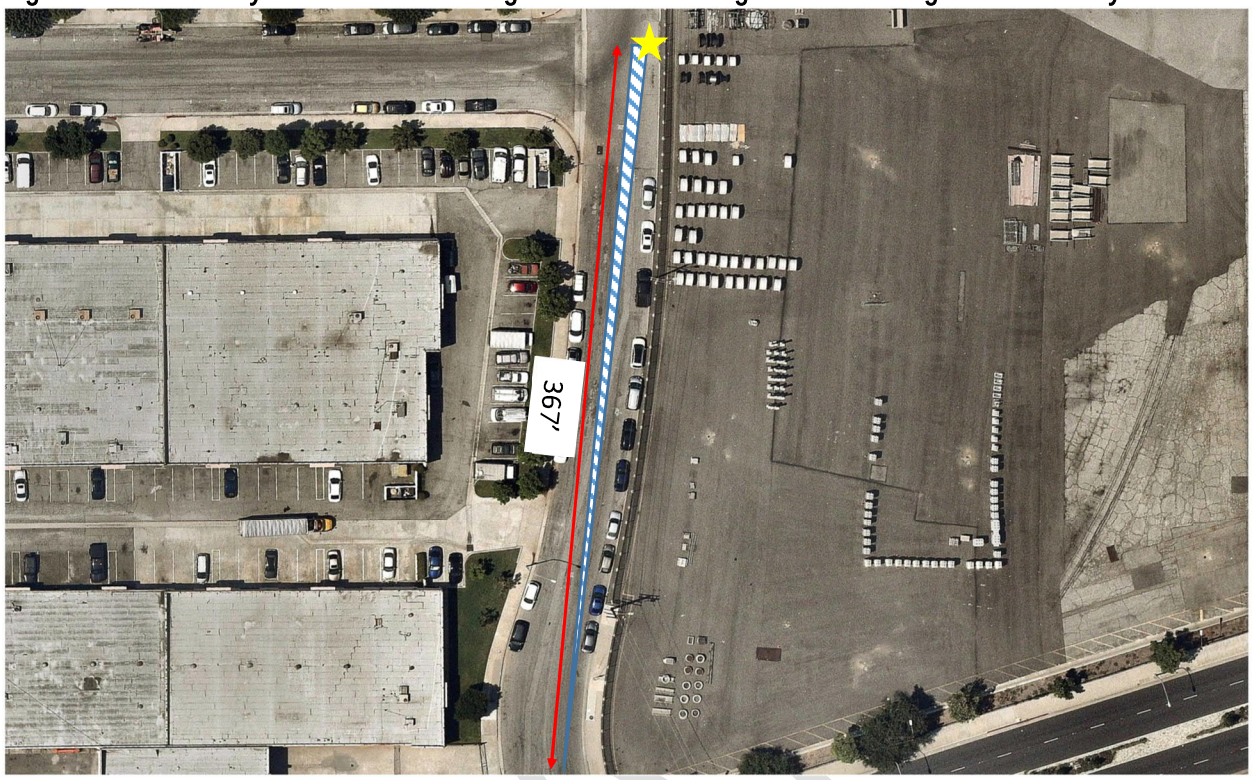


Figure 5.11 South Raymond Ave – Stopping Sight Distance Approaching Driveway from South = 365 feet

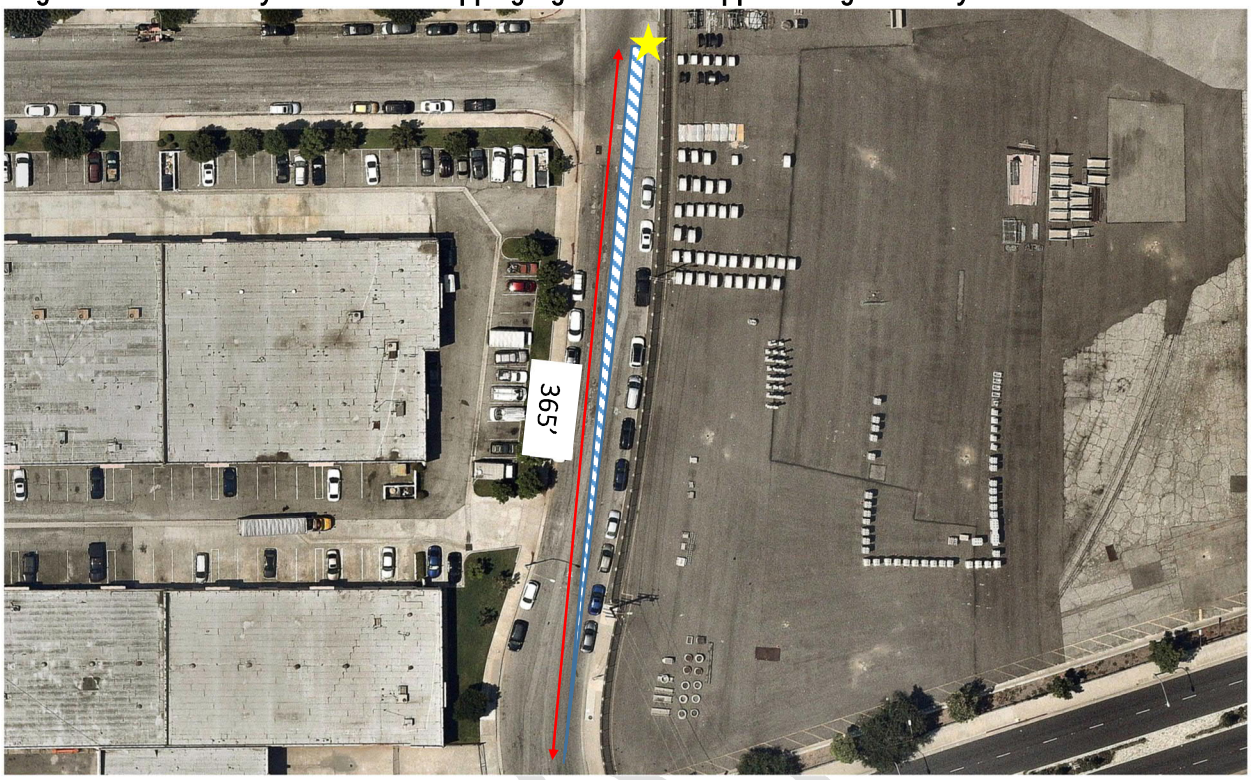
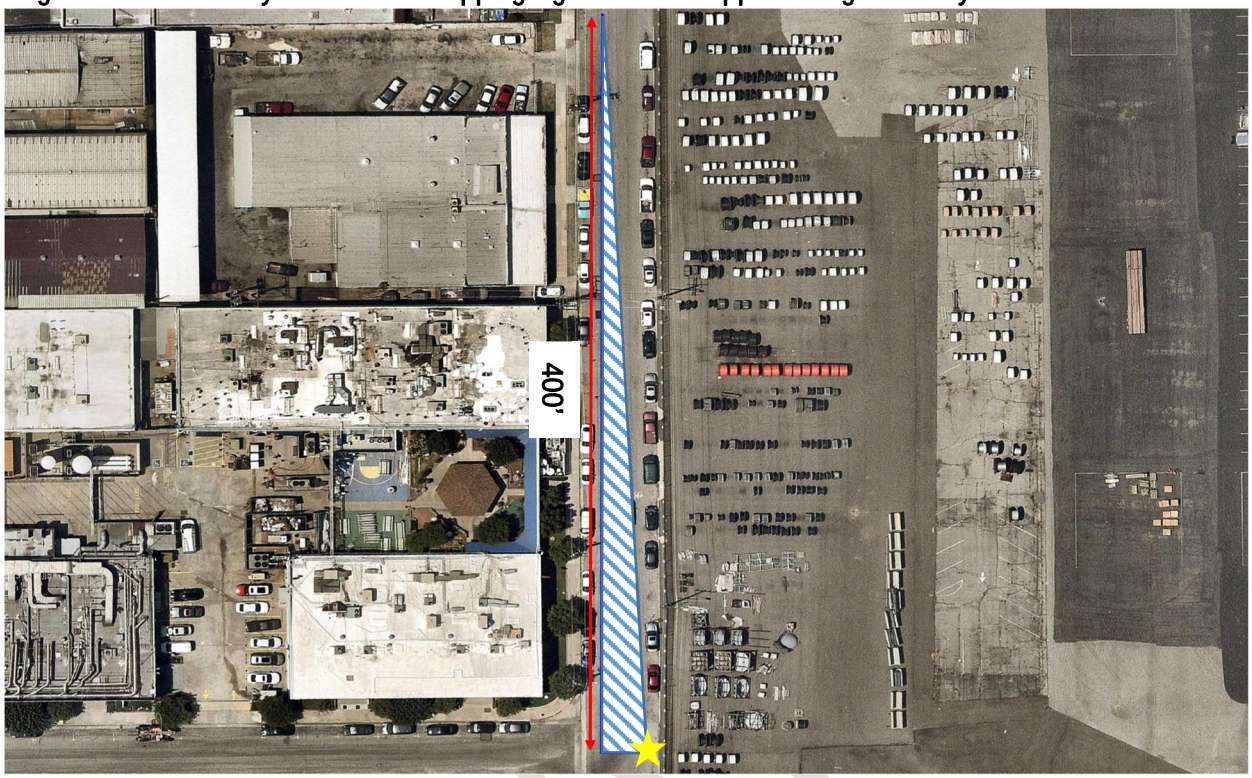


Figure 5.12 South Raymond Ave – Stopping Sight Distance Approaching Driveway from North = 400 feet



6. Conclusion

Currently, the proposed project driveway site does not meet with the minimum corner sight distance and stopping sight distance requirements per Caltrans Highway Design Manual. This is due to parked cars as well as the property fence currently located at the site of the proposed project driveway reducing the line of sight. However, prohibiting parking (removal of a total of 18 parking spaces), removing the existing property fence as well as clearing any other objects in the line of sight before any traffic activity takes place in the project driveway will allow for adequate sight distance at the proposed driveway site.

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