CARCOM CENTER PROJECT
2403 EAST 223RD STREET

Initial Study / Mitigated Negative Declaration for Compliance with the California Environmental Quality Act

Prepared for
City of Carson
Community Development Department
701 E. Carson Street
Carson, CA 90745

October 23, 2018

Prepared by
Environmental Science Associates

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Project Description

Project Overview

The Carcom Center Project (proposed project) includes the development a 220,000-square-foot four-story tilt-up concrete building on a 3.70-acre vacant lot. Carcom Center intends to build a leading Cannabis Manufacturing, Distribution, and Testing Center for cannabis in the State of California based in Carson, CA. The facilities inside the building are to be primarily based around the commercial kitchen and beverage bottling with packaging, storage, and production areas inside. The project applicant proposes to develop: (1) manufacturing facilities that produce, prepare, propagate, or compound manufactured cannabis products, either directly or indirectly or by extraction methods, or independently by means of chemical synthesis or by a combination of extraction and chemical synthesis, package or repackage cannabis products, label or relabel its container, or transform cannabis into a concentrate, an edible product, a beverage, or a topical product, (2) small-scale cultivation for nursery or research and development purposes, (3) warehousing, transportation, and distribution and delivery of the latter; (4) laboratory testing and compliance operation, (5) any other use permitted by City law, whether cannabis-related or not. Storage areas for oils and extracts will be in the vault prior to production. Work in progress will be secured and stored in the manufacturing area at the end of each day. Finished goods will be stored in the packaging area prior to delivery.

Project Location and Setting

The project site is currently a vacant lot with a paved area on the northern portion of the site, a stand of eucalyptus trees on the west, and bare soil, grass, and low-lying vegetation on the remaining portions of the site. The proposed project involves the development of a 220,000-square-foot four-story building on an undeveloped parcel located at 2403 E 223rd Street in the City of Carson (APN 7315012900, 7315012804). The city of Carson is located in the central portion of southern Los Angeles County, approximately 10 miles south of downtown Los Angeles and 3 miles north of the Ports of Los Angeles and Long Beach (**Figure 1**, Regional Location). The proposed project is served by a network of regional transportation facilities providing connectively to the large metropolitan area.

As shown in **Figure 2**, Aerial View of the Project Site and Vicinity, the proposed project is located in a highly urbanized area surrounded by a mixture of land uses, including commercial, warehouse, and light industrial. The proposed project is located south of Interstate 405 (I-405), east of the Alameda Corridor (railroad corridor), east of East 223rd Street (Figure 2).

SOURCE: ESRI

Carcom Center Project

Figure 1
Regional Location

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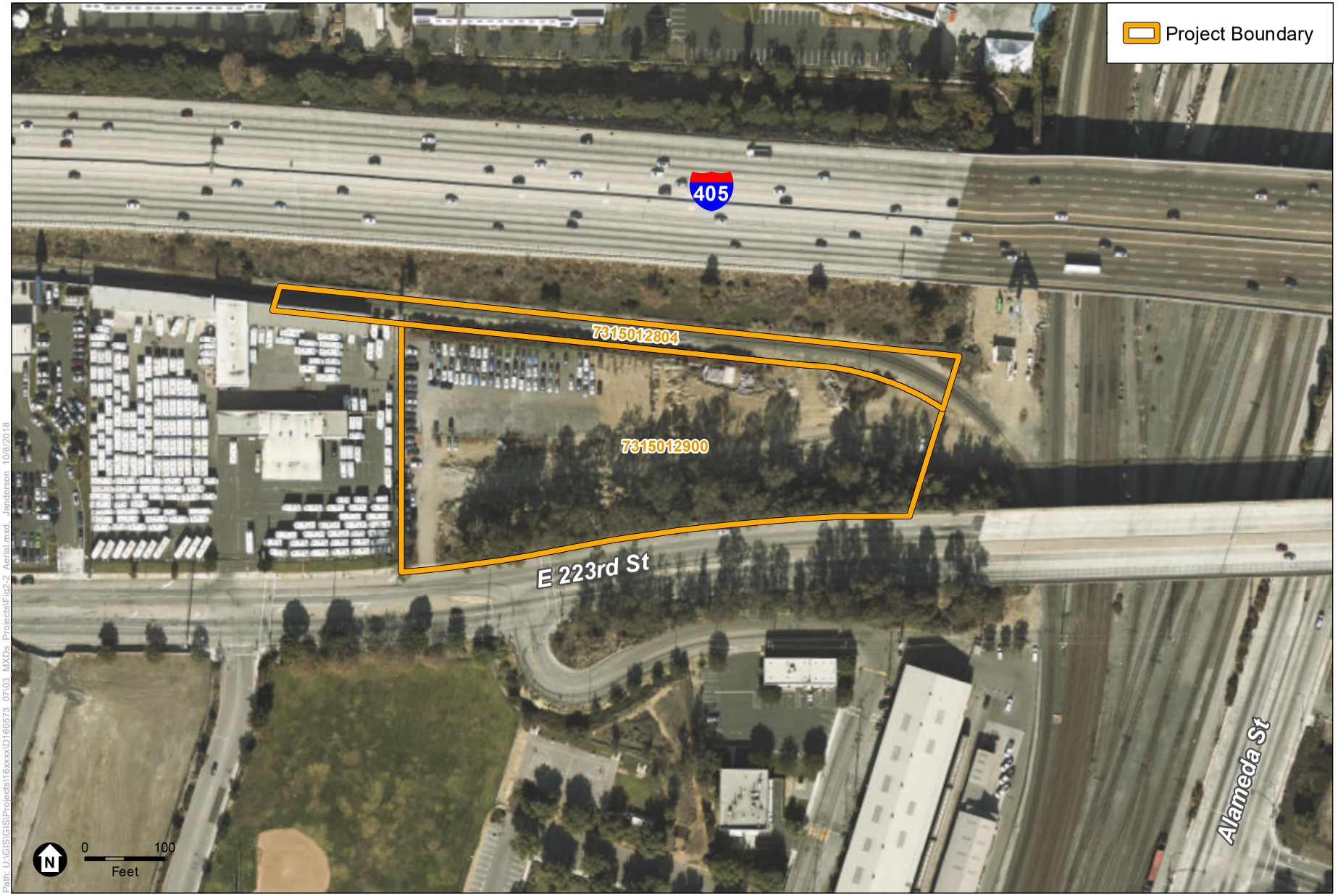


SOURCE: ESRI

Carcom Center Project

Figure 2

Aerial View of Project Site and Vicinity

ESA

The site was previously used as a parking lot and storage yard and now contains the paved surface (no cars) and a row of eucalyptus trees on the westerly most portion of the site. With the exception of the row of trees, the entire site appears to have been previously graded and partially paved. Surrounding land uses include major transportation corridors, the Alameda Corridor and I-405 and commercial/industrial development (Figure 2).

According to the City's General Plan, Land Use Plan, the project site is designated as Regional Commercial. The "Regional Commercial" category includes uses intended to serve a broad population base and offer a wide range of services to both the community and the region. Businesses in this designation include major department stores, specialty shops, other retail and service uses, automobile and other vehicle dealerships, and hotels and motels. Regional Commercial is intended to provide for the City's primary regional shopping center and its peripheral areas. Although the maximum allowable floor area ratio (FAR) is 0.6, the average FAR that will ultimately be built out for this land use is expected to be approximately 0.32. The existing zoning on the project site is Commercial Automotive; the project would require a zone text amendment to be consistent with the cannabis ordinance with a designation of CA. Regional Commercial is primarily for the full range of industrial uses that are acceptable within the community as a whole, with provisions for controlling any adverse effects upon the more sensitive areas of the City.

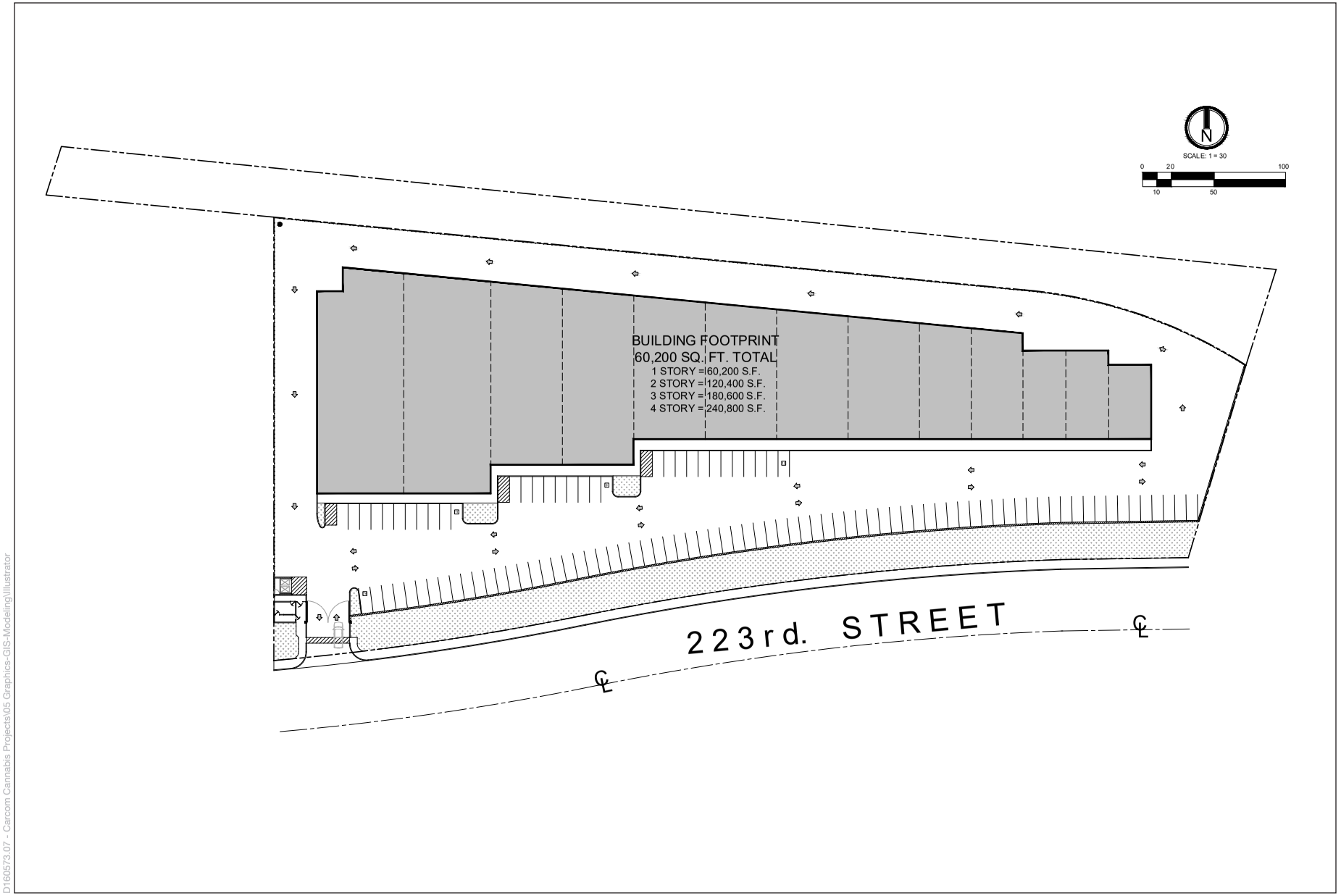
There is a row of existing trees located on the west side of the project site. The trees are located on a berm, within an easement owned by Watson Land. The trees would remain in place and would be subject to Migratory Bird Treaty Act (MBTA) mitigation during construction activities.

Proposed Project

The project site is a semi-triangular shaped vacant lot paved in the northern portion, a stand of eucalyptus trees on the west and is covered with bare soil, grass, and low-lying vegetation on the remaining portions of the site. The site is currently not publically accessible and is enclosed by perimeter fencing.

The proposed project includes the development of a 220,000-square-foot commercial/industrial/ manufacturing building. The project would be either three or four stories with floors one and two used for light industrial manufacturing, distribution, delivery or testing and the third and fourth floors for office use and possibly limited nursery cultivation and research. The footprint for the building will be approximately 60,000 square feet per floor (**Figure 3**, Site Plan and **Figure 4**, Conceptual Plot Plan). The proposed project would maintain a refrigeration area(s). The proposed project would also contain up to 15 ovens and would use and store carbon dioxide (CO_2,) butane, and propane for preparing and processing the product.

The proposed project initially would employ up to 50 employees. It is anticipated the hours of operation for the project would be 24 hour operations as manufacturing and processing can be done outside of standard business hours. Based on statewide manufacturing and distribution



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SOURCE: MO+RE Design Solutions, 2018

Carcom Center Project

Figure 3
Site Plan

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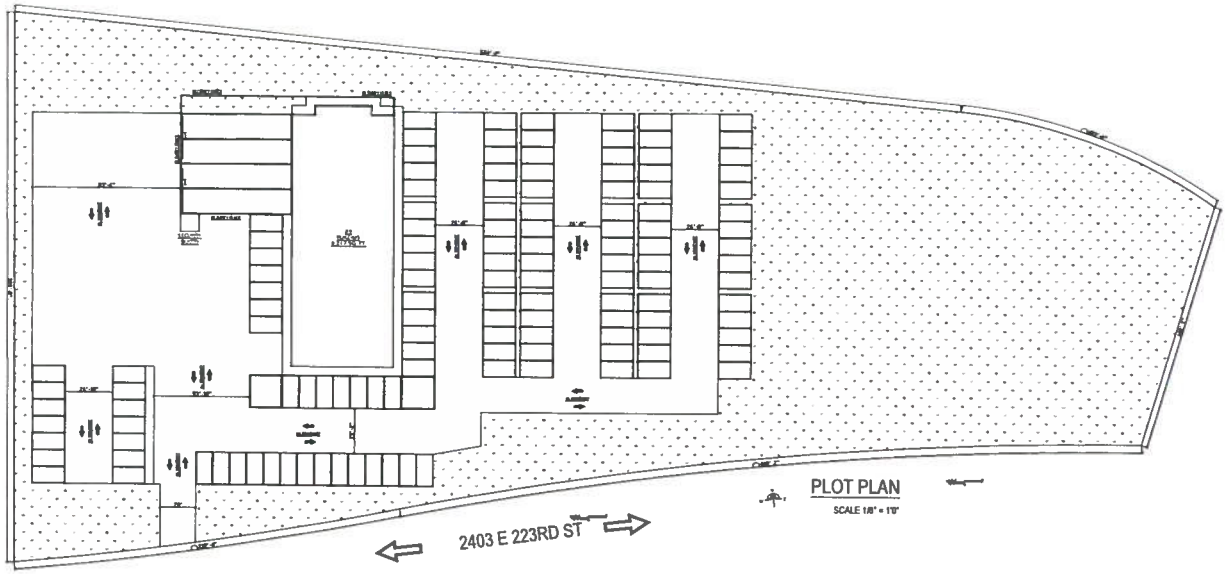

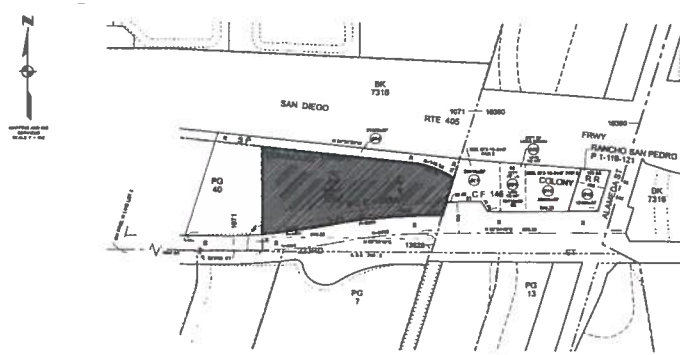

PLOT PLAN

SCALE 1/8" = 1'0"

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SOURCE: Architectural Drafting and Design SEGA, 2018

Carcom Center Project

Figure 4
Conceptual Plot Plan

ESA

employment numbers in the industry, the center expects approximately 1 employee per 1,000 square feet upon full occupancy or 220 employees. Additionally, 10 delivery trips on to the site are expected daily and

50 number of delivery trips are expected off-site daily. Deliveries and pickup of products would be scheduled whenever possible before or after normal hours.

Possible operations at the proposed project would include cannabis cultivation, harvesting, drying, packaging, and production of cannabis products through extraction and infusion manufacturing practices. These products would be distributed to licensed facilities and dispensaries eligible to receive such products, in compliance with California and the City of Carson laws and regulations.

The proposed project could include the following uses:

- Commercial kitchen and food manufacturing for cannabis infused edibles products.
- Beverage manufacturing and bottling
- Small scale cultivation nursery (200 square feet with 200 plants in various stages of growth)
- Tinctures, oils and vape products
- THC and CBD Oil Extraction (volatile and non-volatile)
- Van-based delivery service to location
- Warehousing and Distribution (including co-pack and pick, pack and ship)
- Secure exchange facility for input delivery

Access to the project site would be from one driveway (ingress and egress) accessible from East 223rd Street. The driveway would provide access to 110 parking spaces for employees and 15 spaces for delivery vehicles. The Applicant intends for the site to maintain the existing row of trees along East 223rd and would also provide landscaping treatment throughout the site. The entire property will be highly secure with 24-hour manned security and check in point at the gated entry. No public access and no retail component, so daily trips in and out of the facility will be restricted to authorized users.

The Applicant intends to use solar and other green building features wherever feasible.

Construction Activities

Project construction would include site preparation, grading, trenching, hauling of excavated soil, paving, and building construction. The development is anticipated to occur over 6 to 8 months, and construction is scheduled to begin in December 2018. Project construction and equipment installation is anticipated to occur from 7:00 AM to 6:00 PM. Monday through Saturday beginning in December 2018 and ending in June 2019. No substantial soil excavation and export is anticipated with the proposed project.

Discretionary Approvals Required

The City of Carson is the lead agency under the California Environmental Quality Act (CEQA) and is responsible for the permitting of the proposed project.

The proposed project would be subject to the City of Carson, Ordinance No. 17-1637, which contains conditions necessary for a Commercial Cannabis Operation Permit that includes requirements for operational hours, an odor control plan, a detailed security plan, and a fire safety plan.

In order for the proposed project to be approved and in compliance with the City's Municipal Code, the Applicant would be required to obtain the following approvals:

- A Development Agreement (Planning Commission and City Council);
- A Zone Text Amendment to allow cannabis uses subject to a Development Agreement pursuant to Ordinance No. 17-1637 (Planning Commission and City Council);
- Approval or adoption of the Mitigated Negative Declaration (Planning Commission and City Council);
- A Variance on parking and setbacks subject to Site Plan review (Administrative);
- A Conditional Use Permit to determine the required number of parking spaces based on demand (Administrative);
- A Site Plan and Design review (Administrative);
- Issuance of Grading, building, electrical, mechanical. Plumbing permits to construct the project (Administrative);
- Issuance of Certificate of Occupancy following the construction and prior to occupancy of the site (Administrative);
- A Tree removal permit (Administrative);
- Issuance of a Business License to operate various cannabis businesses (Administrative).

ENVIRONMENTAL CHECKLIST

Initial Study

1. Project Title:	Carcom Center Project
2. Lead Agency Name and Address:	City of Carson Community Development Department 701 E. Carson Street Carson, CA 90745
3. Contact Person and Phone Number:	Ethan Edwards, Senior Planner (310) 952-1761
4. Project Location:	2403 E 223rd Street
5. Project Sponsor's Name and Address:	California Processing Co. LLC 16501 Ventura Boulevard, Ste 400 Encino, CA 91436
6. General Plan Designation(s):	Regional Commercial
7. Zoning:	Commercial Automotive
8. Description of Project:	Cannabis Manufacturing, Distribution and Testing Center
9. Surrounding Land Uses and Setting:	North: Interstate 405 (I-405) South: East 223rd Street East: Alameda Street West: Commercial, Warehouse and Light Industrial uses
10. Other Public Agencies Whose Approval is Required	Undetermined

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial study:

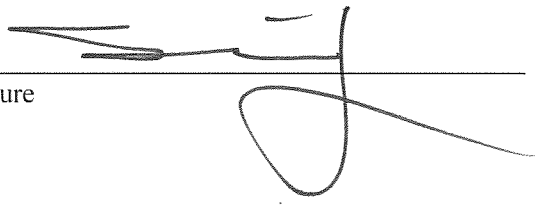
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent and/or the proposed mitigation measures reduce all potentially significant impact to less than significant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

10-18-18

Date

Environmental Checklist

Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS — Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

a) **Less than Significant-Impact.** Project implementation would result in a significant impact if the proposed action developed structures that permanently obstruct or are visually incompatible with a scenic vista. Scenic vistas are panoramic views of features such as mountains, forests, the ocean, or urban skylines.

The existing visual setting of the project area is characterized by a mix of urban uses and the major transportation corridor of the I-405 Freeway approximately 100 feet to the north. The baseball field and street trees located to the south of the project site offers some visual relief from the dense urban and industrial uses.

The proposed project would develop a 3.70-acre vacant lot with a 220,000-square-foot three- to four-story tilt-up concrete building of cultivation and manufacturing facilities within an urbanized area. Because the proposed project would be built on a vacant site enclosed by fencing, the project site itself is not considered a scenic resource. Potential views of scenic resources from the project site include the Palos Verdes Mountains to the south and San Gabriel Mountains to the north. However, due to the distance, intervening development, and the elevated 405 Freeway to the north and East 223rd Street to the south, views of the Palos Verdes and San Gabrielle Mountains in the area are limited. Given the height of the trees located south of the project site, views of the Palos Verdes Mountains are particularly limited.

There are two main public views onto the project site: from the I-405 looking south, from East 223rd Street looking northeast, and from East 223rd looking southeast. Due to the I-405's slight elevation, the project site would be visible from the freeway. However, the scenic vistas from the I-405 looking south onto the Palos Verdes Mountains are partially blocked by the row of street trees located directly south of the project site. The scenic vistas from 223rd Street looking northeast onto the San Gabriel Mountains would also be blocked by the row of street trees along 223rd Street. The scenic vistas from 223rd

looking southeast onto the Palos Verdes Mountains would also be partially blocked by street trees located along East 223rd Street. Thus, While the proposed building may partially block small portions of the vistas of the Palos Verdes and San Gabriel Mountains, the project would not substantially diminish public views of scenic vistas. Therefore, impacts related to scenic vistas would be less than significant.

b) **Less than Significant Impact.** Project implementation would result in a significant impact if the proposed action would substantially damage scenic resources within a State Scenic Highway. According to the California Department of Transportation (Caltrans), there are no Officially Designated State or County Scenic Highways as defined by Caltrans, the County of Los Angeles, or any other local governing body adjacent to or within the vicinity of the project site. The nearest such highway to the site is State Route 2 (Angeles Crest Highway) 32 miles north of the project site (Caltrans, 2012). The proposed project would not damage scenic resources from a state scenic highway.

There are no rock outcroppings, historic buildings or other unique scenic resources located on the project site. There is a row of eucalyptus trees on the westerly most portion of the site. The trees are located on a berm, within an easement owned by Watson Land. The trees would remain in place and would be subject to Migratory Bird Treaty Act (MBTA) mitigation during construction activities. Additionally, the project would install new landscaping including trees. Therefore, impact related to scenic resources would be less than significant.

c) **Less Than Significant Impact.** The existing visual setting of the project area is characterized by a mix of urban uses and the major transportation corridor of the I-405 Freeway approximately 100 feet to the north. The baseball field and row of street trees located to the south of the project site offers some visual relieve from the urban and commercial/industrial uses.

Construction activities typically result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete buildings and other activities that generally contrast with the aesthetic character of an area. Construction activities would be primarily visible from the I-405. Views from East 223rd Street would have only limited views due to the line of trees along both sides of East 223rd Street. Because of the short-term, temporary nature of the construction activities, construction activities would not substantially alter, degrade, or generate long-term contrast with the visual character of the surrounding area. In addition, construction fencing would be provided for safety, and would also serve to screen views of grading and other site disturbance from adjacent streets and sidewalks. Therefore, given the temporary nature of these impacts, impacts on visual character during construction would be less than significant.

The project site is currently undeveloped and surrounded by perimeter fencing. Development of the proposed project would change the visual character of the project site from a vacant parcel to the development of four-story tilt-up concrete building of

cultivation and manufacturing facilities. Development of the building would be consistent with the height of adjacent buildings in the area including the four-story Tesoro building to the south of the project site and nearby one- and two-story commercial and visual character of the area. Additionally, the project site would be partially screened by landscaping. During the approval process, the Applicant would submit landscape plans consistent with the City of Carson Municipal Code. Therefore, impacts to the existing visual character or quality of the project site would be less than significant.

d) **Less than Significant Impact.** A significant impact would occur if light and glare substantially interfered with off-site activity. The proposed project would introduce new sources of light associated with lighting the new developed manufacturing buildings, signage, and security and way-finding lighting. The project site would operate during typical daylight hours, however, since the four-story buildings would be visible from the I-405, the project has the potential to introduce new sources of light and glare to drivers and motorists related to nighttime views. However, prior to the issuance of building permits, the Applicant would be required to submit photometric plans showing the exterior lighting layout, fixture mounting details, and performance fixture descriptions to the City of Carson for review. The. photometric plan would comply with the Municipal Code requirements that minimize lighting impacts to sensitive receptors. Therefore, impacts associated with light and glare as they relate to daytime and/or nighttime views in the area would be less than significant.

References

California Department of Transportation (Caltrans). California Scenic Highway Mapping System. September 2011. Accessed: October 2018. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm

Agricultural and Forest Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
2. AGRICULTURAL AND FOREST 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. **Would the project:**				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a) **No Impact.** The project site is located in an urbanized area and has a General Plan land use designation of Regional Commercial and a zoning designation of CA (Commercial Automotive). The proposed project would require a zone text amendment to be consistent with the cannabis ordinance, and which would allow for cannabis-related uses in the CA zoning areas. According to the California Department of Conservation's State of California Important Farmland map, the project site does not contain any agricultural uses or areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2014). Therefore, the proposed project would not convert farmland to a non-agricultural use, and no impact would occur.

b) **No Impact.** As mentioned above in Issue 2 (a), the project site is in an urbanized area, and does not contain any agricultural land (California Department of Conservation, 2014). The project site is zoned as Regional Commercial and there are no Williamson Act contracts in the project vicinity (California Department of Conservation, 2015).

Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

c) **No Impact.** As mentioned above in Issue 2 (a) and (b), the project site is in an urbanized and is zoned as Regional Commercial. The project site does include forest lands, timberlands, or timberland zoned Timberland Production. No forestland or timberland uses are located in the project site's urban, industrial setting. Therefore, the proposed project would not conflict with existing zoning for forest land and no impact would occur.

d) **No Impact.** As mentioned above in Issue 2 (c), the project site is in an urbanized area. According to the City of Carson General Plan and Municipal Code, the project site is not designated as forestland (City of Carson, 2004; City of Carson, 2018). Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

e) **No Impact.** As mentioned above, construction and operation of the proposed project would have no impact on agriculture or forest resources. Additionally, there would be no need for land acquisitions to implement the proposed project. No other changes in the existing environment, which, due to their location and nature, would result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use under the proposed project. Therefore, there would be no impact.

References

California Department of Conservation. 2014. Important Farmland in California. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/2014/fmmp2014_20_23.pdf

California Department of Conservation. 2015.Los Angeles County Williamson Act 2015/2016. Available at ftp://ftp.consrv.ca.gov/pub/dlrp/wa/San_Diego_w_13_14_WA.pdf.

City of Carson, 2004. City of Carson General Plan, Land Use. Available at http://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%202_Land%20Use.pdf

City of Carson. 2018. City of Carson Municipal Code. Available at https://www.codepublishing.com/CA/Carson/

Air Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
3.	**AIR QUALITY —** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c)	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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion

a) **Less than-Significant Impact**. The proposed project is located within the 6,745-square-mile South Coast Air Basin (SoCAB). Air quality planning for the SoCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD has adopted a series of Air Quality Management Plans (AQMP) to meet the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants for which the SCAB is in non-attainment for the NAAQS (e.g., ozone [O_3], and particulate matter 2.5 microns in diameter or less [PM2.5]). The SCAQMD, California Air Resources Board (CARB), and United States Environmental Protection Agency (USEPA) have adopted the 2016 AQMP which incorporates scientific and technological information and planning assumptions, regarding air quality, including the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and emission inventory methodologies for various source categories (SCAQMD, 2016).

The AQMP builds upon other agencies' plans to achieve federal standards for air quality in the SCAB and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. In addition, the AQMP highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially for mobile sources, to meet all federal criteria pollutant standards in accordance with the Clean Air Act.

The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS. These strategies are developed, in part, based on regional growth projections prepared by the SCAG. As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan (RCP) and Guide and the RTP/SCS, these plans provide the basis for the land use and transportation components of the AQMP and are used in the preparation of the air quality forecasts and the consistency analysis included in the AQMP. Both the RCP and AQMP are based, in part, on projections originating with county and city general plans.

The SCAQMD released the Draft 2016 AQMP on June 30, 2016 for public review and comment. A revised Draft 2016 AQMP was released in October 2016 and the SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2016). CARB approved the 2016 AQMP on March 23, 2017. USEPA approval is pending, but is a necessary requirement before the 2016 AQMP can be incorporated into the State Implementation Plan (SIP). Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, state, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits for greenhouse gas (GHG), energy, transportation and other planning efforts. The strategies included in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the federal O_3 and PM2.5 standards. Until such time as the 2016 AQMP is approved by the USEPA, the 2012 AQMP remains the applicable AQMP.

Construction

The project site is currently a vacant lot with a paved area on the northern portion of the site, a stand of eucalyptus trees on the west, and bare soil, grass and low-lying vegetation on the remaining portions of the site. The project would involve the construction of a four-story, 220,000-square-foot commercial/industrial/manufacturing building. Construction activities associated with the proposed project have the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment and through vehicle trips generated by construction works and haul trips traveling to and from the project site. In addition, fugitive dust emissions would result from construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release volatile organic compounds (VOCs). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Project construction would result in an increase in short-term or temporary employment compared to existing conditions. Construction jobs under the project would generally be small in number, temporary in nature, and filled by local construction workers already living in the Basin, and therefore, would not conflict with the long-term employment projections upon which the AQMP are based.

Control strategies in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the as MOB-08 and MOB-10 in the 2016 AQMP, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating replacement of older, emissions-prone engines with newer engines meeting more stringent emission standards. The proposed project would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment.

Fugitive dust generation would result from the site preparation and various soil-handling activities. Although the amount of soil and asphalt disturbed is anticipated to be minimal, the project would comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403.

Proposed project compliance with these requirements would be consistent with and meet the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Because the proposed project would implement these control strategies, the project does not conflict with the control strategies intended to reduce emissions from construction equipment, construction of the proposed project would not conflict with or obstruct implementation of the AQMP, and impacts are less than significant.

Operation

The 2016 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP.

The proposed project would include a cannabis manufacturing, distribution, and testing center for cannabis products. The activities conducted at the project site are primarily based around the commercial kitchen and beverage bottling with packaging, storage, and production areas. The proposed project would also contain a small scale cultivation area for research and development purposes.

SCAG predicted Carson's employment growth between 2012 and 2040 to be 11,200 jobs (SCAG, 2016. The estimated 220 new full-time-equivalent (FTE) employees generated by the proposed project are well within SCAG's employment growth assumptions for Carson. During each operation day, the proposed project has a maximum of 469 vehicles associated with the delivery of materials, pickup of products, employee trips, and other miscellaneous vehicle trips. As discussed in Issue 16, Transportation and Traffic, below, this project does not have a significant impact on transportation or traffic in the project vicinity. Mobile source emissions associated with the proposed project site were calculated and are discussed in Issue 3 (b) below.

b) **Less than Significant Impact**. As indicated above, the proposed project area is located within the SoCAB, which is characterized by relatively poor air quality. State and federal air quality standards are often exceeded in many parts of the SoCAB. The proposed project contributes to local and regional air pollutant emissions during construction (short-term or temporary) and project occupancy (long-term). Based on the following analysis, construction and operation of the project resulted in less than significant impacts relative the project exceeding the daily significance thresholds for criteria air pollutant emissions as established by the SCAQMD for construction and operational phases (SCAQMD, 2015).

Construction Emissions

Daily regional and annual construction source project criteria pollutant emissions (NO_X, volatile organic compounds [VOC], particulate matter 10 microns in diameter or less [PM10], PM2.5, sulfur oxides [SO_X], and carbon monoxide [CO]) were calculated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. The model also calculates GHG emissions from direct and indirect sources and quantifies applicable air quality and GHG reductions achieved from mitigation measures. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles and statewide and regional emissions inventories from all motor vehicles, including passenger cars to heavy-duty trucks, operating on highways, freeways, and local roads in California. The input values used in the CalEEMod modeling analysis were adjusted based on project specific information.

Construction activities associated with the project would result in the emissions of CO, VOCs, NO_X, SO_X, PM10, and PM2.5. Construction related emissions were calculated based on the site preparation, grading, trenching, paving, building construction, and construction worker, haul truck, and vendor truck trips completed during the construction phase. Construction of the project is estimated to require approximately 6 to 8 months; however, the air quality analysis conservatively assumes a 6-month construction schedule. Project operations are expected to start as early as second quarter 2019. The construction phases and duration are provided in **Table 1**, *Estimated Construction Schedule.* The construction schedule used in the Air Quality Impact Analysis represents a "worst-case" scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines. A detailed summary of construction equipment assumptions for all phases is provided in **Table 2,** *Construction Equipment Assumptions*.

TABLE 1
ESTIMATED CONSTRUCTION SCHEDULE

Activity	Start Date	End Date	Duration (Days)
Demolition	12/3/2018	12/15/2018	10
Site Preparation	12/16/2018	12/23/2018	5
Grading	12/24/2018	1/15/2019	17
Foundations/Concrete Pour	1/16/2019	1/22/2019	5
Building Construction	1/23/2019	5/30/2019	92
Paving	5/7/2019	5/30/2019	18
Architectural Coating	4/5/2019	5/30/2019	40

SOURCE: ESA 2018.

TABLE 2
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Equipment	Horsepower	Load Factor
Air Compressors	78	0.48
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	231	0.29
Excavators	158	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	187	0.41
Pavers	130	0.42
Paving Equipment	132	0.36
Rollers	80	0.38
Rubber Tired Dozers	247	0.4
Tractors/Loaders/Backhoes	97	0.37
Welders	46	0.45

SOURCE: ESA 2018.

The estimated maximum daily construction emissions are summarized in **Table 3**, *Maximum Regional Construction (pounds per day)*. Under the assumed scenarios, emissions resulting from the project construction would not exceed any criteria pollutant thresholds established by the SCAQMD. Therefore, impacts would be considered less than significant.

TABLE 3
MAXIMUM REGIONAL CONSTRUCTION (POUNDS PER DAY)[A]

Source	VOC	NO_X	CO	SO_2	PM10 [b]	PM2.5 [b]
Demolition -2018	4	42	24	<1	3	2
Site Preparation-2018	3	31	15	<1	7	4
Grading-2018	3	47	21	<1	6	3
Grading-2019	3	44	20	<1	5	3
Foundations/Concrete Pour-2019	4	58	27	<1	4	2
Building Construction - 2019	3	29	26	<1	3	2
Architectural Coating-2019	52	3	4	<1	<1	<1
Paving-2019	2	15	16	<1	1	1
Overlapping Phases						
2019						
Building Construction + Architectural Coating	56	45	41	<1	4	3
Building Construction + Architectural Coating + Paving	58	47	45	<1	5	3
Maximum Daily Emissions [b]	**58**	**58**	**45**	**<1**	**7**	**4**
SCAQMD Significance Thresholds	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.
b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2018

Operational Emissions

Operations at the proposed project would include the manufacturing, distribution, and testing of cannabis products. The activities conducted include baking of cannabis edibles and bottling of cannabis beverages with a small scale cultivation area for research and development purposes. These products would be distributed to licensed facilities and dispensaries eligible to receive such products, in compliance with California and the City of Carson laws and regulations. During operations of the project, the primary emission sources would consist of mobile sources, energy use from site operations, and routine maintenance of the facility. Commercial ovens will be used during the baking process of cannabis edibles, however ovens will be less than 2,000,000 British thermal units per hour (Btu/hr) and are therefore exempt from permitting requirements under SCAQMD Rule 219.

The mobile sources associated with the proposed site consists of employee trips, as well as delivery and pickup of cannabis materials and/or products. Trip generation rates are based on the land use size and estimated by CalEEMod. Mobile source emissions are based on the vehicle emission factors from EMFAC and the trip length values for the

Project land uses in CalEEMod, which are Basin-wide average trip distance values. The estimated maximum daily operational emissions are summarized in **Table 4,** *Maximum Unmitigated Regional Operational Emissions (pounds per day).*

TABLE 4
MAXIMUM UNMITIGATED REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY)[A]

Source	VOC	NO_X	CO	SO_2	PM10	PM2.5
Area	5	<1	<1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	1	5	13	<1	3	1
Project Total	6	6	14	<1	3	1
SCAQMD Significance Thresholds	55	55	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

a Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix A.

SOURCE: ESA, 2017

c) **Less than Significant Impact**. The SoCAB is currently designated as extreme non-attainment for the federal and state ozone ambient air quality standards and non-attainment for the state PM10 and federal and state PM2.5 ambient air quality standards. The SCAQMD's approach for assessing cumulative impacts related to operations is based on attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. As discussed above, the SCAQMD has developed a comprehensive plan, the 2012 AQMP, which addresses the region's cumulative air quality condition.

A significant impact would occur if a project were to add a cumulatively considerable contribution of a federal or State non-attainment pollutant. Because the SCAB is currently in non-attainment for ozone, PM10 and PM2.5, related projects could cause ambient concentrations to exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, CEQA Guidelines Sections 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

> *A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process*

to implement, interpret, or make specific the law enforced or administered by the public agency

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted 2012 AQMP. The 2012 AQMP includes demographic growth forecasts for various socioeconomic categories (e.g. population, housing, employment), developed by SCAG for their 2012 Regional Transportation Plan (RTP). As discussed under Issue 3(a), above, the project would be consistent with the 2012 AQMP.

As the proposed project is not part of an ongoing regulatory program, the SCAQMD also recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As discussed above, peak daily emissions of operation-related pollutants do not exceed SCAQMD regional significance thresholds. By applying SCAQMD's cumulative air quality impact methodology, implementation of the project would not result in the addition of criteria pollutants such that cumulative impacts would occur, in conjunction with related projects in the region. In addition, as discussed in Issue 3 (b) above and Issue 3 (d) below, construction of the project is not expected to result in a cumulatively considerable net increase of criteria pollutants for which the SCAQMD has established a regional and localized impact threshold. Therefore, the Project impacts would be considered less than significant.

d) **Less than Significant Impact**. The localized effects from the on-site portion of the emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Proposed Action according to the SCAQMD's Localized Significance Threshold Methodology (June, 2003; revised July, 2008), which relies on on-site mass emission rate screening tables and project-specific dispersion modeling typically for sites greater than 5 acres, as appropriate (SCAQMD, 2008). The localized significance thresholds are applicable to NO_X, CO, PM10, and PM2.5. For NO_X and CO, the thresholds are based on the ambient air quality standards. For PM10 and PM2.5, the thresholds are based on requirements in SCAQMD Rule 403 (Fugitive Dust) for construction and Rule 1303 (New Source Review Requirements) for operations. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between the project area and the nearest sensitive receptor (e.g., residences, schools, hospitals). For the project, the appropriate Source Receptor Area (SRA) for the localized significant threshold (LST) is the South Los Angeles County Coastal monitoring station (SRA 4). Since the total acreage disturbed is approximately 3.70 acres (less than 5 acres) per day, SCAQMD's screening look-up tables were used to determine localized significance thresholds. The nearest sensitive receptor are residences located approximately 1,620 feet (494 meters) to the east along East 223rd Street and separated from the project site by the

Alameda Corridor (railroad corridor). In addition, a private park associated with the Tesoro Campus is located approximately 120 feet south of the proposed project.

In order to apply a conservative analysis, a conservative significance threshold was applied to impacts associated with the proposed project. Therefore, the significance thresholds in the analysis are based on a 2-acre site with a 25-meter receptor distance. If the project's localized daily emissions exceed the applicable LSTs from the screening look-up tables, it does not necessarily mean that the project impact is significant. Rather, refined dispersion modeling should be conducted to compare the project impact to the concentration-based localized significance thresholds.

Construction Emissions

Table 5, *Maximum Localized Construction Emissions (pounds per day)* identifies the localized impacts at the nearest receptor location in the vicinity of the project area. The localized emissions during construction activity would not exceed any of the SCAQMD's localized significance thresholds. Therefore, impacts would be considered less than significant.

TABLE 5
MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS (POUNDS PER DAY)[A]

Source	NO_X	CO	PM10	PM2.5
Demolition -2018	38	22	3	2
Site Preparation-2018	30	13	6	4
Grading-2018	31	17	4	3
Grading-2019	28	16	4	3
Foundations/Concrete Pour-2019	23	18	1	1
Building Construction - 2019	23	18	1	1
Architectural Coating-2019	2	2	<1	<1
Paving-2019	15	15	1	1
Overlapping Phases				
2019				
Building Construction + Architectural Coating	38	33	2	2
Building Construction + Architectural Coating+ Paving	40	35	2	2
Maximum Daily Emissions [b]	**40**	**35**	**6.3**	**4.0**
SCAQMD Significance Thresholds	82	842	7	5
Exceeds Threshold?	**No**	**No**	**No**	**No**

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A

b Localized Significance Thresholds (LST) were for a 2-acre project site with a 25-meter receptor distance in SRA #4, South Los Angeles County Coastal.

SOURCE: ESA, 2018

Operational Emissions

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may include queuing and idling at the site (e.g., warehouse or transfer facilities). With regard to on-site sources of emissions, the project would not generate emissions resulting from trucks queuing and idling at the site and the site will not include stationary sources. **Table 6**, *Maximum Localized Operational Emissions (pounds per day)* summarizes the maximum localized operational emissions resulting from project operations, along with the localized significance thresholds. As shown, on-site daily emissions from operational activities do not exceed the SCAQMD localized thresholds and would not be expected to result in ground level concentrations that exceed the allowable incremental increase established by the SCAQMD. Therefore, the project results in a less than significant localized impact for operational emissions.

TABLE 6
MAXIMUM LOCALIZED OPERATIONAL EMISSIONS (POUNDS PER DAY) [A]

Source	NO_X	CO	PM10	PM2.5
Area	<1	<1	<1	<1
Energy	1	1	<1	<1
Project Total	1	1	<1	<1
SCAQMD Localized Significance Thresholds[b]	82	842	2	1
Exceeds Threshold?	**No**	**No**	**No**	**No**

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A

b Localized Significance Thresholds (LST) were for a 2-acre project site with a 25-meter receptor distance in SRA #4, South Los Angeles County Coastal.

SOURCE: ESA, 2018

CO "Hot Spot" Analysis

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. Projects may worsen air quality if they increase the percentage of vehicles in cold start modes by 2 percent or more; significantly increase traffic volumes (by 5 percent or more) over existing volumes; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at Level of Service (LOS) E or F or causing an intersection that would operate at LOS D or better without the proposed project, to operate at LOS E or F. While construction-related traffic on the local roadways occur during construction, the net increase of construction worker vehicle trips to the existing daily traffic volumes on the local roadways are expected to be relatively small and would not result in CO hotspots. Additionally, the construction-related vehicle trips are short-term, and will ceased once construction activities are completed. During operation, the project adds a total of 469 trips to the local and regional roadway system per day. Overall, it is unlikely that local intersections will form a CO hotspot in

comparison to the AQMP's 2003 study, which estimates 100,000 vehicles per day will cause the formation of a CO hotspot. Therefore, impacts are considered less than significant.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs) are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

Construction

Intermittent construction activities associated with the proposed project would result in short-term emissions of diesel particulate matter (DPM), which the State has identified as a TAC. During construction, the exhaust of off-road heavy-duty diesel equipment would emit diesel particulate matter during general construction activities, such as site grading, excavation, trenching, materials transport and handling, and building construction.

DPM poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA Guidance), which was updated in 2015 with new exposure parameters including age sensitivity factors (OEHHA 2015). Sensitive receptors are located to the east of the project area; however, localized DPM emissions (strongly correlated with PM2.5 emissions) are minimal and are below localized thresholds as presented in Table 5. Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The very low level of PM2.5 emissions (DPM surrogate), coupled with the short-term duration of construction activity, resulted in an overall low level of diesel particulate matter concentrations in the project area. Furthermore, compliance with the CARB airborne toxic control measures (ATCM) anti-idling measure, which limits idling to no more than 5 minutes at any location for diesel-fueled commercial vehicles, further minimized diesel particulate matter emissions in the project area. Sensitive receptors would be exposed to emissions below thresholds and construction TAC impacts are less than significant.

Operations

During long-term operations, TACs could be emitted as part of periodic maintenance operations, cleaning, painting, etc. and from periodic visits from delivery trucks and service vehicles. However, these uses are expected to be occasional and result in minimal exposure to off-site sensitive receptors. The proposed project would generate approximately 60 truck trips per day and is located approximately 1,620 feet (494 meters) from the nearest sensitive receptor. Based on the guidance found in the CARB *Air*

Quality and Land Use Handbook, the proposed project would be less than the recommended 1,000-foot distance and 100 truck per day limit for siting distribution centers near sensitive uses (CARB 2005). Therefore, the proposed project would not expose surrounding sensitive receptors to TAC emissions and impacts would be considered less than significant.

e) **Less than Significant Impact.**

Construction

Potential activities that may emit odors during construction activities include the use of architectural coatings and solvents and the combustion of diesel fuel in on- and off-road equipment. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOCs from architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to 5 minutes at any given location, which was adopted in 2004. The project would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and State measures, construction activities and materials would not create objectionable odors. The nearest existing sensitive receptors are residents located approximately 1,620 feet (494 meters) to the east of the project site. Construction of the project's proposed uses would not be expected to generate nuisance odors at nearby sensitive receptors.

Operations

Operation of the project has the potential to emit odors from the following processes: cannabis cultivation, harvesting, drying, extraction, packaging, and production of cannabis products. During the cultivation of cannabis, potentially strong odors would be emitted from the plants, particularly mature (i.e., flowering) plants, which are of primary concern to nearby sensitive receptors. Other odor sources would include the use or storage of fertilizers; soil storage or composting areas; or the use of diesel-powered equipment, which emit DPM. These odors could potentially affect nearby sensitive receptors.

Cannabis cultivation at the proposed project would be limited, occur indoors, and within a small area of the testing area decreasing the amount of potential odors associated with cannabis cultivation. However, odors may still be emitted through the ventilation systems from the enclosed cultivation and manufacturing areas, and may potentially be concentrated. Additionally, fertilizers and soil or compost piles may contain decaying organic material that may create an objectionable odor. The intensity of the odor perceived by a receptor would depend on the distance of the receptor from the soil or compost stockpiling area and the amount and quality of the exposed material. Most diesel-powered equipment or vehicles would be operating for a limited amount of time in

any given location and would not act as a substantial odor source. These other potential odors are generally not anticipated to be perceived as substantially adverse, especially in comparison to the strong odor of cannabis. The degree to which an individual finds the odor of cannabis plants objectionable varies greatly, but would be a potentially significant impact.

The Carson Municipal Code Ordinance No. 17-1637, Section 15.120(C), states that a commercial cannabis operation shall have an air treatment system that ensures off-site odors shall not result from its activities. This requirement at a minimum means that the commercial cannabis operation shall be designed to provide sufficient odor absorbing ventilation and exhaust systems so that any odor generated inside the location of the commercial cannabis operation is not detected outside the building on adjacent properties or public rights-of-way, or within any other unit located within the same building as the commercial cannabis operation, if the use only occupies a portion of a building.

The proposed project shall develop an odor control plan which would be sent to the City of Carson for approval prior to project implementation. The odor control plan would ensure that odors and air circulation at the project site would not impact employees' health and welfare, nor the surrounding areas. The project proposes to use odor control devices and techniques to ensure that odors from the facility are not detectable off-site. An absorbing ventilation and exhaust system would be installed that will prohibit odors generated inside the facility from being detected outside the facility, anywhere on the adjacent property or public right-of-way, exterior or interior common areas, or within any other unit located inside the same building as the cannabis operation.

As part of the plan to reduce odors produced from growing and processing, the temperature and humidity levels within the building will be continuously monitored, superior ventilation systems would be installed ensuring that air flow is constantly circulating. Moreover, employees will monitor odor levels and any emissions throughout the building. Additionally, the facility will use air-tight sealed doors and windows on all rooms where cannabis plants and products will be stored to help prevent odors from leaking into other rooms in the facility or outdoors.

The project will install a complete HVAC air purification system that uses 10-ton commercial HVAC units, similar to those used in high-grade hospitals and surgical facilities, to ensure that odor of medical cannabis will not emanate beyond the walls of the building. These systems use broad spectrum, high-intensity UV lights targeted on a hydrated quad-metallic catalyst, which uses ambient moisture to generate hydro-peroxides and hydroxides that are propelled into the cultivation facility, to provide active microbial and odor mitigation.

Although the operation of the project has the potential to emit odors from the production and manufacturing of cannabis which could be considered objectionable by a substantial number of people, compliance with the Carson Municipal Code Ordinance No. 17-1637, Section 15.120(C), which requires that all medical cannabis businesses install an air

treatment system that prevents odors from being detected outside the building. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances. Therefore, potential operational source odor impacts are considered to be less than significant as they would not be considered objectionable to a substantial number of people.

References

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Biological Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4.	**BIOLOGICAL RESOURCES — Would the project:**				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

a) **Less than Significant Impact with Mitigation**. ESA conducted a site visit on October 8, 2018. The results of the site visit determined that the project site is primarily disturbed containing non-native plants such as Russian thistle (*Salsola tragus*) and tree tobacco (*Nicotiana glauca*). The project site is also partially developed containing a gravel area formerly used for vehicle storage as well as ornamental landscaping along East 223rd Street. Ornamental vegetation occurring on site includes a stand of and Eucalyptus trees (*Eucalyptus* sp.) and carrotwood (*Cupaniopsis anacardioides*) which provides suitable nesting habitat for migratory birds and raptors protected under the Federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. The MBTA and California Fish and Game Code prohibit the take or destruction of migratory birds/raptors, their nests, and/or eggs. Impacts on nesting birds protected by the MBTA and similar provisions of the Fish and Game Code could occur if work is conducted during the breeding season (February 1 through August 15). However, the proposed project will adhere to all existing laws and regulations pertaining to a project, including compliance with the MBTA. The project site does not contain suitable habitat for 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 Game or U.S. Fish and Wildlife Project and there is a low probability of these species occurring on-site implementation would include compliance with the MBTA through **MM-BIO-1**, and impacts would be less than significant.

b) **No Impact.** The project site is comprised of disturbed and developed areas and contains ornamental vegetation. Surrounding areas are in similar condition as they are either developed, disturbed or contain ornamental vegetation. There is no riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS) on the project site. Therefore, no impact would occur.

c) **No Impact.** Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE.

No federally protected wetlands are present within the proposed project site (USACE 2015). Therefore, the proposed project would not affect any federally protected wetlands.

d) **Less than Significant Impact.** The project site is comprised of disturbed and developed areas, contains ornamental vegetation and is located in an urban area. The project site is also surrounded by areas of a similar makeup containing disturbed and developed areas as well as ornamental vegetation. The project site does not connect two or more areas containing native plant communities and is not within any habitat linkages identified in the *South Coast Missing Linkages* report. Therefore, the project site would not interfere with the movements of wildlife or wildlife corridors. As discussed above in Issue 4 (a), potential impacts on migratory birds and raptors would be avoided because the City would enforce all existing laws and regulations, including the MBTA, to avoid impacts on migratory birds. Impacts would be less than significant.

e) **No Impact.** The project site is within the City's tree protection ordinance which preserves and protects City trees (City of Carson 2018). Trees that occur on the project site qualify as City trees as they occur on a City-owned parcel currently undergoing a transfer and are therefore protected under the City's tree protection ordinance. Existing City trees will be avoided and protective measures outlined in the City's protective tree ordinance will be followed. The project would not conflict the City's protective tree ordinance or any other local policies and/or ordinances protecting biological resources, and no impact would occur.

f) **No Impact.** The project site contains disturbed and developed areas, contains ornamental vegetation and is located in an urban area. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that occur on the project site. Therefore, implementation of the proposed project would not conflict with applicable conservation plans, and no impact would occur.

Mitigation Measure

MM-BIO-1: Any construction activities that occur during the nesting season (February 15 to August 31) shall require that all suitable habitat (i.e., trees and shrubs) be surveyed for the presence of nesting birds by a qualified biologist, retained by the Applicant as approved by the City of Carson before commencement of clearing and prior to grading permit issuance.

A preconstruction survey by a qualified biologist shall be conducted within 50 feet of vegetation no more than 7 days prior to construction occurring and immediately before construction commences. If nests are observed, an appropriate buffer in compliance with the MBTA shall delineated, flagged, and avoided until the qualified biological monitor has verified that the young have fledged or the nest has otherwise become inactive.

References

33 CFR Part 328 – Definition of Waters of the United States.

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Fish and Wildlife Service. 2018. National Wetlands Inventory. Available at https://www.fws.gov/wetlands/data/mapper.html.

South Coast Wildlands. 2008. *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion*.

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Cultural Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5.	**CULTURAL RESOURCES — Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion

The information provided in this section is based on a cultural resource records search, prepared by ESA in September 2017, of the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC); a Sacred Lands File (SLF) search commissioned through the Native American Heritage Commission (NAHC); and a paleontological resources records search commissioned from the Natural History Museum of Los Angeles County (NHMLAC) for the City of Carson 2017 Existing Conditions Report.

a) **Less Than Significant**. A significant impact would occur if the proposed project would substantially alter the environmental context of or remove identified historical resources. A historical resource is defined in Section 15064.5(a)(3) of the State CEQA Guidelines as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as those associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered historical resources under CEQA. Historic aerial maps were examined in order to provide historical information about the project area and to contribute to an assessment of the project area's sensitivity for the presence of cultural resources. Available historic maps include aerials of the project site from 1952 to present day. The aerials indicate that the project site has remained undeveloped since at least 1952 (Netronline 2018). However, the site has been highly disturbed and used for a number of storage uses and regraded over the years, since at least 1992. Neither the records search (a cultural resource records search was prepared by ESA in September 2017, of the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC); a Sacred Lands File (SLF) search commissioned through the Native American Heritage Commission (NAHC) to support the 2017 Existing

Conditions Report) or historic areal maps research resulted in the identification of existing or potential historical resources in the project area. There are no recorded resources on the project site or within the project vicinity and the buildings nearest the site are less than 50 years old. Thus, no impact would occur to a historic resource located on the proposed project site.

b) **Less Than Significant With Mitigation**. A significant impact would occur if a known or unknown archaeological resource would be removed, altered, or destroyed as a result of the proposed development. Section 15064.5(a)(3)(D) of the State CEQA Guidelines generally defines archaeological resources as any resource that "has yielded, or may be likely to yield, information important in prehistory or history." Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community.

The proposed project would develop a 220,000-square-foot four-story tilt-up concrete building of cannabis cultivation and manufacturing facilities on a 3.70-acre vacant lot. According to the cultural records search, the proposed project is not located on known archeological documented site. The nearest previously recorded cultural resource identified is P19-187085, recorded in 1989, which is a California Historical Landmark #963 – The Mojave Road which starts near Los Angeles Harbor to Cajon Pass and across the Mojave Desert to Nevada State Line. This landmark has been described as unique for its significance as an Indian trail, a federal government supply, a freight and emigrant wagon route, and a recreational trail. This landmark is located approximately 250 feet east from the project site (Carson, 2018). The records search indicated that no other cultural resources have been previously recorded near the project site. Moreover, aerial photographs indicate the site has been highly disturbed and used for a number of storage uses and regraded over the years, since at least 1992.

Further, the SLF records search revealed that no known Native American resources from the NAHC database have been recorded within the City; however, the NAHC noted "that the absence of specific site information in the SLF does not indicate the absence of Native American cultural resources in any Area of Potential Effect." (Carson, 2018) Please refer to IS/MND Section Tribal Cultural Resources for more details.

Though project site does not contain any known archaeological resource, given its close proximity to a historical landmark, it is possible that unknown archaeological resources occur under the project site. The project site has been subject to substantial disturbance and no grading or demolition would occur as part of this project; however, since the project could involve ground-disturbance activities such as trenching and no geotechnical study has been performed for the project site, there exist the possibility that project actions could unearth, expose, or disturb subsurface archaeological that may qualify as unique archaeological resources under CEQA. If any such resources were found to be significant, the proposed Project could result in a significant impact to archaeological resources pursuant to Section 15064.5. Implementation of Mitigation Measures CUL-1

and CUL-2 would reduce potential impacts related to archaeological resources. Therefore, impacts associated with archaeological resources would be less than significant.

c) **Less Than Significant Impact With Mitigation.** Project implementation would result in a significant impact if excavation or construction activities associated with the proposed project would disturb paleontological or unique geological features. A city-wide geological and paleontological review of the project area was prepared in the Existing Conditions Report (City of Carson, 2018). The project area is located within the northerly end of end of the Peninsular Ranges geomorphic province. The Peninsular Ranges province encompasses areas from the Los Angeles Basin south of the Santa Monica Mountains to the tip of Baja California and includes the San Jacinto and Santa Monica Mountain Ranges and Santa Catalina Island. The most noticeable landforms within the city are the Dominguez Hills and the Dominguez Gap.

The results from the City-wide paleontological records search performed by the City in the 2017 Existing Conditions Report identifies seven vertebrate localities from older Quaternary deposits are located within the boundaries of the city and that several other localities from the same sedimentary deposits occur nearby. Old lagoonal deposits (from the Dominguez Channel) are located at the surface in the northwestern portion of the city. In the central and eastern portions of the city there are surface deposits composed of younger Quaternary alluvium. The younger Quaternary deposits are not known for being fossiliferous in the uppermost layers; however, at depth these deposits are underlain by older Quaternary deposits, which have produced an assortment of vertebrate fossil localities. The proposed project is located in the south eastern portion of the City. The NHMLAC has indicated that grading or shallow excavations in the upper feet of the old lagoonal deposits or the younger Quaternary Alluvium deposits, are unlikely to uncover fossil vertebrate remains. However, deeper excavations in the city reaching down into older Quaternary deposits, as well as excavations in older Quaternary deposits found at the surface have the potential for producing vertebrate fossils (Carson 2018).

The project site is located adjacent to where LACM 1165, 3319 and 4129 older Quaternary localities where found along both sides of Alameda Street from Carson Street on the north to Sepulveda Boulevard on the south. Additionally, LACM 1919 located approximately 0.5 mile west of the project (south of 223rd Street and west of Wilmington Avenue), which yielded a fossil specimen of mammoth at 10 feet below the surface. Given the project site's close proximity to Quaternary localities, it is possible that unknown subsurface resources occur under the project site during construction activities such as trenching (Carson 2018). While the depth of the project disturbance is not known, and there is the potential for ground disturbance to extend into older Quaternary deposits and thus encounter paleontological resources. Ground-disturbing activities for the proposed project could therefore result in a significant impact to unique paleontological resources under CEQA. However, with the implementation of Mitigation Measures CUL-3 and CUL-4, impacts to paleontological resources would be reduced to less than significant.

d) **Less Than Significant Impact With Mitigation** A significant impact would occur if previously interred human remains would be disturbed during excavation of the project site. No human remains are known to exist within or adjacent to the project area and it is unlikely that the proposed project would disturb unknown human remains. However, because the proposed project would involve ground-disturbing activities, it is possible that such actions could unearth, expose, or disturb previously unknown human remains. With the incorporation of Mitigation Measure CUL-5, which requires compliance with State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, any project-related impacts to human remains would ensure that any potential impacts remain less than significant.

Mitigation Measures

MM CUL-1: Prior to earth moving activities, a qualified archaeologist meeting the Secretary of the Interior's professional qualifications standards for archaeology shall be retained. The qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel. The training shall include a module provided by the qualified paleontologist. Construction personnel shall be informed of the types of cultural resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery. The responsible party shall ensure that construction personnel are made available for and attend the training and shall retain documentation demonstrating attendance.

MM CUL-2: In the event of the discovery of historical, archaeological, or Native American cultural materials, the contractor shall immediately cease all work activities in the vicinity (within approximately 50 feet) of the discovery. After cessation of excavation, the contractor shall immediately contact the responsible party and shall not resume work until the qualified archaeologist has assessed the discovery and any recommended treatment has been fully implemented. If the qualified archaeologist determines that the discovery constitutes a significant resource under CEQA, avoidance shall be the preferred manner of mitigation. In the event that avoidance is demonstrated to be infeasible, a Cultural Resources Treatment Plan shall be prepared and implemented by a qualified archaeologist in consultation with the lead agency. The lead agency shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.

Archaeological materials recovered during any investigation shall be curated at an accredited curational facility. The report(s) documenting the implementation of the Cultural Resources Treatment Plan shall be submitted to the lead agency and to the South Central Coastal Information Center.

MM CUL-3: Prior to the start of any earth moving activities, a qualified paleontologist meeting the Society of Vertebrate Paleontology's professional criteria shall be retained by the responsible party to prepare and implement a Paleontological Resources Mitigation and Monitoring Plan (Plan). The Plan shall address procedures and locations for paleontological resources monitoring; microscopic examination of samples where applicable; the evaluation, recovery, identification, and curation of fossils, and the preparation of a final mitigation report.

MM CUL-4: Paleontological resources monitoring shall be conducted by qualified paleontological monitors, under the supervision of the qualified paleontologist, in areas specified by the Plan. Locations of monitoring will include areas where excavation may extend into Older Quaternary deposits based on geotechnical findings and construction design plans. In the event fossils are exposed during earth moving, the monitor shall have the authority to halt or redirect construction activities to other work areas so the find can be evaluated. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis Based on observations of soil stratigraphy or other factors, and in consultation with the lead agency, the level of monitoring may be reduced.

MM CUL-5: In the event that human remains are uncovered during project excavation, the contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Los Angeles County Coroner in accordance with Health and Safety Code Section 7050.5. If the Coroner determines the remains are Native American in origin, the Coroner shall contact the Native American Heritage Commission. As provided in Public Resources Code Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent shall be afforded the opportunity to provide recommendations concerning the future disposition of the remains and any associated grave goods as provided in Public Resources Code 5097.98.

References

City of Carson. Existing Conditions Report, Volume 1: Chapters 5-8. January 2018. Accessed: October 2018. Available at: https://www.carson2040.com/reports-and-products/

Netronline. Historic Aerials. Accessed: October 2018. Available at: https://www.historicaerials.com/viewer

Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY and Soils — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☐	☐	☒

Discussion

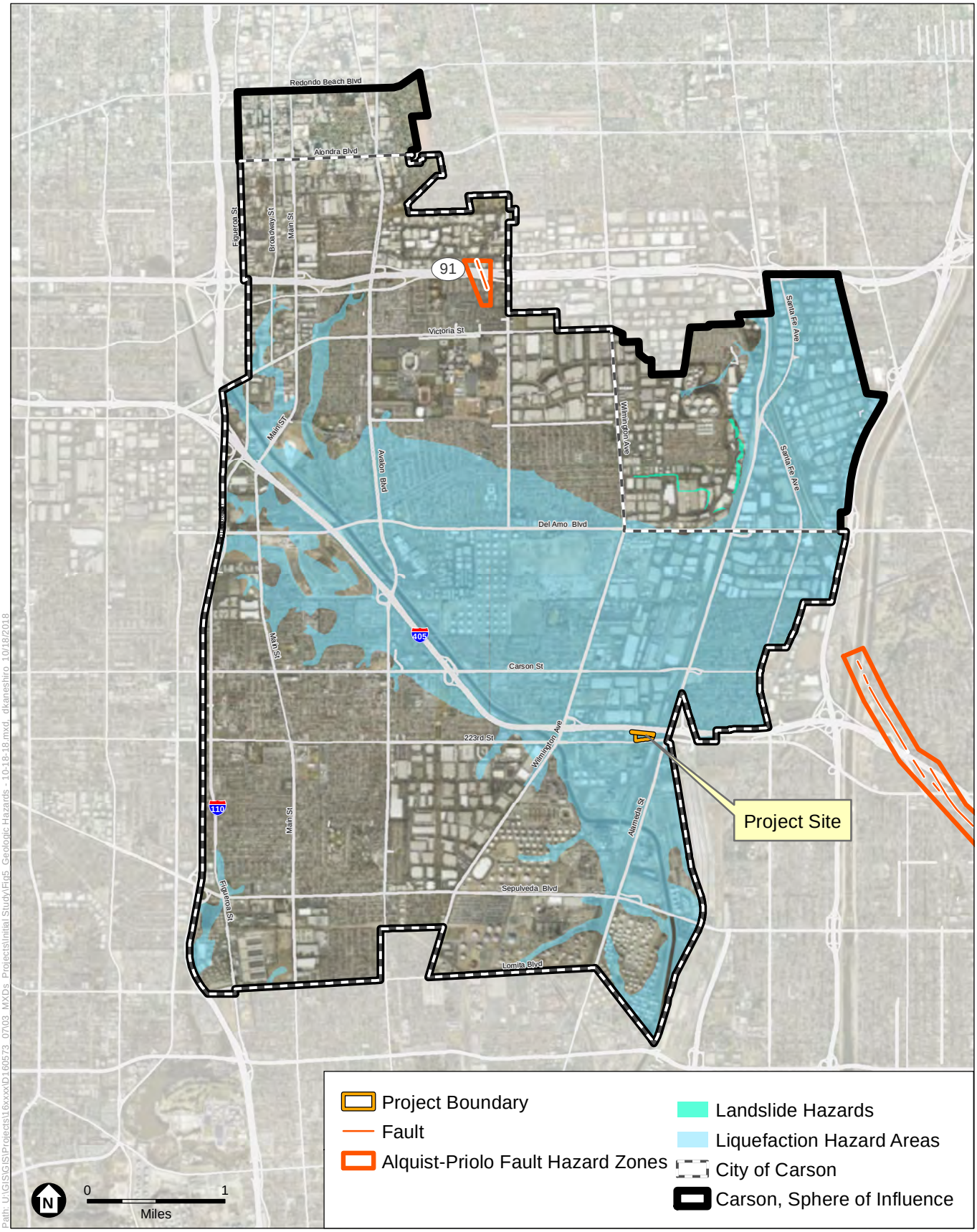
The project site is located in the City of Carson which is situated in the northerly end of the Peninsular Ranges Geomorphic Province of southern California. This geomorphic province encompasses an area that extends approximately 125 miles from the Transverse Ranges and the Los Angeles River Basin south to the Mexican border and beyond another approximately 775 miles to the tip of Baja California (Norris Webb 1990). The Peninsular Ranges province varies in width from approximately 30 to 100 miles and is characterized by northwest-trending mountain range blocks separated by similarly trending faults.

According to the Geologic Map of the Long Beach 30’ x 60’ Quadrangle, California, Version 2.0, Pamphlet, the project site is underlain by poorly consolidated and poorly sorted clay, sand, gravel and cobble alluvial fan and valley deposits (CDC 2016). These deposits consist of Holocene alluvial soft clay, silt, silty sand, and sand, and where this unit is saturated, the liquefaction susceptibility is high (CDC 1998). Historic high groundwater depth under the project site is approximately 20 feet below ground surface (CDC 1998).

Southern California is a seismically active region. The proposed project site lies within the southwestern block of the Los Angeles Basin, which is bounded by the Newport-Inglewood zone of deformation (Norris and Webb 1990). The Newport-Inglewood – Rose Canyon fault zone, is the closest active fault to the project site. The Newport Inglewood fault is located approximately 1.75 miles east from the project site. The Newport-Inglewood fault extends from the southern edge of the Santa Monica Mountains southeastward to an area offshore of Newport Beach. The Newport-Inglewood fault zone is considered active based on historic earthquakes; the 1933 Long Beach Earthquake is attributed to the Newport-Inglewood fault zone. The maximum probable earthquake along this fault zone is between 6.0 and 7.4 (Southern California Earthquake Data Center 2013). Other potentially active faults in the region include the Palos Verdes fault zone, Elsinore-Whittier fault zone, Santa Monica fault zone, San Jacinto fault zone and the San Andreas fault zone. **Figure 5**, *Geologic Hazards*, depicts the faults, Alquist-Priolo Fault Zones, landslide and liquefaction hazards in relation to the proposed project site.

a.i) **Less Than Significant Impact.** The Alquist-Priolo Earthquake Fault Zoning Act requires the delineation of zones along active faults in California. The project site does not lie within an Alquist-Priolo Earthquake Fault Zone as shown on Figure 5. As stated above, the closest active fault trace, mapped in accordance with the Alquist-Priolo Earthquake Fault Zoning Act, is the Newport - Inglewood fault located approximately 1.75 miles east of the project site. Surface rupture would be most likely to occur along previously established fault traces. Since there are no mapped faults across the project site, surface rupture due to faulting is considered unlikely. In addition, construction of the proposed project would be subject to the California Building Code (CBC) and Uniform Building Code (UBC) as adopted by the City of Carson. Thus, the proposed project would not result in any significant impacts in relation to a rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Map.

a.ii) **Less than Significant Impact.** An earthquake of moderate to high magnitude generated within the area could cause significant ground shaking at the project site. The exact degree of shaking experienced at a given location depends on many factors, such as: the magnitude and duration of the seismic event, the distance from a given site to the zone of rupture (i.e., hypocenter), local site-specific geologic conditions (i.e., nature, thickness, and extent of underlying soil and/or bedrock), and broader, often regional geologic factors such as basin geometry. In general, the severity of seismic ground shaking tends to abate with increasing distance from the event hypocenter. Seismic ground shaking, if sufficiently intense and sustained, can result in significant damage to, or catastrophic failure of buildings or other man-made structures. If an earthquake were to occur, the project site could expect to feel potential ground shaking at a Modified Mercalli intensity of VII, very strong shaking with moderate damage (United States Geological Survey, 2016), with a chance of damage at 2 to 5 percent (United States Geological Survey 2017).



SOURCE: NAIP, 2016 (Aerial); CGS

Carcom Center Project

Figure 5
Geologic Hazards Map

ESA

The potential for damage to buildings results from seismic-related events including ground shaking, ground failure, and ground displacement. To reduce these impacts, construction of the project would be required to conform to the seismic design parameters of the current CBC and UBC as adopted by the City of Carson. The City would be responsible for the review of all project plans for grading, foundation, infrastructure, and all other relevant construction permits. Compliance with applicable regulations would reduce potential impacts related to strong seismic ground shaking to a less than significant level.

a.iii) **Less Than Significant Impact with Mitigation.** Liquefaction is a process whereby strong seismic shaking causes unconsolidated, water-saturated sediment to temporarily lose strength and behave as a fluid. This process can lead to near-surface or surface ground failure that can result in extensive damage to or catastrophic failure of buildings, roads, utility lines, and other man-made structures. In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and soils within the saturated zone must also be susceptible for liquefaction. A mapped liquefaction zone is an area where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. As shown on Figure 4, the project site lies within a liquefaction zone (CDC 1999). Since the project lies within a liquefaction hazard zone the potential for liquefaction to occur at the project site is high and would result in a potentially significant impact.

Liquefaction can also manifest as lateral ground spreading or flow, localized sand boils (i.e., eruptions of fluidized sediment), or rapid subsidence and an accompanying loss of bearing strength. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures. The project site is relatively flat and lacks an adjacent free face to drive lateral spreading. However, the site is underlain by younger alluvial deposits which are generally described as poorly consolidated and poorly sorted clay, sand, gravel, and cobble (CDC 2016). This type of soil has a high liquefaction susceptibility (CDC 2016). Thus, the potential for lateral spreading, localized sand boils, or rapid subsidence is considered high at the project site and would result in a potentially significant impact.

As described above, the potential for liquefaction and seismic induced ground failure is considered to be high at the project site due to the depth to groundwater and type of soils which underlie the site. With implementation of Mitigation Measure GEO-1, impacts associated with seismically induced ground failures or liquefaction would be less than significant. Mitigation Measure GEO-1 shall be implemented prior to final project design to ensure that people or structures are not exposed to hazards associated with earthquake-induced liquefaction. Additionally, compliance with seismic design parameters of the current CBC and UBC, as adopted by the City of Carson, would further reduce potential liquefaction and seismically induced ground failure impacts. Thus, compliance with

Mitigation Measure GEO-1 and applicable regulations would reduce potential impacts related to seismic related ground failure and liquefaction, to less than significant.

a.iv) **No Impact.** The project site and surrounding area are relatively flat, making the possibly of a landslide highly unlikely. Moreover, the proposed project would not involve significant changes to site topography. Thus, there is no potential for landslides to occur on or near the project site as a result of the proposed project. Additionally, as shown in Figure 4, the project site does not lie within a landslide hazard zone. Therefore, there are no impacts related to landslides.

b) **Less than Significant Impact.** Soil erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. The project site is a semi-triangular shaped vacant lot paved in the northern portion, has a stand of eucalyptus trees on the west side, and is covered with bare soil, grass, and low-lying vegetation on the remaining portions of the site. Erosion can occur by varying processes and may occur at the project site where bare soil is exposed to wind or moving water (both rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses. As identified in the Carson 2040 General Plan Update Existing Conditions Report, soils within the City of Carson generally have low to moderate erosion potential, with the exception of the Oakley sand which has a moderate to high erosion potential (City of Carson 2018). As shown in the County of Los Angeles General Plan Update EIR, the project site is primarily underlain by Chino silt loam and Hanford fine sandy loam which have a low erosion potential and a low to moderate shrink swell potential (County of Los Angeles 2014).

The project site is currently graded and partially paved with the rest covered with bare soil, grass, and low-lying vegetation on the remaining portions of the site. As a result, there are few areas of topsoil on-site and the project would not result in impacts related to the loss of topsoil. During construction, the project site would be subject to ground-disturbing activities (e.g., site clearing, grading, foundation and infrastructure construction, installation of utilities). These activities would expose fresh soils for a limited time, allowing for possible erosion. Wind erosion would be minimized through soil stabilization measures required by the SCAQMD Rule 403 (Fugitive Dust), such as daily watering. Additionally, the potential for soil erosion of these exposed areas would increase during periods of heavy precipitation. However, the applicant would prepare a stormwater pollution prevention plan (SWPPP) and implement best management practices (BMPs), as required by the Los Angeles Regional Water Quality Control Board, which would minimize the potential for soil erosion. Therefore, project impacts related to construction, would be less than significant by complying with the applicable regulatory standards.

During operation of the project, BMPs related to ongoing drainage design and maintenance practices would be included in the SWPPP and implemented to reduce soil erosion during operation. Operational soil erosion can also be controlled through design

procedures such as appropriate surface drainage design of roadways and facilities to provide for positive surface runoff. The project would be developed with buildings, paved areas, and limited open spaces and would have minimal to no areas of topsoil. Loss of topsoil would not be a concern for the project. Therefore, operational project impacts would be less than significant by complying with the applicable regulatory standards.

c) **Less than Significant Impact with Mitigation.** As discussed above under a.ii). through a.iv), the potential for liquefaction and seismic induced ground failure is considered to be high at the project site due to the depth to groundwater and type of soils which underlie the site. Impacts from on- or off-site landslides are not expected. Compliance with Mitigation Measure GEO-1 and applicable regulations would reduce potential impacts related to seismic related ground failure and liquefaction, to less than significant.

Unstable soils would include compressible/collapsible soils. Compressible soils generally undergo consolidation when exposed to new loading, such as fill or foundation loads. Soil collapse is a phenomenon where the soils undergo a significant decrease in volume upon increase in moisture content, with or without an increase in external loads. The project would involve construction upon existing soils which are generally unconsolidated alluvial deposits that could be subject to collapse and possibly undocumented fill soils which may be potentially compressible/collapsible. Due to the presence of potentially compressible/collapsible soils there is the potential for differential settlement which is a potentially significant impact.

As described above, the potential for compressible/collapsible soils is considered to be high at the project site due to the depth to groundwater and type of soils which underlie the site. With implementation of Mitigation Measure GEO-1, impacts associated with unstable soils that could result in lateral spreading, liquefaction, or collapse would be less than significant. Mitigation Measure GEO-1 shall be implemented prior to final project design to ensure that people or structures are not exposed to hazards associated with unstable soils. Additionally, compliance with seismic design parameters of the current CBC and UBC, as adopted by the City of Carson, would further reduce potential liquefaction and unstable soil impacts. Thus, compliance with Mitigation Measure GEO-1 and applicable regulations would reduce potential impacts related to unstable soils and liquefaction, to less than significant.

Subsidence is a general lowering of the ground surface over a large area, and is generally attributed to lowering of the groundwater levels, or extraction of oil, gas or geothermal energy. Subsidence has previously occurred within the City of Carson as a result of previous oil withdrawal within the Dominguez and Wilmington Oil. The City of Carson has maintained control of any further subsidence within the City. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the site or in the general site vicinity. Thus, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the project site. Therefore, impacts relating to subsidence would be less than significant.

d) **Less than Significant Impact with Mitigation.** Expansive soils include clay minerals that are characterized by their ability to undergo significant volume change (shrink or swell) due to variation in moisture content. As discussed above, the project site is primarily underlain by Chino silt loam and Hanford fine sandy loam which have a low to moderate shrink swell potential. Soils with shrink-swell or expansive properties typically occur in fine-grained sediments and cause damage through volume changes as a result of a wetting and drying process. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

As described above, the potential for expansive soils is considered low to moderate due to the type of soils which underlie the site, resulting in a potentially significant impact. With implementation of Mitigation Measure GEO-1, impacts associated with expansive soils would be less than significant. Mitigation Measure GEO-1 shall be implemented prior to final project design to ensure that people or structures are not exposed to hazards associated with expansive soils. If expansive soils are found at the site, the project would be designed with structural design recommendations to reduce the impacts from expansive soils. These could include over-excavation and replacement with non-expansive soils, soil treatment, moisture management, and/or specific structural design for expansive soil conditions. Additionally, compliance with seismic design parameters of the current CBC and UBC, as adopted by the City of Carson, would further reduce potential expansive soil impacts. Thus, compliance with Mitigation Measure GEO-1 and applicable regulations would reduce potential impacts related to expansive soils, to less than significant.

e) **No Impact.** The project site is located in an urbanized area where municipal wastewater infrastructure already exists. The project would be required to connect to the existing infrastructure and would not use septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

Mitigation Measure

MM GEO-1 Geotechnical Investigation. Prior to the issuance of grading or building permits, the applicant shall submit a geotechnical report, prepared by a registered civil engineer or certified engineering geologist, to the City of Carson, for review and approval. The project shall comply with the Uniform Building Code Chapter 18. Division1 Section1804.5 Liquefaction Potential and Soil Strength Loss. The geotechnical report shall assess potential consequences of any liquefaction and soil strength loss, estimation of settlement, lateral movement or reduction in foundation soil-bearing capacity, and discuss mitigation measures that may include building design consideration. Building design considerations shall include, but are not limited to: ground stabilization, selection of appropriate foundation type and depths, selection of appropriate structural systems to accommodate anticipated displacements or any combination of these measures.

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Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion

a) **Less than Significant Impact.** Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long term global temperature increases.

The State of California defines GHGs as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different global warming potentials (GWPs) and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, CH_4 has a GWP of 25 (over a 100-year period); therefore, 1 metric ton (MT) of CH_4 is equivalent to 25 MT of CO_2 equivalents ($MTCO_2e$). The State uses the GWP ratios available from the United Nations Intergovernmental Panel on Climate Change (IPCC) and published in the *Fourth Assessment Report* (AR4). By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons (MT) per year. Large emission sources are reported in million metric tons (MMT) of CO_2e.

Some of the potential effects of global warming in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB 2008). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;

- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

California generated 429.4 $MMTCO_2e$ in 2016, the most recent year data are available. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2016, accounting for approximately 39 percent of total GHG emissions in the state. This sector was followed by the industrial sector (21 percent) and the electric power sector (including both in-state and out-of-state sources) (16 percent) (CARB 2018).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

The City of Carson has not adopted a threshold of significance for GHG emissions that would be applicable to this project. In December 2008, the SCAQMD adopted a 10,000 $MTCO_2e$ per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards, the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for projects is the most relevant air district-adopted GHG significance threshold and is used as a benchmark for the proposed project. It should be noted that the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold (SCAQMD 2008).

The justification for the threshold is provided in SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As stated by the SCAQMD:

> *the…screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects…the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO$_2$e per year]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology (BACT)] for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility.*

Thus, based on guidance from the SCAQMD, if an industrial project would emit GHGs less than 10,000 MTCO$_2$e per year, the project would not be considered a substantial GHG emitter and GHG emission impact would be less than significant, requiring no additional analysis and no mitigation.

CEQA Guidelines 15064.4 (b)(1) states that a lead agency may use a model or methodology to quantify GHGs associated with a project. In September 2016, the SCAQMD in conjunction with CAPCOA released the latest version of the CalEEMod (Version 2016.3.2). The purpose of this model is to estimate construction-source and operational-source emissions from direct and indirect sources. Accordingly, the latest version of CalEEMod has been used for this project to estimate the project's emission impacts.

Construction Emissions

Construction activities associated with the project would result in emissions of CO_2 and to a lesser extent methane (CH_4) and nitrous oxide (N_2O). Construction-period GHG emissions were quantified based on the same construction schedule, activities, and equipment list as described in Issue 3 (b). To amortize the emissions over the life of the project, the SCAQMD recommends calculating the total GHG emissions attributable to construction activities, dividing it by a 30-year project life, and then adding that number to a project's annual operational-phase GHG emissions. As such, construction emissions were amortized over a 30-year period and included in the project's annual operational-phase GHG emissions.

Operational Emissions

GHG Emissions

Operational activities associated with the project would result in emissions of CO_2 and to a lesser extent CH_4 and N_2O. Operational sources of GHG emissions would include mobiles sources from vehicles traveling to and from the site, and indirect GHG emissions from export of electricity.

During operations, a maximum of 469 vehicle trips per day is expected. GHG emissions from mobile sources were calculated based on the trips per day, GHG emission factors for transportation fuels, and trip distances in CalEEMod.

Emissions of GHGs also resulted from electricity demand to power the on-site equipment and lighting. Electricity-related GHG emissions are based on the maximum electricity demand for project equipment, assuming maximum operating loads and equipment running hours, and CO_2 intensity factors for Southern California Edison.

Emissions Summary

The project's annual GHG emissions are shown in **Table 7**, *Annual Project Greenhouse Gas Emissions*. As shown, the project's total GHG emissions would be below the SCAQMD's proposed screening level for industrial/stationary source projects of 10,000 $MTCO_2e$. The project would result in a less than significant impact with respect to GHG emissions.

TABLE 7
ANNUAL PROJECT GREENHOUSE GAS EMISSIONS

Emissions Sources	CO_2e (Metric Tons per Year) [a]
Area	<1
Electricity	1,337
Natural Gas	176
Mobile	683
Waste	242
Water	259
Construction[b]	13
Project Total	**2,711**
SCAQMD GHG Significance Threshold	10,000
Exceeds Threshold?	**No**

[a] Totals may not add up exactly due to rounding in the modeling calculations.
[b] Construction emissions are amortized over 30 years.

SOURCE: ESA 2018

b) **Less than Significant Impact**. Although the City of Carson General Plan does not identify specific GHG or climate change policies or goals, the City's Energy Efficiency Climate Action Plan (EECAP) aims to implement energy efficiency and GHG reduction efforts (Carson 2015). The project has been evaluated for consistency with the EECAP. According to the EECAP, the City is in the process of implementing strategies to reduce energy consumption across sections, which includes promoting commercial energy retrofits (Carson 2015). Consistent with this strategy, the project will use solar energy, low-flow kitchen and bathroom faucets and toilets, energy-efficient appliances, a high efficiency ventilation systems, landscaping that would consist of native and drought-tolerant plants, and other green building features that conform to the California Green Building Code. Therefore, the proposed project would be consistent with the applicable GHG reduction strategies in the City's EECAP.

The Project's highest GHG contributors are from mobile and electricity sources. These are highly regulated sources with measures implemented in the Scoping Plan to reduce GHG emissions from each. With respect to relevant statewide GHG reduction strategies, in January 2007, the California Governor enacted Executive Order S-01-07, which mandates the following: (1) establish a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and (2) adopt a Low Carbon Fuel Standard (LCFS) for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the Climate Change Scoping Plan. The LCFS regulations were approved by CARB in 2009 and established a reduction in the carbon intensity of transportation fuels by 10 percent by 2020 with implementation beginning on January 1, 2011. In September 2015, CARB approved the re-adoption of

the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In the proposed 2017 Climate Change Scoping Plan Update, CARB's preferred recommendation includes increasing the stringency of the LCFS by reducing the carbon intensity of transportation fuels by 18 percent by 2030, up from the current target of 10 percent by 2020 (CARB, 2017). Furthermore, as utility providers, such as Southern California Edison, continue to meet their Renewable Portfolio Standards, GHG emissions from electricity consumption will decrease in future years.

Overall, as the project would be consistent with the City's EECAP and contributes to the implementation of the LCFS, the project would not conflict with an applicable plan, policy, or regulation to reduce GHG emissions. As such, impacts would be considered less than significant.

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Hazards and Hazardous Materials

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
8.	**HAZARDS AND HAZARDOUS MATERIALS — Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

a) **Less Than Significant Impact with Mitigation.** Exposure of the public or the environment to hazardous materials can occur through transportation accidents; environmentally unsound disposal methods; improper handling of hazardous materials or hazardous wastes (particularly by untrained personnel. The severity of these potential effects varies by type of activity, concentration and/or type of hazardous materials or wastes, and proximity to sensitive receptors.

Project construction activities may involve the use and transport of hazardous materials. Construction would involve the use of heavy equipment, which uses small amounts of oil and fuels. Construction activities that involve hazardous materials would be governed by several agencies, including the Environmental Protection Agency (EPA), Department of Transportation (DOT), California Division of Occupational Safety and Health (Cal/OSHA), and the California Department of Toxic Substances Control (DTSC).

Construction contractors would be required to implement Best Management Practices (BMPs) for handling hazardous materials during construction activities, including following manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction; avoiding overtopping construction equipment fuel tanks; routine maintenance of construction equipment; and properly disposing of discarded containers of fuels and other chemicals. Construction contractors would be required to implement safety measures in accordance with the General Industry Safety Orders of the California Code of Regulations. All construction-related materials would be transported and disposed of in accordance with applicable codes and regulations. Compliance with applicable federal, state, and local standards is required; therefore, construction-related impacts in regards to the transport, use, or disposal of hazardous materials during construction would be less than significant.

Operation of the proposed project would not generate hazardous waste materials, but it would generate agricultural waste; expired or contaminated cannabis product and potentially wastewater which may contain concentrated fertilizer. Upon expiration of any and all of its cannabis and any tainted or contaminated cannabis, the cannabis product will be removed and placed in secured trash bins in a quarantined secure storage area prior to destruction and final disposal. All plant waste will be composted using a mulching machine and then small amounts of cooking oil or other compostable items will be added to ensure that the compost mixture is unrecognizable and unusable. The composted waste will then be placed in a secured trash bins, within a locked storage room, prior to destruction and/or final disposal at an approved landfill. All runoff water from the cultivation process that cannot be recycled or discharged will be placed in a secured trash bin, within a locked storage room, prior to final disposal. All waste will be picked up by a certified third-party hazardous waste hauler.

Extraction and manufacturing of cannabis products would require the use of chemicals and fertilizers which will be stored, handled, and used at the facility. Project operation would also use and produce typical hazardous materials and wastes, associated with industrial uses, such as fuel, paints, commercial cleansers, solvents, and lubricants. It is not known at this time the exact quantities that the project would use. If the quantity or volume of hazardous materials used and stored at the project site exceeds the criteria threshold per HSC standards, then the applicant will be required to submit a Hazardous Materials Business Plan (HMBP) to the County of Los Angeles Fire Department (LAFD). The storage, use, transport and disposal of hazardous materials are regulated by applicable federal, state, and local regulations. Compliance with Mitigation Measures HAZ-1, HAZ-2, and the Carson Municipal Code Ordinance No. 17-1637, Section 15.140(E)(5)[1] and other federal, state and local requirements would serve to minimize health and safety risks to people or structures associated with routine use, transport, and

[1] Carson Municipal Code Ordinance No. 17-1637, Section 15.140(E)(5), states that all hazardous material used, generated or associated with the operation must be disposed of in a manner which is approved by the Director before disposal occurs, and which is compliant with all local, State, and federal guidelines for the disposal of hazardous materials.

disposal as well as accidental release of or exposure to hazardous materials. Therefore, operational impacts associated with the project related to use, transport, storage, or disposal of hazardous materials would be less than significant.

b) **Less Than Significant Impact with Mitigation.** Construction of the project would involve hazardous material typical to construction, including gasoline, motor oils, paints, solvents, and other miscellaneous materials (e.g., engine oil, etc.). All potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. The construction phase would involve the use of heavy equipment, which uses small amounts of oil and fuels and other potential flammable substances. During construction, equipment would require refueling and minor maintenance on location that could lead to fuel and oil spills. The contractor would be required to identify a staging area for storing materials. The drivers/operators of the bulk delivery trucks or mobile re-fuelers are trained and equipped to respond to a fuel spill, should one occur. Additionally, operators of heavy-duty equipment are trained to remain alert and nearby during fueling of equipment, and spills, should they occur, should not reach the off-site environment. Construction contractors would be required to implement safety measures in accordance with the General Industry Safety Orders of the California Code of Regulations. All construction-related materials would be transported and disposed of in accordance with applicable codes and regulations. Compliance with applicable federal, state, and local standards is required; therefore, construction-related impacts in regards to significant risk of explosion or accidental release of hazardous materials would be less than significant.

The proposed project includes the development of a three- to four-story commercial/industrial/ manufacturing building that would be used for the manufacturing, distribution, and testing of cannabis. Due to the volume of hazardous waste that will be used and stored on the project site, the applicant may potentially be required to submit a HMBP to the County of LAD, as described above under a). The storage, use, transport and disposal of hazardous materials are regulated by applicable federal, state, and local regulations. Compliance with Mitigation Measures HAZ-1, HAZ-2, and the Carson Municipal Code Ordinance No. 17-1637, Section 15.140(E)(5)[2] and other federal, state and local requirements would serve to minimize health and safety risks to people or structures associated with routine use, transport, and disposal as well as accidental release of or exposure to hazardous materials. Therefore, operational impacts associated with the project related to an accidental release would be less than significant.

Additionally, the Applicant proposes extraction of cannabis, which would require the inclusion of an extraction room. If extraction is done with liquid butane, or another highly flammable product, it would pose a potential risk to public safety, if not stored and

[2] Carson Municipal Code Ordinance No. 17-1637, Section 15.140(E)(5), states that all hazardous material used, generated or associated with the operation must be disposed of in a manner which is approved by the Director before disposal occurs, and which is compliant with all local, State, and federal guidelines for the disposal of hazardous materials.

processed properly. The LAFD will need to review the plans to ensure that they are designed adequately to minimize the risk to public safety (Mitigation Measure HAZ-3). The extraction room would be separated from other building facilities, would be vented properly, and the butane, or other extraction product, would be stored in a manner that isolates the material and contains it at specific temperatures. Compliance with Mitigation Measure HAZ-3, would render impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment less than significant.

c) **No Impact.** There are no schools located within one-quarter mile of the project site. The nearest school is Dominguez Elementary located approximately 1.3 miles northeast from the proposed site. Thus, the project would not emit or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d) **No Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. A review of regulatory databases maintained by county, State, and federal agencies found no documentation of hazardous materials violations or discharge on the project site.

There are no Superfund sites within the vicinity of the project site. All environmental cleanups and permitted hazardous material facilities are included in the Envirostor database, including Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites. The nearest known occurrence (State Response site) is the Manville Corporation. facility located at 2420 East 223rd Street (approximately 340 feet west of project site). The project site has a land use restriction as of 1/12/1990 for asbestos containing material (ACM) in the soil. The asphalt cover is not to be disturbed without approval and it cannot house a residence, day care, elder care, hospital, or school facilities, nor can you grow food on the property. As the ACM is capped, it should not become a nuisance for the proposed site. Therefore, the proposed project would not create a significant hazard to the public or environment.

e) **No Impact.** The Long Beach Airport is the closest airport to the subject site, located approximately 4 miles east of the project site. The project site does not lie within the boundaries of the airport influence plan area. Operation of the proposed project would not interfere with airport operations. Thus, the project would not result in safety hazards for people living or working in the area.

f) **No Impact.** The site is located approximately 3.35 miles southeast of the Goodyear Blimp Base Airport. Operation of project would not interfere with operation of the Goodyear Blimp. Thus, the project would not result in safety hazards for people living or working in the area.

g) **Less than Significant Impact.** A portion of the project site fronts East 223rd Street, which is designated as a local evacuation route in the General Plan Safety Element. Construction and Operation of the project would not require activities that would

interfere with this evacuation route. Construction activities would not block access to the project site or other nearby facilities or block the roadway. A construction plan will be prepared and submitted to the City for review to assure that the project does not interfere with emergency access during development. Therefore, impacts relating to interference with an adopted emergency response or evacuation plan during construction activities would be less than significant.

Operation of the proposed project would not significantly alter the existing circulation pattern in the project area or adversely impact evacuation plans. Access to the project site would be from one driveway (ingress and egress) accessible from East 223rd Street. Proposed parking and circulation plans will be reviewed by the County Fire and Sheriff Departments to assure that driveways and roads are adequate for emergency vehicles. Operation of the project would not impair or interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts relating to interference with an adopted emergency response or evacuation plan from project operations would be less than significant.

h) **No Impact.** The proposed project would be located within a highly built up industrial area and is not adjacent to any wildlands. The project would be by the Los Angeles County Fire Department. According to the California Department of Forestry and Fire Protection (CAL FIRE), the proposed project is not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2011). Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no impact would occur.

Mitigation Measures

MM HAZ-1: Prior to commencing operation of the cannabis facility (Certificate of Occupancy), the applicant will be required to show the City proof of contract with a licensed hazardous waste hauler that will be responsible for removing all hazardous wastewater and solid waste generated at the project site.

MM HAZ-2: Prior to commencing operation of the cannabis facility, the applicant will submit a Hazardous Material Business Plan, if the use and storage of hazardous materials would exceed the criteria threshold quantity per HSC standards. The Los Angeles County Fire Department, as the State Certified Unified Program Agency (CUPA) in the County of Los Angles is responsible for review and approval of the site specific HMBP that sets forth operational procedures, emergency contact information, emergency response plan for containment spills or release of vapors and other information required in the HMBP. The HMBP shall be posted in a visible location on the project premises and shall list all hazardous materials to be used on-site in a documented material safety data sheet. The HMBP shall also include a training program for employees on safe handling procedures, use of protective equipment and abatement procedures in the event of an accidental spill or release. An evacuation plan and spill prevention and counter measurement plan (SPCC) shall also be included. Implementation of the HMBP will ensure that an emergency response plan is in place in the event that hazardous materials are accidentally released during operations.

MM HAZ-3: Any and all equipment, facilities, connections and building components required for cannabis extraction shall be submitted to the Los Angeles County Fire Department for review and approval. Should extraction of cannabinoids be included in the building plans, no building permit shall be issued until the Los Angeles County Fire Department provides the City with written authorization to issue the permit.

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Hydrology and Water Quality

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9.	**HYDROLOGY AND WATER QUALITY — Would the project:**				
a)	Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☒	☐	☐
e)	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☒	☐	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a) **Less than Significant Impact with Mitigation.** Stormwater runoff within the City of Carson is typical of urbanized areas and includes pollutants from motor vehicles and other transportation related uses (parking lots). Pollutants include hydrocarbons, oil, grease, sediment and heavy metals. Pollutants associated with landscape maintenance are also likely to be present in stormwater runoff. These pollutants include nutrients from fertilizers and herbicides and pesticides. Trash is also an expected pollutant. Fecal coliform bacteria and other pollutants are typically found in stormwater runoff from land uses similar to those within the City. Most urban storm water discharges are considered non-point sources. Runoff from the project site ultimately drains to Dominguez Creek, which is located approximately 0.6 miles south of the project site. Dominguez Creek

drains to the Los Angeles River, and is thus located within the larger Los Angeles River Watershed. The Los Angeles River ultimately discharges to the Los Angeles Harbor. According to the Los Angeles Regional Water Quality Control Board (LARWQCB) 303(d) list of impaired water segments, Dominguez Creek has Total Maximum Daily Loads (TMDLs) established for: cadmium, copper, lead, zinc, DDT, PCBs, Chlordane, PAHs, benthic community and Sediment toxicity effects. The Dominguez Channel is 303(d) listed impaired for the following: ammonia and coliform bacteria. Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable receiving water limitations in Dominguez Channel are the following: arsenic, chromium, silver, nickel, mercury, and thallium.

During construction, the project site would be subject to ground-disturbing activities (e.g., site clearing, grading, foundation and infrastructure construction, installation of utilities). These activities would expose fresh soils for a limited time, allowing for possible erosion. Wind erosion would be minimized through soil stabilization measures required by the South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust), such as daily watering. Erosion from runoff could contain pollutants from heavy equipment or construction related materials, such as diesel, gasoline, oils, grease, solvents, lubricants, or other petroleum products which have the tendency to mix with water, and if not contained, would create the potential for a pollutant discharge from the project site. However, the project would be subject to existing regulations associated with the protection of water quality, as it would be required to obtain and comply with a Construction General Permit from the State Water Resources Control Board. The Construction General Permit and associated National Pollutant Discharge Elimination System (NPDES) requirements include development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), with associated monitoring and reporting requirements. Stormwater Best Management Practices (BMPs) are required to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. BMPs could include, but are not limited to, the use of or implementation of water bars, silt fences, staked straw bales, and avoidance of water bodies during construction. Additional source-control BMPs might also be required to prevent runoff contamination by potentially hazardous materials and eliminate non-stormwater discharges. These existing regulations, programs, and policies would ensure that runoff from construction activities would not violate waste discharge requirements or degrade the surface water quality of receiving waters to levels below standards considered acceptable by the LARWQCB and/or other regulatory agencies or affect the beneficial uses of receiving waters, resulting in less than significant impacts.

Positive surface drainage would be accommodated at the project site to allow surface runoff to flow away from improvements or areas susceptible to erosion. To reduce wind-related erosion, wetting of soil surfaces and/or covering exposed areas and soil stockpiles would be used during construction operations, as appropriate. The use of soil tackifiers may also be considered to reduce the potential for wind-related soil erosion. Implementation of BMPs would ensure that water- and wind-related erosion would be

confined to the construction area and not transported off-site. In addition, the topographic gradients at the project site are relatively gentle. Therefore, potential soil erosion and sedimentation runoff during construction would not exceed water quality standards and impacts would be less than significant.

Historic high groundwater depth in the vicinity of the project site is approximately 20 feet below ground surface (CDC 1998). Based on the depths to groundwater at the site, construction dewatering is not anticipated to be required, as the project site would only require minimal grading. However, should shallow perched groundwater be encountered that would require dewatering, the project would apply for coverage and adhere to the monitoring and reporting program under RWQCB Order No. R8-2009-0003. If dewatering is required, any groundwater that was found to be contaminated would be properly treated prior to being discharged in accordance with the NPDES permit. Uncontaminated groundwater may be treated and pumped to the storm drain system or used for on-site dust control purposes. Compliance with regulatory requirements would ensure that dewatering activities would not result in the exceedance of water quality standards during construction, including TMDL limits applicable to the Dominguez Channel, resulting in less than significant impacts.

During construction, materials such as fuels or solvents would be stored on-site. The potential for a spill or release of construction related chemicals during construction would be generally small because of the localized, short-term nature of the releases. Applicable regulations require measures regarding the handling of these types of materials and action protocols if a spill or release does occur. In addition, the site-specific health and safety plan would include measures to appropriately handle an on-site accidental release of fuel or other material from the equipment, resulting in a less than significant impact.

Compliance with the Construction General Permit, SWPPP, NPDES requirements, and local regulations that require construction phase BMPs are considered protective of water quality and would prevent a substantial violation of water quality standards, including TMDL limits applicable to the Dominguez Channel, and regulate waste discharge requirements minimizing the potential for contributing additional sources of polluted runoff during construction. Therefore, compliance with applicable regulatory requirements during construction would reduce potentially significant impacts to a less than significant level.

Stormwater discharge is generated by rainfall that runs off the land and impervious surfaces such as paved streets, parking lots, and rooftops. Currently, stormwater on the site drains via sheet flow to catch basins along East 223rd street and storm drains located along East 223rd Street. Following project construction, the site would be developed with buildings and paved areas and would have minimal areas of topsoil. The site would be primarily impervious surfaces, except for the landscaped areas. Post construction site drainage would still drain to the storm drains located along East 223rd Street. Stormwater discharge may include pollutants of concern, which are expected to be generated by the project that could affect stormwater. During project operation, pollutants of concern

within runoff may include, but are not limited to, pollutants such as hydrocarbons, oil, grease, heavy metals, nutrients, herbicides, and trash. This runoff can flow directly into storm drains and continue untreated into the Dominguez Channel. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats. Implementation of Mitigation Measure HYD-1 would satisfy Carson Municipal Code and MS4 permit requirements and would ensure compliance with water quality standards for stormwater runoff. Therefore, implementation of these programs and regulatory requirements would reduce stormwater pollutants that could affect water quality from the project site, thus reducing impacts related to stormwater pollution and water quality to less than significant levels. In addition, compliance with City of Carson Low-Impact Development standards and MS4-permit requirements would ensure that operation of the project would reduce potential violation of waste discharge requirements to a less than significant level.

Although not determined at this time, proposed project may incorporate methods of recycling wastewater from cultivation operations. Wastewater may have high concentrations of fertilizer, TDS, and/or brine solutions. All runoff water from the cultivation process, that cannot be recycled or doesn't meet discharge requirements, will be placed in a secured container, within a locked storage room, prior to final disposal. All wastewater will be picked up by a certified third-party hazardous waste hauler. Thus, no unsafe wastewater would be discharged, which would be protective of water quality and would prevent a substantial violation of water quality standards, including TMDL limits applicable to the Dominguez Channel.

Implementation of Mitigation Measure HYD-1 and all other applicable requirements would ensure compliance with water quality standards for stormwater runoff. Therefore, implementation of these programs and regulatory requirements would reduce stormwater pollutants that could affect water quality from the project site, thus reducing impacts related to stormwater pollution and water quality to a less than significant level.

The LID Plan would be designed to control pollutants, pollutant loads, and runoff volumes to the maximum extent feasible by minimizing impervious surface areas and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use. The LID plan will detail how the project will comply with retaining stormwater runoff on-site for the stormwater quality design volume (SWQDv) and minimizing hydromodification impacts to the natural drainage systems. If 100-percent on-site retention of the SWQDv is technically infeasible, partially or fully, the infeasibility will be demonstrated in the LID Plan submitted for approval. Technically infeasible reasons could include; brownfield development sites or other locations where pollutant mobilization is a document concern, smart growth and infill or redevelopment locations where the density and/or nature of the project would create significant difficulty for compliance with the on-site volume retention requirements. If partial or complete on-site retention is technically infeasible, the project site may biofiltrtre 1.5 times the portion of the remaining SWQDv that is not reliably retained on-site or alternatively off-site infiltration may be available. The remaining SWQDv that

cannot be retained or biofiltered on-site or off-site must be treated on-site to reduce pollutant loading. BMPs must be selected and designed to meet pollutant-specific benchmarks as required by the NPDES Permit. Flow-through BMPs may be used to treat the remaining SWQDv and must be sized appropriately based on either a rainfall intensity of 0.2 inches per hour or the 1-year, 1-hour rainfall intensity as determined by the most recent Los Angeles County isohyetal map, whichever is greater.

The LID Plan will identify permanent site design, source-control, and treatment-control BMPs that would be implemented as part of the project, including pollutant removal and protection of downstream water resources. The LID manual3 presents several alternatives for stormwater quality control measures; retention-based, biofiltration, vegetation-based, and treatment-based. Potential retention/detention-based options include: bioretention, infiltration basin, infiltration trench, dry well, permeable pavement without an underdrain, rain barrel/cistern, and green roof. Vegetation-based options include: stormwater planter, tree-well filter, vegetated filter strips, and vegetated swales. Treatment-based stormwater options include: sand filters, constructed wetlands, extended detention basins, wet ponds, permeable pavement with an under drain and proprietary devices. The final design is specified in the LID Plan which requires approval by the City prior to project approval. Implementation of these BMPs and control measures into the project design would reduce impacts from stormwater runoff volumes and stormwater pollutants to a less than significant level.

The following source control measures are taken from the County LID Manual: S-1 – Storm Drain Message and Signage, S-2 – Outdoor Material Storage Area, S-3 – Outdoor Trash Storage/Waste Handling Area, S-4 – Outdoor Loading/Unloading Dock Areas, S-5 – Outdoor Vehicle/Equipment Repair/Maintenance Area, S-6 – Outdoor Vehicle/Equipment/Accessory Wash Area, S-7 – Fuel & Maintenance Area, S-8 – Landscape Irrigation Areas, S-9 – Building Materials, S-10 – Animal Care and Handling Facilities, and S-11 – Outdoor Horticulture Areas. Of these 11 measures, storm drainage message and signage, outdoor material storage area, outdoor trash storage/waste handling area, and outdoor loading/unloading dock area, and landscape irrigation areas are anticipated to be required due to the proposed operations. Storm drain message and signage requires that signs and messages be posted that discourage illegal dumping. Outdoor material storage requirements include placing potential contaminants into an enclosure that prevents contact with the storm drains. Outdoor trash requirements include isolating the stormwater impacted by the storage area and ensuring the waste is contained on-site via grading and screens until the materials can be disposed of properly. Outdoor loading and unloading include similar requirements such as isolating the bays from the surround drainage systems and covering the area to prevent any leakage of pollutants. Lastly, landscape requirements include design criteria to limit excessive runoff generated by the landscaping and minimize fertilize, pesticides, and herbicide uses. The LID Plan will include a detailed list of components and features that will be incorporated into the

3 County of Los Angeles Department of Public Works, 2014. Low Impact Development Manual Standards Manual.

final project design. Implementation of these source control measures would reduce impacts at the project site to a less than significant level.

b) **Less than Significant Impact.** Construction activities are not expected to have excavation activities below the normal or historic high groundwater levels, which are approximately 20 feet below ground surface. However, if seepage or perched groundwater is encountered during construction, which is unlikely, dewatering may be necessary. Any seepage encountered during construction would be mitigated per the SWPPP, as needed, by constructing small drainage swales from the base of the excavations to temporary sump pits or stormwater/LID features on-site. If dewatering is required, groundwater that was found to be contaminated would be properly treated prior to being discharged in accordance with the NPDES permit. Uncontaminated groundwater may be treated and pumped to the storm drain system or used for on-site dust control purposes. If seepage is encountered, it would not substantially deplete groundwater supplies and would not result in a net deficit in aquifer volume, or lower the groundwater table resulting in a less than significant impact.

Any discharges of groundwater during construction would comply with applicable permits and federal, state, and local requirements concerning the handling, storage, and disposal of hazardous materials to reduce the potential for a release of contaminants into the groundwater as a result of project construction. Water use may temporarily increase for a limited extent during construction for general site activities including cleaning of tools and equipment, wet trades, and dust suppression. However, this increase would be temporary and is not expected to deplete groundwater resources. Therefore, construction-phase impacts relating to depletion of groundwater supplies or groundwater recharge would be less than significant.

Water supply to the City of Carson comes from the Metropolitan Water District (MWD), the California Water Service Company's Rancho Dominguez District (CWS), and the Golden State Water Company (GSW). CWS serves most of the City of Carson. They use a combination of local groundwater and surface water, purchased from MWD which is imported from the Colorado River and the State Water Project in northern California. The CWS Dominguez water system includes 374 miles of pipeline, nine active wells, 12 storage tanks and seven MWD connections (CWS 2014). GSW serves portions of the City of Carson, primarily the northwest corner. They provide a blend of groundwater from the West and Central Coast groundwater basins and imported water from the California River Aqueduct and State Water Projected imported from MWD (GSWC 2016). The proposed project would obtain water from supplier that uses groundwater sources. As discussed further under Utilities and Service Systems, there is sufficient water available to supply the project; thus, groundwater supplies would not be significantly depleted as a result of project implementation.

Additionally, although the existing site is undeveloped, it is primarily impervious due to partially paving and compaction of subgrade from previous uses. Implementation of the project would not significantly increase the amount of impervious surfaces at the site.

Additionally, groundwater recharge doesn't take place at the site as it is in the middle of a heavily industrial area. Therefore, project implementation would not significantly affect groundwater recharge or deplete groundwater resources resulting in a less than significant impact.

Project implementation would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project would not access directly any underlying groundwater resources. Project water supply would potentially come from groundwater resources, as all city water supplies use groundwater, but would not substantially deplete these resources. There is sufficient water supply for the projected water demands of the project such that there would be no depletion of groundwater supplies. Although the amount of impervious surfaces would slightly increase with implementation of the project, groundwater recharge does not occur at the site as it's in the middle of an industrial area. Thus, the rate of infiltration needed to support groundwater recharge would not be substantially decreased. Furthermore, compliance with applicable regulatory requirements would reduce potentially significant impacts to a less than significant level.

c) **Less than Significant with Mitigation.** The proposed project would require minimal grading which could affect drainage at the site. However, careful design would prevent substantial alterations to drainage patterns and/or erosion on-site or off-site. The project site is a semi-triangular shaped vacant lot which is paved in the northern portion, has a stand of eucalyptus trees on the west, and is covered with bare soil, grass, and low-lying vegetation on the remaining portions of the site. The site is primarily impervious due to previous paving and compaction of subgrade from previous uses at the site. The proposed project would slightly increase the impervious surfaces at the site. However, the project would not substantially alter the existing drainage pattern of the site or result in substantial erosion or siltation. Standard construction phase BMPs, required as part of the permitting process, would decrease the potential for significant erosion or sedimentation from soil disturbance associated with construction of the project. In addition, there are no stream or rivers nearby whose course would be altered by the project. Therefore, project construction would not substantially alter drainage patterns or result in substantial erosion or siltation occurring on-site or off-site, resulting in less than significant impacts.

Implementation of Mitigation Measure HYD-1 would ensure that operation of the project would not substantially alter drainage patterns across the site, thereby reducing the potential for erosion or siltation on-site or off-site. In addition, because there are no rivers or streams in the vicinity, the project would not alter a river or stream. Therefore, long-term impacts on drainage patterns across the project site that could result in substantial erosion and siltation on-site or off-site would be less than significant.

d) **Less than Significant with Mitigation.** Although minimal grading would occur throughout the site, the resultant ground disturbance would be spread over the site and would not significantly alter the overall topography, as the site has been previously graded, nor cause there to be flooding on-site or off-site. Water would be temporarily

used during construction of the project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate, or evaporate. Therefore, construction of the project would not result in a substantial increase in the rate or amount of surface runoff or cause flooding on-site or off-site and impacts would be less than significant.

The rate and amount of surface runoff is determined by multiple factors, including topography, the amount and intensity of precipitation, the amount of evaporation that occurs in the watershed, and the amount of precipitation and water that infiltrates to the groundwater. The project would not alter the amount or intensity of precipitation, nor would it alter the course of any streams or rivers located on or around the project site. Currently, surface runoff at the site is via sheet flow to the storm drains along 223rd Street. The project would not substantially alter the topography or existing drainage pattern of the site, area, or receiving waters, or result in on-site or off-site flooding. Although the project would slightly increase the amount of impervious surfaces at the site, its hydrologic boundaries would closely match existing conditions. Thus, the rate of stormwater across the site would not increase. Implementation of Mitigation Measure HYD-1 would ensure that the project is designed to meet drainage control requirements to ensure that peak runoff volumes are reduced. In addition, because there are no rivers or streams in the vicinity, the project would not alter a river or stream. Therefore, long-term impacts on drainage patterns across the project site that could result in substantial increased rate or volume of stormwater runoff resulting in flooding on-site or off-site would be less than significant.

e) **Less than Significant with Mitigation.** Water would be used during the temporary construction phases of the project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. Therefore, the project would not result in a substantial increase in the rate or amount of surface runoff and would not exceed the capacity of existing or planned stormwater drainage systems and impacts would be less than significant.

The project site is a semi-triangular shaped vacant lot which is paved in the northern portion, has a stand of eucalyptus trees on the west, and is covered with bare soil, grass, and low-lying vegetation on the remaining portions of the site. The site is primarily impervious due to previous paving and compaction of subgrade from previous uses at the site. The proposed project would slightly increase the impervious surfaces at the site. Currently, surface runoff at the site is via sheet flow to the storm drains along 223rd Street. The project would not substantially alter the topography or existing drainage pattern of the site. Although the project would slightly increase the amount of impervious surfaces at the site, its hydrologic boundaries would closely match existing conditions. Thus, the rate of stormwater across the site would not increase. Implementation of Mitigation Measure HYD-1, would ensure that stormwater runoff would not supply additional sources of polluted runoff and would not exceed the capacity of existing or planned stormwater drainage systems as it has to be designed to hold 100 percent of the stormwater quality runoff volume. As a result, project implementation isn't expected to

increase stormwater volumes or rates of discharge or add additional pollutants to stormwater drainage systems. Thus, impacts would be less than significant.

Project implementation could create potentially polluted runoff water that could exceed the capacity of existing or planned stormwater drainage systems. Compliance with applicable permits, Carson Municipal Code, Mitigation Measure HYD-1, and other local regulations that require BMPs and source control measures would restrict stormwater runoff and polluted runoff. Therefore, compliance with applicable regulatory requirements would reduce potentially significant impacts to a less than significant level.

f) **Less than Significant with Mitigation.** Impact a) through Impact e) discuss potential impacts associated with the degradation of water quality during construction. The project would be required to adhere to the NPDES permit conditions, Mitigation Measure HYD-1 for control of stormwater flow requirements, discharges, and protection of water quality. Therefore, implementation of these programs and regulatory requirements would reduce stormwater pollutants that could affect water quality from the project site, thus reducing impacts related to stormwater pollution and water quality to less than significant levels.

Impact 4.8-1 through Impact 4.8-5 discuss potential impacts associated with the degradation of water quality during operation. Implementation of Mitigation Measure HYD-1 would satisfy MS4 permit requirements and would ensure compliance with water quality standards for stormwater runoff. Therefore, implementation of these programs and regulatory requirements would reduce stormwater pollutants that could affect water quality from the project site, thus reducing impacts related to stormwater pollution and water quality to less than significant levels.

g) **No Impact.** The proposed project does not lie within a 100-year floodplain as mapped on federal Flood Hazard Boundary or FIRM or other flood hazard delineation maps. The project site does lie within an "other flood hazard area" as delineated on the FIRM map 06037C1955F. The project site located in Zone X on the FIRM panel, which includes areas of 0.2 percent chance of flood (500-year floodplain), areas of 1 percent annual flood chance (100 year floodplain) with average depths of 1 foot. Therefore, the proposed project would not place housing within a 100-year floodplain and no impacts would occur.

h) **No Impact.** The proposed project does not lie within a 100-year floodplain as mapped on federal Flood Hazard Boundary or FIRM or other flood hazard delineation maps. The project site does lie within an "other flood hazard area" as delineated on the FIRM map 06037C1955F. The project site located in Zone X on the FIRM panel, which includes areas of 0.2 percent chance of flood (500-year floodplain), areas of 1 percent annual flood chance (100-year floodplain) with average depths of 1 foot. Moreover, the proposed project would not place any structures within a 100-year flood hazard area that would impede or redirect flood flows. Therefore, no impact to existing floodplains from

structures that would impede or redirect flood flows would occur as a result of implementation of the proposed project.

i) **No Impact.** Dam inundation areas are mapped by dam owners and submitted to the California Office of Emergency Services. The City of Carson is not located in close proximity to a dam. Therefore, dam failure, and subsequent inundation, is not a concern at the project site. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam.

j) **No Impact.** A tsunami is a sea wave or series of sea waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The City of Carson is located approximately 5.9 miles inland from the Pacific Ocean and 2.2 miles inland from the Los Angeles/Long Beach Harbor area. Tsunami inundation areas are mapped by the California Geological Survey, part of the California Department of Conservation. Based on maps on the California Department of Conservation website, (CDC, 2015) the City of Carson is not located in a potential inundation area resulting from a tsunami. Therefore, tsunamis are not a concern at the project site. A seiche is a surface wave that oscillates in an enclosed water body, such as a reservoir, lake, or pond, when the water body is shaken, usually by an earthquake. There are no enclosed water bodies within the City of Carson so damage from seiches is not expected at the project site. Mudflow is a combination of water, rock, debris and soil resulting from surface erosion. Areas susceptible to mudflows are primarily canyon areas or areas along the bases of mountain slopes. The project site is not located next to any canyons or mountain slopes. Therefore, mudflows are not expected to occur at the project site. Therefore, the proposed project would not experience inundation by seiche, tsunami, or mudflow.

Mitigation Measure

MM HYD-1: Prior to final project design, a Low Impact Development (LID) Plan would be developed by the Applicant and submitted to the City of Carson for approval. The LID Plan is required because the project is classified as a "Planning Priority Project" per the CMC Ord. 96-1101, § 1 and must comply with requirements of Section 5809 Storm Water Pollution Control Measures for New Development and Redevelopment Projects. The project will result in 10,000 square feet or more of the impervious surfaces which was not subject to post-construction stormwater quality control requirements. Therefore, all stormwater runoff generated at the project site must be treated.

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Land Use and Land Use Planning

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10.	**LAND USE AND LAND USE PLANNING — Would the project:**				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

a) **No Impact.** The project site is located in an urbanized area in an existing industrial neighborhood. The project site is surrounded by commercial uses (RV rental facility) to the west, the Alameda Corridor to the east, the I-405 to the north, and East 223rd Street to the south followed by a tree buffer to a parkett and industrial buildings. The site is currently not publically accessible and is enclosed by perimeter fencing. The development of the proposed project would not physically divide an established community because it does not prevent access to any of the existing adjacent land uses and would not divide any established communities. The proposed project would not result in changes to the surrounding neighborhood. As a result, no impacts are anticipated to occur regarding dividing an established community.

b) **Less than Significant Impact.** According to the City's General Plan, Land Use Plan, the project site is designated as Regional Commercial (City of Carson 2004). The "Regional Commercial" category includes uses intended to serve a broad population base and offer a wide range of services to both the community and the region. Businesses in this designation include major department stores, specialty shops, other retail and service uses, automobile and other vehicle dealerships, and hotels and motels. Regional Commercial is intended to provide for the City's primary regional shopping center and its peripheral areas. The existing zoning on the project site is "Commercial Automotive." The project would require a Zone Text Amendment to allow cannabis uses subject to a Development Agreement pursuant to the City of Carson Cannabis Operations Ordinance No. 17-1637 with a designation of CA. RC is primarily for the full range of industrial uses which are acceptable within the community as a whole, with provisions for controlling any adverse effects upon the more sensitive areas of the City. With approval of the zone text amendment the project would be consistent with the City's zoning. Therefore, impacts are anticipated to be less than significant with applicable land use plans, policies, and regulations.

c) **No Impact.** The project site is located in an urbanized area in an area surrounded by industrial and commercial land uses. The project area is completely surrounded by existing development, and no sensitive habitat exists within or in areas surrounding the project site. No habitat conservation plans or natural community conservation plans are in place or applicable to the project area. As a result, no impacts are anticipated to occur regarding any applicable habitat conservation plans or natural community conservation plans.

References

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Mineral Resources

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion

a) **No Impact.** The project site is located in the City of Carson in an urbanized area, on a developed parcel with surrounding industrial uses. According to the Los Angeles County Conservation and Natural Resources Element and the California Department of Conservation (CDC), the project site is in Mineral Resource Zone 3 (MRZ-3), as identified in Figure 9.6, Mineral Resources (Los Angeles County, 2015), and the CDC Mineral Lands Classification Map (CDC, 1982). No mineral extraction or other mining operations have historically or currently occur within the project site, nor would the project result in the loss of availability of any known mineral resource. Therefore, no impact to a known mineral resource would occur.

b) **No Impact.** As described above, the project site is in MRZ-3 as identified by the Los Angeles County Conservation and Natural Resources Element and the CDC. While the project is within an MRZ-3 zone, no mineral extraction or other mining operations have historically or currently occur within the project site, nor would the project result in the loss of availability of any locally important mineral resource. Further, the project site is not identified as an area that contains known mineral resources in the City's General Plan (City of Carson, 2004). Therefore, no impact would occur to a locally important mineral resources.

References

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City of Carson. City of Carson General Plan EIR. 2002. Available at: http://ci.carson.ca.us/content/files/pdfs/planning/generalplan/EIR.pdf. Accessed October 2018.

Los Angeles County, Department of Regional Planning. Figure 9.6, Mineral Resources. 2015. Available at: http://planning.lacounty.gov/assets/upl/project/gp_2035_2014-FIG_9-6_mineral_resources.pdf. Accessed October 2018.

Noise

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
12.	**NOISE — Would the project result in:**				
a)	Exposure of persons to or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) **Less Than Significant with Mitigation.** Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound (Caltrans 2013, Section 2.2.1).

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale (i.e., not linear) that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. In a non-controlled environment, a change in sound level of 3 dB is considered "just perceptible," a change in sound level of 5 dB is considered "clearly noticeable," and a change in 10 dB is perceived as a doubling of sound volume (Caltrans 2013, Section 2.1.3). Pressure waves traveling through air exert a force registered by the human ear as sound (Caltrans 2013, Section 2.1.3).

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured

using an electronic filter that deemphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements (Caltrans 2013, Section 2.1.3).

An individual's noise exposure is a measure of noise over a period of time, whereas a noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual. These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts (Caltrans 2013, Section 2.2.2.1).

The time-varying characteristic of environmental noise over specified periods of time is described using statistical noise descriptors in terms of a single numerical value, expressed as dBA. The most frequently used noise descriptors are summarized below (Caltrans 2013, Section 2.2.2.2):

L_{eq}: The L_{eq}, or equivalent sound level, is used to describe the noise level over a specified period of time, typically 1-hour, i.e., $L_{eq}(1)$, expressed as L_{eq}. The L_{eq} may also be referred to as the "average" sound level.

L_{max}: The maximum, instantaneous noise level.

L_{min}: The minimum, instantaneous noise level.

L_x: The noise level exceeded for specified percentage (x) over a specified time period; i.e., L_{50} and L_{90} represent the noise levels that are exceeded 50 90 percent of the time specified, respectively.

L_{dn}: The L_{dn} is the average noise level over a 24-hour day, including an addition of 10 dBA to the measured hourly noise levels between the hours of 10:00 PM to 7:00 AM. to account nighttime noise sensitivity. L_{dn} is also termed the day-night average noise level or DNL.

CNEL: Community Noise Equivalent Level (CNEL), is the average noise level over a 24-hour day that includes an addition of 5 dBA to the measured hourly noise levels between the evening hours of 7:00 PM to 10:00 PM and an addition of 10 dBA to the measured hourly noise levels between the nighttime hours of 10:00 PM to 7:00 AM to account for noise sensitivity during the evening and nighttime hours, respectively. CNEL and Ldn noise levels typically differ by less than 1 dBA and are generally interchangeable.

City of Carson Municipal Code

The City of Carson Municipal Code, under Chapter 5 (Noise Control Ordinance) Section 5500, adopts the Los Angeles County Noise Control ordinance.

Exterior Noise Standards

Pursuant to Los Angeles County Municipal Code, Section 12.08.390 (Exterior Noise Standards), exterior noise levels should not exceed 50 dBA between the hours of 7:00 AM and 10:00 PM at residential uses during the daytime, 45 dBA between the hours of 10:00 PM and 7:00 AM at residential uses during the nighttime, 65 dBA at commercial uses, and 70 dBA at industrial uses. The County's exterior noise standards are summarized in **Table 8**, *Los Angeles County Exterior Noise Standards*.

TABLE8
LOS ANGELES COUNTY EXTERIOR NOISE STANDARDS

Noise Zone	Designated Noise Zone Lane Use (Receptor Property	Time Interval	Exterior Noise Level (dB)
I	Noise-sensitive area	Anytime	45
II	Residential Properties	10:00 PM – 7:00AM (nighttime)	45
		7:00 AM – 10:00 PM	50
III	Commercial Properties	10:00 PM – 7:00 AM (nighttime)	55
		7:00 AM – 10:00 PM	65
IV	Industrial Properties	Anytime	70

SOURCE: Los Angeles County Municipal Code Section 12.08.390 (Exterior Noise Standards)

Further, the County Noise Ordinance establishes the following standards based on the duration of the noise-generating activity:

- Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour.
- Standard No. 1 shall be the applicable noise level; or, if the ambient L50 exceeds the forgoing level, then the ambient L50 becomes the exterior noise level for Standard No. 1.

- Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour.

- Standard No. 2 shall be the applicable noise level from Standard 1 plus 5 dB(A); or, if the ambient L25 exceeds the forgoing level, then the ambient L25 becomes the exterior noise level for Standard No. 2.

- Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 5 minutes in any hour.

- Standard No. 3 shall be the applicable noise level from Standard 1 plus 10 dB(A); or, if the ambient L8.3 exceeds the forgoing level, then the ambient L8.3 becomes the exterior noise level for Standard No. 3.

- Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 1 minute in any hour.

- Standard No. 4 shall be the applicable noise level from Standard 1 plus 15 dB(A); or, if the ambient L1.7 exceeds the forgoing level, then the ambient L1.7 becomes the exterior noise level for Standard No. 4.

- Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Standard 1 plus 20 dB(A); or, if the ambient L0 exceeds the forgoing level, then the ambient L0 becomes the exterior noise level for Standard No. 4.

Construction Noise Standards

Pursuant to Section 12.08.440 of the Los Angeles County Code, noise sources created by construction are prohibited between the hours of 7:00 PM and 7:00 AM Monday through Saturday or any time on Sundays or holidays. The City of Carson Municipal Code Section 5502(c) amends Los Angeles County Code Section 12.8.440 to require that for affected residential receptors between the hours of 7:00 AM and 8:00 PM, maximum noise levels for nonscheduled, intermittent, short-term operation (less than 20 days) of mobile equipment shall not exceed 75 dBA at a single-family residences, 80 dBA at multi-family residences, or 85 dBA for semi-residential/commercial use. The maximum noise level for repeatedly scheduled and relatively long-term (periods of 21 days or more) of construction equipment shall not exceed 65 dBA at single-family residences, 70 dBA at multi-family residences, or 70 dBA at semi-residential/commercial uses between the hours of 7:00 AM and 8:00 PM. For commercial receptors, the maximum noise level generated by mobile or stationary equipment shall not exceed 85 dBA.

City of Carson General Plan

In addition to the Los Angeles County's noise standards, the City of Carson has also established noise guidelines in the Noise Element of the City's General Plan that are used for planning purposes, see **Table 9**, *Noise and Land Use Compatibility Matrix*. These guidelines are based, in part, on the community noise compatibility guidelines established by the California State Governor's Office of Planning and Research and are intended for

use in assessing the compatibility of various land use types with a range of noise levels (California, 2013).

TABLE 9
NOISE AND LAND USE COMPATIBILITY MATRIX

	Community Noise Exposure L_{dn} or CNEL			
Land Use Categories	**Normally Acceptable**	**Conditionally Acceptable**	**Normally Unacceptable**	**Clearly Unacceptable**
Residential-Low Density	50-60	60-65	65-75	75-85
Residential Multi- Family	50-60	60-65	65-75	75-85
Transient Lodging, Hotel, Motel	50-65	65-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-65	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-70	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	70-75	NA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business, Commercial, Professional	50-67.5	67.5-75	75-85	NA
Agriculture, Industrial, Manufacturing, Utilities	50-70	70-75	75-85	NA

Normally Acceptable: Specified land use is satisfactory, based upon the assumption buildings involved are conventional construction, without any special noise insulation.
Conditionally Acceptable: New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will suffice.
Normally Unacceptable: New construction or development generally should be discouraged. A detailed analysis of the noise reduction requirements must be made and noise insulation features included in the design of a project.
Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: U.S. Department of Housing and Urban Development Guidelines and State of California Standards

Thresholds of Significance

With respect to the community noise assessment, changes in noise levels of less than 3 dBA are generally not discernable to most people, while changes greater than 5 dBA are readily noticeable and would be considered a significant increase.

Therefore, the significance threshold for mobile source noise is based on human perceptibility to changes in noise levels (increases) with consideration of existing ambient noise conditions and the City's land use noise compatibility guidelines. Therefore, the Project would result in a significant noise impact if:

- Exposure or persons or generation of noise levels in excess of standards established in the local general plan or noise ordinance, and applicable standards of other agencies.
- Project-related off-site traffic increase ambient noise levels by 5 dBA CNEL or more along roadway segments with sensitive receptors, and the resulting noise level occurs

on a noise-sensitive land use within an area categorized as either "normally acceptable" or "conditionally acceptable"; or causes ambient noise levels to increase by 3 dBA CNEL or more and the resulting noise occurs on a noise-sensitive land use within an area categorized as either "normally unacceptable" or "clearly unacceptable."

Existing Conditions

The project is located in a highly urbanized area surrounded by a mixture of land uses including commercial, warehouse and light industrial. The project is located south of I-405, east of the Alameda Corridor (railroad corridor), east of East 223rd Street. The project site is bordered to the west by a car dealership and commercial uses, a private park associated with the Tesoro Campus to the south, I-405 to the north and a railroad corridor to the east. To the west, is a two-story multi-tenant warehouse/light manufacturing building and South Broadway.

To quantify the existing noise environment of the Project Site, one short-term (15-minute) noise measurements was conducted at location R1, located at the southwest corner of the intersection of East 223rd Street and Arco Road, south of the Project Site. Ambient sound measurements were conducted on Tuesday, October 9, 2018, approximately 120 feet south of the Project Site, to characterize the existing noise environment in the Project vicinity.

The ambient noise measurements were conducted in accordance with the City's standards. The ambient noise measurements were conducted using a Larson-Davis Model LxT Sound Level Meter (SLM). The Larson-Davis LxT SLM is a Type 1 standard instrument, as defined in the American National Standard Institute (ANSI) S1.4. The SLMs were calibrated and operated according to manufacturer specifications. The SLM microphone was placed at a height of 5 feet above ground level.

These monitoring locations provide a representative characterization of the existing noise conditions within the vicinity of the Project Site. The results of the ambient noise measurement data are summarized in **Table 10**, *Summary of Ambient Noise Measurements*. As shown in Table 10, the measured L_{eq} is 72 dBA.

TABLE 10
SUMMARY OF AMBIENT NOISE MEASUREMENTS

Site ID	Monitoring Date(s)	Start Time	End Time	L_{eq}	L_{max}	L_{min}	L_{10}	L_{50}	L_{90}
R1 NE Corner of Carson Plaza Hotel	10/9/2018	8:59 AM	9:14 AM	72	91	61	75	67	63

SOURCE: ESA, 2018.

Construction Noise

The development is anticipated to occur over 6 to 8 months, and construction is scheduled to begin in second quarter 2019. Project construction and equipment installation is anticipated to occur from 7:00 AM to 6:00 PM., Monday through Saturday. Construction activities would include demolition, site preparation, grading, paving, and building construction. Construction hours would occur in accordance with the County of Los Angeles construction noise standards, which prohibit construction between the hours of 7:00 PM and 7:00 AM, Monday through Saturday or any time on Sunday and holidays. Parking for the construction workers would be provided on the project site or will be leased from nearby off-site parking areas.

The analysis includes consideration of construction noise effects on noise sensitive receivers in the vicinity of the Project Site due to the operation of construction equipment (on-site construction activities) and haul trucks (off-site construction activities).

On-Site Construction Activities

Noise from construction activities would be generated by the operation of vehicles and equipment involved during various stages of construction: demolition, excavation, foundation construction, and building construction. The noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment, the specific model (horsepower rating), the construction activities being performed, and the maintenance condition of the equipment. Construction noise associated with the Project was analyzed using a mix of typical construction equipment, estimated durations, and construction phasing, based on construction equipment data provided by the Applicant and assumptions derived from similar projects. Consistent with Section 12.08.440 of the Los Angeles County Code, the construction noise levels estimated at the property line of the closest sensitive receptor location. As previously stated the project site is surrounded by a mix of land uses, including commercial, warehouse, light industrial, automotive, and manufacturing uses. There are no residential land uses within 500 feet of the project site. The closest sensitive receptors to the Project Site is the car dealership to the west and park associated with the Tesoro Campus to the south, located approximately 15 feet and 120 feet, respectively, from the Project Site. The nearest residential land use to the Project Site is approximately 1,700 feet to the east, across the Alameda Corridor. It is conservatively assumed that multiple equipment would operate simultaneously. In reality equipment would likely be dispersed throughout the Project Site; therefore, the noise levels represent a conservative maximum and actual noise levels could be lower. **Table 11**, *Construction Equipment and Estimated Noise Levels*, presents the list of construction equipment including approximate quantities per construction phase with reference noise levels.

TABLE11
CONSTRUCTION EQUIPMENT AND ESTIMATED NOISE LEVELS

Construction Phase and Equipment	Noise Level L_{max} at 50 ft (dBA)	Equipment Usage Factor (%)	Hourly Quantity	Estimated Hourly Noise Level L_{eq} at the Car Dealership (dBA) per Phase
Demolition				
Concrete Saw	90	20	1	94
Excavator	81	40	3	
Rubber Tired Loader	79	40	2	
Site Preparation				
Rubber Tired Loader	79	40	2	89
Tractor/Loader/Backhoe	80	25	2	
Grading				
Excavator	81	40	1	88
Graders	85	40	1	
Rubber Tired Loader	79	40	1	
Tractor/Loader/Backhoe	80	25	3	
Building Construction				
Cranes	81	16	1	84
Forklift	75	10	3	
Generator Sets	81	50	1	
Tractor/Loader/Backhoe	80	25	3	
Welders	74	40	1	
Foundation/Concrete Pour				
Cranes	81	16	1	84
Forklift	75	10	3	
Generator Sets	81	50	1	
Tractor/Loader/Backhoe	80	25	3	
Welders	74	40	1	
Paving				
Cement and Mortar Mixers	79	40	2	88
Paver	77	50	1	
Pavement Scarifier	90	20	2	
Roller	80	20	2	
Tractor/Loader/Backhoe	80	25	1	
Architectural Coating				84
Air Compressor	78	20	1	

Note: Noise Levels at 50 ft and Usage Factor are derived from Federal Highway Administration's Roadway Construction Noise Model User's Guide. Usage factors are the ratio of the time that a piece of equipment is in use to the total time that it could be in use. Usage factors are typically attributable to multiple pieces of equipment operating simultaneously.

SOURCE: ESA, 2018.

The estimated noise levels, shown in Table 11, assumes the Project contractor(s) would equip the construction equipment, stationary or mobile, with properly operating and maintained noise mufflers, consistent with the manufacturers' standard operation procedures. These assumptions represent a worst-case noise scenario as all construction equipment used in a given phase would not typically operate concurrently and at full power, and the location of activities is routinely spread across the construction site, rather than concentrated close to the nearest noise-sensitive receptors.

As shown in Table 11, estimated construction noise levels at the nearest sensitive receptor, the car dealership, range from 84 to 94 dBA L_{eq}. Accounting for distance attenuation of 6 dBA per doubling of distance,[4] the maximum construction noise levels would be approximately 79 dBA at the park associated with the Tesoro Campus and 36 dBA at the nearest residential land use. The County Code does not provide a threshold for parks or recreational areas. Therefore, for purposes of this analysis, because the park is associated with a commercial business, the commercial noise threshold has been applied to the adjacent park. The City of Carson Municipal Code Section 5500 limits construction noise levels to 70 dBA L_{max} for commercial receptors between the hours of 7:00 AM and 8:00 PM. The Project construction noise levels per phase would exceed 70 dBA L_{max} at the nearest commercial source, the car dealership and park. Construction noise levels experienced at the nearest residential land use would be far below the threshold of 65 dBA at single-family residences. Construction noise impacts would not be experienced at residential land uses; however Project construction noise would be considered a potentially significant impact due to the potential exceedance of the 70 dBA L_{max} standard at a commercial receptor. Therefore, Mitigation Measures NOISE-1 to NOISE-4 are prescribed for the Project.

Implementation of MM NOISE-1 through NOISE-4, would require the implementation of noise reduction devices and techniques during construction at the Project Site, which would reduce noise levels generated by the construction of the Project to the maximum extent that is technically feasible.

MM NOISE-1 would provide at least 10 dBA noise reduction at all off-site sensitive receptor locations.[5] Implementation of MM NOISE-4 would further reduce the construction noise levels by an additional 15 dBA, resulting in a decrease in construction noise levels from 94 dBA to 69 dBA 15 feet from the construction activity. Therefore, noise-sensitive receivers located at the nearest commercial use to the south Project Site would experience noise levels below the 85 dBA L_{max} at commercial receptors. MM Noise-2 would help to ensure the proper implementation of MM NOISE-1, MM NOISE-3, and MM NOISE-4. Therefore, with implementation of these mitigation measures, the

4 Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically "hard" sites for each doubling of distance from the reference measurement, Caltrans, Technical Noise Supplement, September, 2013.

5 P.D. Schomer and B. Homans, Construction Noise; Specification, Control, Measurement, and Mitigation. Technical Report E-53, Construction Engineering Research Laboratory, April 1975

potentially significant noise impacts during Project construction would be reduced to a less than significant level.

The Project would comply with Section 12.08.440 of the Los Angeles County Code; the Project's construction activities, including delivery and haul routes, would be restricted to hours between 7:00 PM. and 7:00 AM Monday through Saturday or any time on Sundays or holidays.

Therefore, with respect to a violation of the noise standards and regulations established in the Los Angeles County Code, potentially significant noise impacts during Project construction would be reduced to a less than significant level through compliance with applicable regulations and implementation of the prescribed mitigation measures.

Off-Site Construction Activities

Construction truck and vehicle trips would be generated primarily by construction workers commuting to and from the work site and by trucks hauling materials and equipment to and from the project site. Construction trucks and vehicles would use the regional circulation system as well as the main roadways within Carson. Traffic entering and leaving the site would include workers' daily arrival and departure, equipment deliveries, hauling of excavation spoil, concrete deliveries, and other construction related traffic. While construction of the proposed project would temporarily generate additional truck and vehicle trips within Carson and the regional circulation system, traffic levels would not substantially increase and would be temporary in nature as traffic levels would return to pre-construction conditions once construction is complete.

Construction would occur mainly Monday through Friday, between the hours of 7:00 AM to 6:00 PM, Monday through Saturday. However, if occasional nighttime and weekend work is needed, the City will obtain a noise variance for any work occurring outside the hours of 7:00 AM and 7:00 PM, and for any holiday or weekend work, in compliance with local regulations. Construction noise could impact sensitive receptors during construction resulting in noise impacts to sensitive receptors.

Implementation of Mitigation Measures NOISE-1 to NOISE-4 would lessen construction noise and ensure that impacts at sensitive receptors would be minimized. Mitigation Measures NOISE-1 to NOISE-4 require the implementation of noise reduction devices and techniques during construction at the Project Site, which would reduce noise levels generated by the construction of the Project to the maximum extent that is technically feasible. Therefore, off-site construction traffic noise impacts would be less than significant.

Operational Noise

The existing noise environment in the Project vicinity is dominated by traffic noise from nearby roadways, as well as nearby commercial activities. Long-term operation of the Project would have a minimal effect on the noise environment in proximity to the Project Site. Noise generated by the Project would result primarily from the added operation of

the building mechanical equipment and the added off-site traffic. Implementation of the Project would involve industrial manufacturing activity. While the majority of activities would occur within the proposed building, deliveries, materials and component movements, refuse and recycling noise sources, and product unloading and loading from delivery trucks would be undertaken in the open and include equipment that would generate noise.

Stationary Noise Sources

The operation of mechanical equipment that would be installed for the new facility, such as air conditioners, fans, generators, and related equipment, would generate audible noise levels in proximity to the equipment. Mechanical equipment would typically be located on rooftops or within buildings, shielded from nearby land uses to attenuate noise and avoid conflicts with adjacent uses. All building outdoor mounted mechanical and electrical equipment would be designed to meet the requirements of Municipal Code, Section 12.08.390. A conservative exterior noise level reference for air condenser units, the primary source of noise from fixed mechanical equipment, is 81.9 dBA L_{eq} measured at a distance of 5 feet based on a review of noise data from several large shopping center projects in Southern California(Moreno Valley, 2015 and Pomona, 2014).

The specific location of stationary equipment within the Project Site is not yet known. However, a conservative estimation would be an assumed distance of 50 feet from the nearest sensitive receptor, the car dealership, the noise level would attenuate to 61.9 dBA L_{eq}. This would exceed the significant threshold of 55 dBA at commercial land uses. Therefore, environmental impacts related to the exposure of persons to or generation of noise levels in excess of established standards during long-term operation of the proposed Project would be potentially significant.

Implementation of mitigation measure NOI-5 requires standard noise control devices for all stationary equipment and prohibits locating such equipment within 110 feet of the property line. At a distance of 110 feet, noise levels would attenuate to 55 dBA L_{eq}, without consideration of noise level reductions provided by noise control devices. Therefore, impacts would be reduced to less than significant levels.

Loading Area Noise Sources

Loading and unloading activities would most likely occur on the northern portion of the Project Site. Vehicle access to the loading areas would be from the entrance along East 223rd Street, located at the southwest corner of the Project Site. Loading area activities including truck movements, idling, and loading/unloading operations would generate noise levels that have the potential to adversely impact adjacent land uses during Project operations. Based on measured noise levels, delivery truck idling (at loading area) would generate noise levels of approximately 75 dBA (L_{eq}) at a 5-foot distance. The nearest sensitive receptors include commercial uses adjacent to the west of the Project Site and are located within approximately 15 feet. The park associated with the Tesoro Campus along the southern side of East 223rd Street and residential uses along the eastern side of

the Alameda Corridor, are located approximately 120 feet and 1,700 feet, respectively, from the potential loading activities. Accounting for distance attenuation of 6 dBA per doubling of distance,[6] noise levels experienced at the nearest residential land uses would be approximately be 25 dBA, which is far below the significance threshold of 50 dBA for residential uses. Noise levels at the park associated with the Tesoro Campus would be approximately 48 dBA at the park associated with the Tesoro Campus which would not exceed the significance threshold of 55 dBA at a commercial land use. However, noise levels would be approximately 66 dBA at the car dealership which would result in a potentially significant impact. Therefore, Mitigation Measures NOISE-6 is prescribed for the Project.

Implementation of mitigation measure NOI-6 prohibits locating the loading and unloading areas within 110 feet of the property line. At a distance of 110 feet, noise levels would attenuate to 49 dBA, without consideration of noise level reductions provided by noise control devices. Therefore, impacts would be reduced to less than significant levels.

Refuse and Recycling Noise Sources

The moving of trash and recycling bins generate noise levels that have a potential to adversely impact adjacent land uses during long-term Project operations. Dumpsters would be wheeled manually. The moving of trash and recycling bins manually would generate noise levels approximately 60 dBA L_{max} at 3 feet distance. The nearest noise-sensitive uses, the car dealership, is located approximately 20 feet from the Project Site. Based on a noise level source strength of 60 dBA at a reference distance of 3 feet, and accounting for distance attenuation (6 dBA per doubling of distance)[7], moving trash bin noise would be approximately 47 dBA at the commercial land use property lines. Additionally, the moving of trash and recycle bins would not increase existing ambient noise levels of at the park and nearest residential land uses. Therefore, noise from refuse collection areas at off-site sensitive receptor locations would not exceed the threshold. As such, operational noise impacts would be less than significant.

Off-Site Operational Traffic Noise

It is anticipated the proposed project would generate approximately 469 vehicle trips per day, 88 AM peak hour (64 trips inbound in and 24 outbound) and 79 PM peak hour (35 inbound and 44 outbound). It is anticipated the proposed project would generate 60 daily delivery trips (10 daily out bound and 50 inbound). Assuming all 60 delivery

[6] Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically "hard" sites for each doubling of distance from the reference measurement, Caltrans, Technical Noise Supplement, September, 2013.

[7] Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically "hard" sites for each doubling of distance from the reference measurement, Caltrans, Technical Noise Supplement, September, 2013.

trucks operate at the facility within the same peak hour, the traffic noise generated from the Project is estimated to be 67 dBA L_{eq}, far less than the existing ambient noise level of 72 dBA L_{eq}. Therefore, the Project would result in a less than significant impact.

b) **Less Than Significant**. Ground-borne vibration from development is primarily generated from the operation of construction equipment and from vehicle traffic. Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. The vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise. Vibration levels for potential structural damage is described in terms of the peak particle velocity (PPV) measured in inches per second (in/sec).

Ground-borne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities such as pile driving. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. If traffic, typically heavy trucks, does induce perceptible building vibration, it is most likely an effect of low-frequency airborne noise or ground characteristics.

Building structural components also can be excited by high levels of low-frequency airborne noise (typically less than 100 Hz). The many structural components of a building, excited by low-frequency noise, can be coupled together to create complex vibrating systems. The low-frequency vibration of the structural components can cause smaller items such as ornaments, pictures, and shelves to rattle, which can cause annoyance to building occupants.

Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes. Ground-borne vibration related to human annoyance is generally related to root mean square (rms) velocity levels, and expressed as velocity in decibels (VdB).

Regulatory Framework

Pursuant to Section 12.08.560 (Vibration) of the Los Angeles Municipal Code, as adopted by the City of Carson, operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet from the source if on a public right-of-way is prohibited.

With respect to ground-borne vibration from construction activities, Caltrans has adopted guidelines/recommendations to limit ground-borne vibration based on the age and/or condition of the structures that are located in close proximity to construction activity. With respect to residential and commercial structures, Caltrans' technical publication, titled Transportation- and Construction-Induced Vibration Guidance Manual, provides a vibration damage potential threshold criteria of 0.5 inches per second PPV for historic and older buildings, 1.0 inch-per-second PPV for newer residential structures, and 2.0 inches per second PPV for modern industrial/commercial buildings. In addition, the guidance also sets 0.035 PPV as the threshold for "Distinctly Perceptible" human response to steady state vibration (Caltrans 2004).

According to the Federal Transit Administration (FTA), ground vibrations from construction activities very rarely reach the level that can damage structures. A possible exception is the case of old, fragile buildings of historical significance where special care must be taken to avoid damage. The construction activities that typically generate the most severe vibrations are blasting and impact pile driving, which would not be used for the Project. The Project would use construction equipment such as graders, loaders, and pavers, which would generate ground-borne vibration during excavation and foundation activities. Based on the vibration data by the FTA, typical vibration velocities from the operation of a large bulldozer would be approximately 0.089 inches per second PPV at 25 feet from the source of activity.

Construction Vibration

As previously stated the project site is surrounded by a mix of land uses, including commercial, warehouse, light industrial, automotive, and manufacturing uses. There are no residential land uses within 500 feet of the project site. The closest sensitive receptor to the proposed project is the car dealership directly adjacent to the Project site. The nearest building on the car dealership property is located at a distance of approximately 60 feet from the Project Site. This car dealership building would be exposed to vibration velocities up to 0.024 inches per second PPV. These values would not exceed the 2.0 inches per second PPV significance threshold (modern industrial/commercial buildings), therefore vibration impacts during excavation phase would be less than significant.

With respect with human perception, as discussed above, the nearest off-site commercial building is located adjacent and to the west of the Project Site, which would be exposed to vibration velocities up to 0.024 inches per second PPV. As this value does not exceed the 0.035 inches per second (PPV) perception threshold, vibration impacts during grading/excavation phase would be less than significant.

Operational Vibration

Once construction activities have been completed, there would be no substantial sources of vibration activities from the Project Site. The Project's operations would include industrial-grade stationary mechanical and electrical equipment, such as pumps, compressor units, and exhaust fans, which would produce limited levels of vibration. In addition, the primary sources of transient vibration would include passenger vehicle

circulation within the proposed parking area and delivery truck traveling to and from the Project Site, which also produce limited levels of vibration. These sources would generate substantially lower levels of vibration identified above for construction. Therefore, vibration impacts during Project operation would be less than significant.

c) **Less Than Significant.** The existing noise environment in the project area is dominated by traffic noise from nearby roadways, as well as industrial activities. Long-term operation of the project would not have a significant effect on the community noise environment in proximity to the project area. Noise sources that would have potential noise impacts include: off-site vehicle traffic and facility equipment. Motor vehicle travel on local roadways attributable to the project, as discussed above, would have a less than significant impact on existing ambient noise levels. Noise levels associated with on-site operations (mechanical and electrical equipment) are also considered less than significant as discussed above. As such, noise impacts would be less than significant.

d) **Less Than Significant With Mitigation.** Temporary or periodic increases in noise levels would occur in the immediate vicinity during construction activities associated with the proposed projects. Above, the construction activities would expose nearby existing commercial car dealership to increased noise levels as high as 94 dBA L_{max} at 15 feet, which would be a substantial noise increase over existing ambient noise levels, but would be temporary and typical of day-time construction activities. Nevertheless, construction noise could impact sensitive receptors during construction resulting in noise impacts to sensitive receptors. However, implementation of Mitigation Measures NOISE-1 to NOISE-4 would lessen construction noise and ensure that impacts at sensitive receptors would be minimized. Therefore, construction noise impacts would be less than significant.

e) **No Impact**. The project area is not located within an airport land use plan area or within 2 miles of a public airport or public use airport. Therefore, construction or operation of the project would not expose people to excessive airport related noise levels. No impact would occur.

f) **No Impact**. The project area is not located within the vicinity of a private airstrip, or heliport or helistop. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from such uses. No impact would occur.

Mitigation Measures

MM NOISE-1: Noise-generating equipment operated at the Project Site shall be equipped with the most effective noise control devices, i.e., mufflers, lagging, and/or motor enclosures. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.

MM NOISE-2: The Applicant shall designate a construction relations officer to serve as a liaison with surrounding residents and property owners who is responsible for responding to any concerns regarding construction noise and vibration. The liaison's

telephone number(s) shall be prominently displayed at the Project Site. Signs shall also be posted at the Project Site that includes permitted construction days and hours.

MM NOISE-3: Construction and demolition activities shall be scheduled so as to avoid operating several heavy pieces of equipment simultaneously.

MM NOISE-4: The Project shall provide a temporary 15-foot-tall construction barrier along property lines facing adjacent off-site commercial buildings and be equipped with noise blankets capable of achieving sound level reductions of at least 15 dBA between the Project construction site and the off-site commercial uses. Temporary noise barriers shall be used to block the line-of-sight between the construction equipment and the noise-sensitive receptors. The temporary barrier shall remain in place until windows have been installed. Standard construction protective fencing with green screen or pedestrian barricades for protective walkways shall be installed along property lines facing streets or commercial buildings. All temporary barriers, fences, and walls shall have gate access as needed for construction activities, deliveries, and site access by construction personnel.

MM NOISE-5 All stationary mechanical equipment shall be equipped with standard noise control devices such as sound attenuators, acoustics louvers, or sound screen/parapet walls. In addition, all stationary mechanical equipment shall be located greater than 110 feet from the property line. Equipment specifications, design, and location shall be submitted and reviewed during the Design Review process.

MM NOISE-6 All loading and unloading areas shall be located greater than 110 feet from the property line. Design and location shall be submitted and reviewed during the Design Review process.

References

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Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) **No Impact.** The proposed project components would consist of cannabis manufacturing, distribution, and testing and would include secured storage areas for the generated products. The proposed project does not include residential uses would not result in direct population growth. The project initially would employ up to 50 employees. Based on statewide manufacturing and distribution employment numbers in the industry, the center anticipates approximately 1 employee per 1,000 square feet upon full occupancy or 220 employees. Substantial indirect new population growth is not expected based on the expected number of employees. The proposed project is served by existing roads, infrastructure, and utilities, and would not extend infrastructure or foster growth beyond that planned in the City of Carson General Plan. Thus, there would be no impacts related to the need to construct infrastructure to support a substantial population growth.

b-c) **No Impact.** The proposed project is located on a vacant parcel within the city of Carson and no housing would be removed as part of the proposed project. Therefore, development of the project would not displace any homes or persons.

Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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 following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

a.i) **Less Than Significant Impact.** The project site is currently served by the Los Angeles County Fire Department (LACFD). The LACFD respond from six fire stations located within the City of Carson and the closest station to the project site is Station #127 located 0.34 miles west of the project site at 2049 E 223rd Street.

The proposed project components would consist of cannabis manufacturing, distribution, and testing and would include secured storage areas for the generated products. As the project site is currently vacant, there would be an increase in use of the project site, which would increase demand for fire services, but it is anticipated the existing fire personnel would be adequate to address the increase in demand.

The proposed project application includes a Fire Safety Plan as required by the City of Carson and LACFD. The City and LACFD would review the Fire Safety Plan proposed by the project to ensure it complies with applicable local and State requirements including the City of Carson Municipal Code regarding fire prevention and suppression. The proposed project would include a fire alarm system, sprinklers, fire extinguishers, and a fire prevention plan. In addition, the LACFD will review and comment on individual site plans, at the time when an application for the development of the proposed project is submitted. Therefore, compliance with the City's Municipal Code and incorporation of fire prevention systems, would result in a less than significant impact.

a.ii) **Less Than Significant Impact.** The project site is currently served by the Los Angeles County Sheriff's Department (LASD). The closest police station to the project site is the Carson Station located 1.86 miles northwest of the project site at 21356 South Avalon Boulevard.

Per the City of Carson, Ordinance No. 17-1637, the proposed project has prepared and submitted a detailed security plan (June 2018) to the City, to address potential safety and security concerns that may occur due to the project operations.

During operation of the proposed project, access to the into the project site via the driveway would be gated and controlled. All access doors would be secured by electronic locking doors controlled by security personnel, and would require keycards and/or electronic passcodes. The entire operation shall be alarmed with a centrally monitored fire and burglar alarm system and monitored by an alarm company properly licensed by the State of California Department of Consumer Affairs Bureau of Security and Investigative Services in accordance with California Business and Professions Code Section 7590. Security cameras shall be installed and maintained in good condition, with at least thirty (30) days of digitally recorded documentation in a format approved by the Director and the Police Captain. The cameras shall be in continuous use 24 hours per day, 7 days per week.

The proposed project would include no less than two security guards on duty 24 hours a day, 7 days a week. The overall security program would include, a Security Coordinator, who would manage the overall security program and report directly to the company officers; Physical Security Guard Force (21 total: 7-person force for 8-hour shifts); one shift supervisor; six security guards; transportation security guard force (12 total: 4-person force for 8-hour shifts); one lead transportation security officer (LTSO); one mission commander for all transportation tasks; and three transportation Security Officers (TSOs).

Furthermore, flood and security lighting will be strategically installed in and around the building for employee safety at closing and opening times in the evening and in the morning. Therefore, compliance with the City's Municipal Code and incorporation of the security plan including policies and systems, impacts to LASD would result in a less than significant impact.

a.iii-v) **No Impact.** The proposed project would not include the construction of residential or other uses that would induce population growth that would trigger increased demand for schools, parks, libraries and other public facilities. Therefore, demand for schools, parks, and other public facilities would not increase as a result of the proposed project.

Recreation

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15.	**RECREATION:**				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a) **No Impact.** The project site is a semi-triangular shaped vacant lot paved in the northern portion, a stand of eucalyptus trees on the west and is covered with bare soil, grass, and low-lying vegetation on the remaining portions of the site. The site is currently not publically accessible and is enclosed by perimeter fencing. The project site does not contain existing recreational facilities and the closest recreational facility is Friendship Mini Park, located 0.51 miles northwest of the project site. Additionally, the closest full-size park is Dolphin Park located approximately 0.5 miles northwest of the project site (City of Carson 2004). The proposed project components would consist of cannabis manufacturing, distribution, and testing and would include secured storage areas for the generated products. As such, the developed facility would not include recreational components or uses. Additionally, the proposed project would not result in a substantial increase in the City's population since the employees and visitors of the proposed operations would likely already live in or near the highly urbanized project area. Thus, the project would not result in an increase in use of neighborhood and regional parks or contribute to the potential need for additional parkland. Therefore, no impacts would occur.

b) **No Impact.** The proposed project would include the development of a 220,000-square-foot four-story tilt-up concrete building on a 3.70-acre vacant lot. The proposed project does not include the development of recreational facilities or require the construction or expansion of recreational facilities. The proposed project would not result in a substantial increase in the city's population since the employees of the proposed operations consisting of cultivation, manufacturing, and storage of cannabis products, would likely already live in or near the highly urbanized project area. Thus, the project would not result in the construction or expansion of recreational facilities. Therefore, no impact would occur.

References

City of Carson, 2004. Carson General Plan, Parks and Recreation, Available at: http://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%209_Parks%20and%20Recreation.pdfChapter%204_Transportation.pdf

Transportation and Traffic

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION/TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Discussion

East 223rd Street is an east-west major highway east of Figueroa Street. For the small segment between Figueroa Street and the western city border, it is a secondary highway. 223rd Street connects to Torrance in the west and Long Beach in the east where it is called Wardlow Road, and terminates at the Long Beach Airport. It generally provides two lanes of travel in each direction and a center median or turn lane. On-street parking is generally permitted and the speed limit is 40 or 45 miles per hour, except in a school zone where it is 25 miles per hour (City of Carson 2018).

Alameda Street, or State Route (SR) 47, is a major highway that is an important freight corridor for industrial uses in and around Carson. It generally provides two lanes of travel in each direction with no on-street parking. The posted speed limit is 45 miles per hour (City of Carson 2018).

Wilmington Avenue is a north-south major highway that begins at Lomita Boulevard on the southern border of Carson and extends north to Florence-Firestone, in unincorporated Los Angeles County, where it becomes Elm Street. It provides two lanes of travel in each direction south of Del Amo Boulevard and three north of Del Amo Boulevard. Most segments have a center turn lane or center median. Where Wilmington Avenue crosses the rail line north of

Lomita Boulevard, there is one lane in each direction. On-street parking is permitted on some segments and the posted speed limit is 40 or 45 miles per hour (City of Carson 2004).

According to the Carson Master Plan of Bikeways (Carson 2013), there is a proposed 5-foot bikeway along East 223rd Street adjacent to the proposed project site. Additionally, Carson Circuit – E, runs along East 223rd Street to Willington Avenue and Metro 202 runs along Alameda Street.

a) **Less than Significant Impact.** Construction of the proposed project would temporarily increase local traffic due to the transport and delivery of construction equipment and materials. Project area access would be provided via East 223rd Street. The Metropolitan Transit Authority #202 operates bus services in the project area.

Direct construction traffic impacts, such as local congestion and disruption of traffic flow from construction of the proposed project would be temporary. Construction activities that would generate off-site traffic would include the delivery of construction vehicles and equipment to the project area, the daily arrival and departure of construction workers. The estimated haul truck traffic would vary depending on the construction activity; however, it is estimated that the excavation of soil within the project area would occur intermittently for approximately 50 total working days from the 4th quarter 2018 through conservatively the first quarter 2019. Approximately 20 truck haul trips would occur each day over this period of excavation. The haul trucks would exit the staging area within the proposed project and travel east along East 223rd Street for approximately 2,200 feet to I-405. The addition of haul truck trips along East 223rd Street would not substantially affect capacity of the roadways. Therefore, no significant construction traffic impacts would occur from off-site construction traffic.

Construction-generated traffic would be temporary, and therefore, would not result in any long-term degradation in operating conditions on local roadways used for the project. The primary impact of construction-related traffic would be a temporary and intermittent lessening of the capacities of the roads in the project area because of the slower movements of larger turning radii of construction trucks compared to passenger vehicles. Drivers could experience delay if they were traveling behind a heavy truck. The impact from construction generated traffic from the proposed project would be less than significant.

Using the International Transportation Engineers (ITE) trips rates for Manufacturing land uses (140) based on employees anticipated for the proposed project, 220, it is anticipated the proposed project would generate approximately 469 vehicle trips per day, 88 AM peak hour (64 trips inbound in and 24 outbound) and 79 PM peak hour (35 inbound and 44 outbound). It is anticipated the proposed project would 60 delivery trips (10 daily outbound and 50 inbound). The impact from operational generated traffic from the proposed project would be less than significant.

b) **Less than Significant Impact.** Congestion management programs (and level of service standards established by congestion management agencies) are intended to monitor and

address long-term traffic conditions related to future development that generate permanent (ongoing) traffic increases, and do not apply to temporary impacts associated with construction projects. Proposed project construction would be transitory in nature, and effects on roadway operations would be temporary.

The Metro Congestion Management Program (CMP), required by Caltrans prepared by Los Angeles County Metropolitan Transportation Authority (Metro), includes two locations in the City of Carson. One is an arterial intersection that has since been removed from the program and the other is located on I-405. They are: Alameda Street and Del Amo Boulevard Intersection (no longer CMP and arterial I- 405 at Del Amo Boulevard Overpass Freeway (CMP 2010) The proposed project is located over 1.5 miles south of the Overpass. Additionally, regional access to the project site would likely be the I-405 or SR 47, and the Del Amo Boulevard Overpass is not a likely route the proposed project traffic would use.

Moreover, the CMP guidelines state that an analysis of potential impacts to CMP mainline freeway monitoring locations is required where the proposed project will add 150 or more trips during either the AM or PM peak hours of adjacent street traffic. Since fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the freeway segments in the vicinity of the study area, no further CMP freeway segment analysis is required and the impact would be less than significant.

c) **Less than Significant Impact.** The proposed project is not located within the Airport Influence Area of any nearby airports. The nearest airport to the project area is Long Beach Airport, a public airport approximately 4 miles east of the project area. The proposed project does not involve any aviation components or structures at heights that would potentially pose an aviation concern. No project activities would alter the existing air traffic patterns, levels, or locations that result in safety risks.

The operation of cannabis procurement sites does not routinely include the use of aircraft. Cannabis operations do not typically involve buildings, structures, or land uses that are considered incompatible with airport activities (e.g., height that would obstruct 8 landing/takeoff zones). It is not anticipated that the proposed project would require or result in a change in location of any airports or air traffic such as to result in substantial safety risks, such as air traffic safety issues. Therefore, this impact would be less than significant.

d) **Less than Significant Impact.** An impact would occur if the project substantially increases hazards due to a design feature. A review of existing site conditions and nearby roadways determined that there are no existing hazardous design features, such as sharp curves or dangerous intersections, on-site or within the vicinity of the project site. The intersection of 223rd Street and Willmington Avenue had 16 accidents reported between the years 2012 through 2016 (City of Carson 2018). The site is already graded and the existing driveway would be used when fully developed and does not include the creation of any such design hazards or include any uses that are incompatible with normal traffic

operations. Impacts related to traffic hazards or incompatible uses would be expected to be similar to existing conditions. The proposed project also would not introduce uses (types of vehicles) that are incompatible with existing uses already served by the area's road system and impacts would be less than significant.

e) **Less than Significant Impact.** Refer to response g) from Hazards and Hazardous Materials, and a) and d) above.

Operation of the proposed project would not significantly alter the existing circulation pattern in the project area or adversely impact evacuation plans. Access to the project site would be from one driveway (ingress and egress) accessible from East 223rd Street. Proposed parking and circulation plans will be reviewed by the County Fire and Sheriff Departments to assure that driveways and roads are adequate for emergency vehicles. Operation of the project would not impair or interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts relating to interference with an adopted emergency response or evacuation plan from project operations would be less than significant.

f) **Less than Significant Impact.** The proposed project would not directly or indirectly eliminate alternative transportation corridors or facilities (e.g., bus stops). In addition, the project would not preclude increased alternative transportation services. The Project area access would be provided via East 223rd Street, which has a bus line operated by the City of Carson, that runs to Willimington Avenue and then towards northbound (City of Carson, 2018). MTA operates #202 in the project area. MTA Line 202 operates between Wilmington and the Rosa Parks/Imperial/Wilmington Station in Willowbrook. In the Carson area, the primary route served by Line 202 is Avalon Boulevard between Lomita Boulevard and Carson Street, Carson Street between Avalon Boulevard and Alameda Street, and Alameda Street between Carson Street and Del Amo Boulevard (City of Carson, 2004). Additionally, the City's Master Plan of Bikeways designates a 5-foot bikeway along East 223rd Street, along the northern side of the roadway, the southern boundary of the proposed project site. It is not anticipated that development of the proposed project would not interfere with the conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Additionally, the project would be required to implement sidewalk improvements to the front of their property including the upgrade or installation of curb-gutters, street lights, and landscaping per City requirements.

Therefore, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation. As mentioned above, the proposed project would not impede non-motorized travel or public transportation in the project vicinity; it would not decrease the performance or safety of such facilities. As a result, impacts would be less than significant.

References

Los Angeles County Metropolitan Transportation Authority, 2010, Congestion Management Program, Accessed, October 2018, available at: http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf

City of Carson, 2018. Carson 2040 Existing Conditions Report, Volume 1, Chapters 5-8. Available at: https://static1.squarespace.com/static/5991f4e96a4963f2e46af74d/t/5a7e3a6471c10b2ebf8d4245/1518221964406/Existing+Conditions+Report_Volume1_Part2.pdf. Accessed: October 2018.

City of Carson, 2004. Carson General Plan, Transportation Element, Available at: http://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%204_Transportation.pdf

Tribal Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
17. Tribal Cultural Resources — Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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:				
a) 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	☐	☐	☒	☐
b) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Discussion

a-b) **Less Than Significant Impact**. In compliance with the requirements of AB 52 and in order to identify potential impacts to tribal cultural resources, the City submitted notification and request to consult letters to five (5) Native American individuals and organizations on the City's AB 52 Notification List on October 18, 2018, and conducted follow-up Native American consultation pursuant to AB 52. In particular, letters were sent to the following California Native American tribes:

- Sandonne Goad, Gabrielino/Tongva Nation
- Charles Alvarez, Gabrieleno-Tongva Tribe
- Andrew Salas, Gabrieleño Band of Mission Indians—Kizh Nation
- Robert Dorame, Gabrielino Tongva Indians of California Tribal Council
- Anthony Morales, Gabrielino/Tongva San Gabriel Band of Mission Indians

These notification letters are provided in Appendix D of this MND. The City has not received any responses from the Native American community to date.

Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
18. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a) **Less than Significant Impact.** The proposed project will not exceed wastewater treatment requirements applicable by the Los Angeles Regional Water Quality Control Board (LARWQCB) for the Joint Water Pollution Control Plan (JWPCP) operated by the Los Angeles County Sanitation District (LACSD). These treatment requirements establish pollutant limits for effluent discharges to receiving waters. The project site and the activities proposed are not subject to the National Pollutant Discharge Elimination System (NPDES) General Permit per the facilities list provided therein (Order 2014-0057-DWQ – effective July 1, 2015). Additionally, the proposed project may include the cultivation of cannabis hydroponically, and would recapture and reuse wastewater to the extent feasible. If cannabis cultivation is pursued, the proposed project would not use pesticides and would only use fertilizers that are approved by the California Department of Food and Agriculture. Irrigation water for cannabis cultivation would likely exceed water quality requirements of the LARWQCB for cultivation due to the addition of fertilizers. Once the cannabis irrigation water is no longer usable, it will be stored in a separate storage tank and hauled away by a third party licensed hazardous waste removal company. Therefore, any agricultural waste water onsite will not enter the sewer system.

Additionally, the proposed project would include water-efficient laboratory equipment to reduce wastewater generation and water supply demand. The proposed project's manufacturing operation will use CO2 chemicals, which can be harmful to the

environment. However, with adherence to LARWQCB requirements and documentation of any total dissolved solids from wastewater recycling activities, impacts in regard to the project in violating waste discharge requirements would be further reduced. Therefore, impacts would be less than significant.

b) **Less than Significant Impact.** The JWPCP currently treats wastewater generated by the project area. The JWPCP provides primary and secondary treatment for an average of 258 million gallons per day (mgd) of wastewater from the Los Angeles region. JWPCP has the capacity to treat 400 mgd and is the largest of LACSD's treatment plant (LACSD 2018). The proposed project would include the development of a 220,000-square-foot four-story tilt-up concrete building on a 3.70-acre vacant lot. This would increase wastewater generation compared to existing conditions. Therefore, wastewater generation would be greater than what currently exists at the project site, but would represent a fraction of a percent of the JWPCP's remaining daily treatment capacity and would not result in new wastewater treatment facilities or expansion of existing facilities.

Water supply to the City of Carson comes from the Metropolitan Water District (MWD), the California Water Service Company's Rancho Dominguez District (CWS), and the Golden State Water Company (GSW). CWS serves most of the City of Carson. They use a combination of local groundwater and surface water, purchased from MWD which is imported from the Colorado River and the State Water Project in northern California.

The MWD, CWS Rancho Dominguez District, and the GSW would provide sufficient supplies of water to support the proposed project's construction and operation and no new entitlements, or resources, would be required to meet the expected project water supply demand. The proposed project would include approximately 200 square feet of cannabis cultivation, and 219,800 square feet of cannabis manufacturing, distribution, and testing operations. Based on existing research, it is estimated that 100 square feet of cannabis cultivation activities would require 16.84 gallons of water per day, which indicates that project-related cultivation would require approximately 33.69 gallons of water per day, or 12,293.2 gallons per year[8] (BOTEC, 2013). As previously discussed, the project would develop a Cannabis Manufacturing, Distribution and Testing Center in addition to its proposed cultivation area. Activities related to the manufacturing, distribution, and testing of cannabis, would primarily require water for the operation of onsite bathrooms and office areas. Based on the City of Los Angeles' CEQA Thresholds Guide, water demand estimates are generally sewer generation rates increased by 10 percent (City of Los Angeles, 2006). Furthermore, according to the Los Angeles County Department of Sanitation, dry manufacturing uses generate 25 gallons of wastewater per 1,000 square feet per day (County of Los Angeles, 2018). Given the manufacturing, distribution, and testing operations at the site would have similar water demand when compared to that of general manufacturing uses, and taking into consideration the 10 percent generation rate increase, the project's manufacturing, testing, and distribution

8 Based on a generation rate of 151 liters/day/22 m^2 (BOTEC, 2013) = 16.84 gallons/day/100 square feet = 12,293.2 gallons/year/200 square feet.

operations would require 2,206,242.5 gallons of water per year[9]. In total, considering both the cultivation and manufacturing, distribution and testing operations, it is estimated that the project would require 2,218,535.7 gallons of water per year (6.81 AFY) for its proposed operations.

While the proposed project would result in a net increased water demand of 2,218,535.7 gallons per year] at the project site, net demand would be a fraction of the City of Carson's existing supply. As such, the proposed project would not result in new water facilities or expansion of existing facilities.

c) **Less than Significant Impact.** As previously mentioned above in Issue 9 (e), the project site is currently undeveloped and is somewhat impervious due to compaction of subgrade from previous uses and the type of soil at the site. Project implementation could create potentially polluted runoff water that could exceed the capacity of existing or planned stormwater drainage systems. Compliance with applicable permits, Carson Municipal Code, Mitigation Measure **HYD-1**, and other local regulations that require BMPs and source control measures would allow the proposed project to avoid construction of new storm water drainage facilities or expansion of existing facilities.

Implementation of Mitigation Measure **HYD-1**, would ensure that stormwater runoff would not supply additional sources of polluted runoff and would not exceed the capacity of existing or planned stormwater drainage systems as it has to be designed to hold 100 percent of the stormwater quality runoff volume. As a result, project implementation isn't expected to increase stormwater volumes or rates of discharge or add additional pollutants to stormwater drainage systems. Therefore, impacts would be less than significant.

d) **Less than Significant Impact.** Water supply to the City of Carson comes from the Metropolitan Water District (MWD), the California Water Service Company's Rancho Dominguez District (CWS), and the Golden State Water Company (GSW). CWS serves most of the City of Carson. They use a combination of local groundwater and surface water, purchased from MWD which is imported from the Colorado River and the State Water Project in northern California. The CWS Dominguez water system includes 374 miles of pipeline, nine active wells, 12 storage tanks and seven MWD connections. GSW serves portions of the City of Carson, primarily the northwest corner. They provide a blend of groundwater from the West and Central Coast groundwater basins and imported water from the California River Aqueduct and State Water Projected imported from MWD. Domestic Water Supply for the service areas of the project will be provided by CVWD.

The proposed project is located within the CWS Rancho Dominguez District service area. According to the reliability data in the California Water Service 2015 Urban Water

[9] Based on a generation rate of 25 gallons of sewage/day/1,000 square feet = 27.5 gallons of water supplied/day/1,000 square feet x 219,800 square feet x 365 operating days/year = 2,206,242.5 gallons/year.

Management Plan for Dominguez District (UWMP), CWS has sufficient supply to meet a total water demand of 46,971 AFY by the year 2040 (CWS, 2016). CWS has measures to reduce the demand through reduce water consumption through conservation programs, educational programs, and rebates.

The UWMP is based on SCAG growth projections and takes into account all expected regional growth. The project's contributions to growth fall within the range of growth accounted for in the SCAG projections that are used for future planning activities and provision of services. The projections are revised on four year intervals so as to stay current with current growth trends and changes in land use activity. Changes to planning and zoning designations can be incorporated in timely fashions so long as the growth does not exceed the amount anticipated within the service timelines. The UWMP is updated on regular five year cycles and includes programs to meet the supply requirements.

Since the proposed project is only expected to generate 6.81 AFY, which translates into a 0.014 percent of the 46,971 AFY accounted for in the UWMP, it is anticipated that the proposed project's construction and operational would be met, and no new entitlements, or resources, would be required to meet the expected project water supply demand. Therefore, impacts would be less than significant.

e) **No Impact.** The Joint Water Pollution Control Plant (JWPCP) serves the project site. The capacity of this facility is limited to levels associated with approved growth identified by the Southern California Association of Governments (SCAG). As the proposed project would not include new development activities or increase population, it would not generate additional wastewater demands. Therefore, no impact would occur.

f) **Less than Significant Impact.** Waste Management Incorporated provides residential, commercial and industrial waste collection service for the City of Carson. Waste Management Inc. collects approximately 34,000 tons from residential customers, 40,750 tons from commercial customers and 26,600 tons from industrial customers per year. The disposal service uses traditional methods of solid waste collection using standard trash trucks and crews. The service also includes pickup of sorted recyclable materials, which are taken directly to a company to separate and sell. In 2016, about 55 percent of Carson's solid waste went to the El Sobrante Landfill in Corona, about 25 percent went to H.M. Holloway Inc. Landfill in Lost Hills, and the other twenty percent went to twelve other landfills throughout the Los Angeles area. According to Calrecycle, the El Sobrante Landfill has a remaining capacity of about 145 million tons, and it is expected to remain in operation until 2045. The H.M. Holloway Inc. Landfill has a remaining capacity of about 7 million tons, and is expected to remain in operation until 2030.

Operation of the proposed project would increase the site's solid waste disposal demand, utilizing CalRecylce's recommended waste generation rates for manufacturing/warehouse uses of 0.00071 tons/100sf/day (Santa Barbara, 1997), the proposed project would generate 0.671 tons (1,342 lbs) of waste per day or 570.13 tons

per year. While this waste generation rate would have the potential to result in a significant impact, the project proponent would be required to prepare and submit a Cannabis Soil, Plant Material, and Solid Waste Management Plan, as per Mitigation Measure MM UE-1.

With implementation of Mitigation Measure MM UE-1, the project's contribution to solid waste generation would be reduced and would be a small portion of the total capacity provided by regional landfills. Therefore, the proposed project would be served by a landfill with sufficient capacity to support the solid waste disposal needs, and impacts would be less than significant

g) **Less than Significant Impact.** The proposed project will comply with federal, State, and local statutes, and regulations in regard to solid waste. As adopted by the City of Carson, AB 939 requires that all California jurisdictions prepare a Source Reduction Recycling Element (SRRE) that demonstrates how the City of Carson will divert 50 percent of their jurisdiction's waste stream from disposal into landfills each year. According to the requirements of the City of Carson's SRRE a private company provides waste collection services for the City of Carson. The disposal service uses traditional methods of solid waste collection, with standard trash trucks and crews. The service also includes the pickup of sorted recyclable materials, which are taken directly to a company that separates and sells them.

In 2016, California passed the Medical and Adult-Use Cannabis Regulation and Safety (MAUCRSA) to establish a comprehensive system to control and regulate the cultivation, distribution, transport, storage, manufacturing, processing, and sale of both medicinal cannabis and medical cannabis product and adult-use cannabis and adult-use cannabis products. MAUCRSA requires designated secured areas for cannabis waste and a cannabis waste management plan.

To comply with MAUCRSA, the proposed project has developed a detailed cannabis waste disposal plan. The proposed project. will contract with a waste hauler permitted to transport the solid waste for final destruction by an acceptable waste facility pursuant to MAUCRSA and City of Carson law. The proposed project will provide the Department of Food and Agriculture with the information for the waste hauler permitted to transport cannabis waste including the name, business address, and primary contact information. The proposed project will retail documentation from the waste hauler that indicates the date and time of each collection of cannabis waste at the licensed premises.

With the proposed project's adherence to AB 939 waste diversion goals, compliance with the City of Carson's SRRE, and compliance with MAUCRSA, impacts in regard to compliance with federal, State, and local statutes will be reduced to less than significant.

Mitigation Measures

MM UE-1: Cannabis Soil, Plant Material, and Waste Management. Each Licensee shall prepare and submit a Cannabis Soil, Plant Material, and Solid Waste Management

Plan for the cannabis site, which describes the type and amount of solid waste that would be generated. The Plan shall maximize to the extent practicable composting of soil and cannabis plant waste onsite, and implement BMPs for solid waste handling. Transfer of cannabis plant waste material from the site shall only occur as allowed by state regulations, either through pre-treatment onsite to render the waste acceptable to licensed landfill or composting facilities, or using a commercial hauler that meets state regulations for the treatment and disposal of cannabis waste.

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Energy

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
ENERGY — Would the project:				
a) Would the Project cause wasteful, inefficient, and unnecessary use of energy?		☐	☒	☐
b) Would the Project result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		☐	☒	☐

Discussion

Appendix G of the State CEQA Guidelines does not provide any checklist items for the evaluation of impacts related to energy resources. As discussed above, Appendix F of the CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which states that an EIR shall include the topics listed for consideration, to the extent applicable, and a detailed statement setting forth "[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."

a) **Less than Significant Impact.** The project would consume energy during construction activities primarily from on- and off-road vehicle fuel consumption in the form of diesel, gasoline, and electricity from water conveyance for dust control. Project operation would consume energy from industrial activities including cannabis product manufacturing, extraction, packaging, and producing of cannabis goods such as oils, energy use from general building operations (HVAC, lighting, cannabis product manufacturing), and mobile sources (product transport and delivery, customer trips, etc.) and would increase operational energy use. The analysis below includes the project's energy requirements and energy use efficiencies by energy type for each stage of the project (construction and operations).

Construction

The project would consume energy during construction activities, primarily from on- and off-road vehicle fuel consumption in the form of diesel, gasoline, and electricity from water conveyance for dust control. The analysis below includes the project's energy requirements and energy use efficiencies by energy type for each stage of the project.

The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors from the CARB OFFROAD model, which was used in the project's air quality analysis. On-road vehicles would include trucks to haul material to and from the project site, vendor trucks to deliver supplies necessary for project construction, and fuel used for

employee commute trips. Lighting, and other processes associated with grid electricity, would be provided using generator sets running on diesel fuel. Electricity used from water conveyance for dust control was calculated using assumptions for gallons used per acre per day and CalEEMod water conveyance intensity factors were applied to calculate total construction electricity consumption. Construction activities typically do not involve the consumption of natural gas. **Table 12,** *Summary of Energy Consumption During Project Construction* summarizes the project's total fuel and electricity consumption from construction activities.

TABLE 12
SUMMARY OF ENERGY CONSUMPTION DURING PROJECT CONSTRUCTION

Fuel Type	Quantity
Gasoline	**gallons**
On-Road Construction Equipment	8,760
Off-Road Construction Equipment	0
Total Gasoline	**8,760**
Diesel	**gallons**
On-Road Construction Equipment	11,252
Off-Road Construction Equipment	20,315
Total Diesel	**31,567**
Electricity	**kWh**
Water Conveyance for Dust Control	27,028
Construction Length	**6 months**

SOURCE: ESA, 2018

The energy use summary provided above in Table 8 represents the amount of energy that could potentially be consumed during project construction based on a conservative set of assumptions, provided in Appendix C, of this Draft IS/MND. As shown, on- and off-road vehicles would consume an estimated 8,760 gallons of gasoline, approximately 31,567 gallons of diesel fuel, and approximately 27,028 kWh of electricity throughout the project's construction. For comparison purposes, the fuel usage during project construction would represent approximately 0.0002 percent of the 2016 annual on-road gasoline-related energy consumption and 0.005 percent of the 2016 annual diesel fuel-related energy consumption in Los Angeles County. Electricity would represent approximately 0.00003 percent of Southern California Edison's (SCE) total electricity sales for 2017. Detailed calculations are shown in Appendix C, of this Draft IS/MND.

The project's construction contractors would comply with applicable CARB regulations governing the accelerated retrofitting, repowering, or replacement of heavy duty diesel on- and off-road equipment. CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling time in order to reduce public exposure to diesel particulate matter and other toxic air contaminants. CARB approved the Truck and Bus

regulation to reduce NO_X, PM10, and PM2.5 emissions from existing diesel vehicles operating in California. In addition to limiting exhaust from idling trucks, CARB recently promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.

While intended to reduce construction criteria pollutant emissions, compliance with the above listed anti-idling and emissions regulations would also result in efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. According to the CARB staff report that was prepared at the time the anti-idling ATCM was being proposed for adoption in late 2004/early 2005, the regulation was estimated to reduce non-essential idling and associated emissions of diesel particulate matter and NO_X emissions by 64 and 78 percent respectively in analysis year 2009.

These reductions in emissions are directly attributable to overall reduced idling times and fuel combustion as a result of compliance with the regulation. Project compliance with CARB regulations would result in energy savings of approximately 3,072 gallons of diesel fuel, assuming a fuel reduction equivalent to the percent reduction of diesel particulate matter or NO_X as estimated by CARB for 2009 (the lesser value, i.e., 64 percent, is used as a conservative assumption). Heavy-duty engines continue to become more efficient and reduction amounts may lessen in the future due to this. Although the energy savings cannot be accurately quantified, the project would still reduce consumption of diesel fuel under the anti-idling measure. Construction electricity use would be temporary, sporadic, and would cease upon completion of the project. Electricity for water conveyance would only be used when necessary to prevent fugitive dust and would decrease after completion of excavation and paving phases when the site is paved and has less dust to control. Thus, construction of the proposed project would use energy necessary to build the project, but would not result in the wasteful, inefficient, and unnecessary use of energy and impacts would be less than significant.

Operations

During operation of the project, energy would be consumed for multiple purposes, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and appliances. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. **Table 13**, *Project Operational Energy Usage and Regional Energy Supply*, below, summarizes the project's operational energy sources in comparison to SCE, SoCalGas, and Los Angeles County transportation fuel consumption.

TABLE 13
PROJECT OPERATIONAL ENERGY USAGE AND REGIONAL ENERGY SUPPLY

Source	Natural Gas Per Year (cubic feet)	Electricity Per Year (million kWh)	Diesel Fuel Per Year (gallons)	Gasoline Fuel Per Year (gallons)
SoCalGas (2018) [a] / SCE (2017) [b]	945,715,000,000	85,879	—	—
Los Angeles County (Transportation Sector) (2016) [c]	—	—	580,769,231	3,577,000,000
Building Electricity	3,174,058	4.85 [d]	—	—
Mobile Sources	—	—	6,993 [e]	67,625 [e]
Total	**3,174,058**	**4.85**	**6,993**	**67,625**
Percent of SoCalGas / SCE	0.0003%	0.006%	—	—
Percent of Los Angeles County (Transportation Sector)	—	—	0.0012%	0.0019%

NOTES:

[a] California Gas and Electric Utilities, 2018 California Gas Report, 2018. Available at: https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf. Accessed October 2018

[b] Southern California Edison. 2017 Financial and Statistical Report. Available at https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2017-financial-statistical-report.pdf. Accessed October 2018.

[c] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2016_A15_Results.xlsx. Accessed October 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

[d] Project electricity was calculated using CalEEMod electricity outputs plus outputs from Oregon Department of Energy's Indoor Cannabis Cultivator Energy Use Estimator. Available at: https://energy.odoe.state.or.us/cannabis.html. Accessed 2018.

[e] Project gasoline and diesel are calculated based on the estimated VMT and fuel consumption factors from EMFAC2014. Electricity and natural gas are calculated in Issue 7, Greenhouse Gas Emissions, using CalEEMod (includes water-related electricity for conveyance and treatment).

SOURCE: ESA, 2018.

The project would increase demand for electricity compared to existing conditions including what is needed to support building operations. As shown in Table 9, the project would result in a projected consumption of electricity totaling approximately 4.85 million kWh per year and represent 0.006 percent of SCE's total sales in 2017. The project has been evaluated for consistency with the EECAP. According to the EECAP, the City is in the process of implementing strategies to reduce energy consumption across sections, which includes promoting commercial energy retrofits (Carson 2015). Consistent with this strategy, the project will use solar energy, low-flow kitchen and bathroom faucets and toilets, energy-efficient appliances, a high-efficiency ventilation systems, landscaping that would consist of native and drought-tolerant plants, and other green building features that conform to the California Green Building Code and would be consistent with energy reduction strategies in the City's EECAP.

As discussed above, the project would comply with the applicable provisions of Title 24, City of Carson's EECAP, and the CALGreen Code in effect at the time of building permit issuance. As such, the project would minimize energy demand. Therefore, with

the incorporation of these features, operation of the project would not result in the wasteful, inefficient, and unnecessary consumption of electricity.

The project would increase the demand for natural gas resources. The project's estimated operational natural gas demand is provided in Table 9. As shown in Table 9, the Project is projected to generate an annual demand for natural gas totaling approximately 3,174,058 cubic feet. As would be the case with electricity, the Project would comply with the applicable provisions of Title 24, City of Carson's EECAP, and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. As such, the project would minimize energy demand. Therefore, with the incorporation of these features, operation of the Project would not result in the wasteful, inefficient, and unnecessary consumption of natural gas and impacts would be less than significant.

As discussed in Issue 3, *Air Quality*, SCAG predicted Carson's employment growth between 2012 and 2040 to be 11,200 jobs (SCAG, 2016. The estimated 220 new full-time-equivalent (FTE) employees generated by the proposed project are well within SCAG's employment growth assumptions for Carson. During each operation day, the proposed project has a maximum of 469 vehicles associated with the delivery of materials, pickup of products, employee trips, and other miscellaneous vehicle trips. According to the Carson Master Plan of Bikeways (Carson 2013), there is a proposed five-foot bikeway along East 223rd Street adjacent to the proposed project site and, Carson Circuit – E, runs along East 223rd Street to Willington Avenue and Metro 202 runs along Alameda Street. As discussed in Issue 16, Transportation and Traffic, this project does not have a significant impact on transportation or traffic in the project vicinity. Furthermore, the project has a planned and existing network of bike and bus transit that could be used to access the site. Therefore, since the project is consistent with SCAG' growth projections, is connected to a transit network, and has less than significant traffic impacts based on the low number of trips, the project's fuel consumption would not result in the wasteful, inefficient, and unnecessary consumption of fuel and impacts would be less than significant.

b) **Less than Significant Impact.** Construction of the project would result in a temporary increase in demand for electricity, gasoline, and diesel. The project's energy consumption primarily would result from on- and off-road fuel use from construction related vehicles and electricity from water conveyance for dust control. Natural gas would not be used during project construction. These activities make up small percentages of total energy supplies and would cease after the 6-month construction period. Thus, construction would not cause a permanent increase in demand and impacts would be less than significant.

Project operation will increase the demand for electricity resources including for water supply, conveyance, distribution, and treatment. The project's estimated operational electricity demand, including from water demand, is provided in Table 9. As shown in Table 9, the project would result in a projected consumption of electricity totaling 4.85 million kWh. While the project would generate an increase in electricity demand,

the demand would be extremely minimal with respect to SCE supplies, approximately 0.006 percent of total sales in 2017 and it is not anticipated that additional power generation facilities would be required to serve the proposed project, or that the demand would exceed capacity of energy providers. Impacts would be less than significant.

The project would increase the demand for natural gas resources. Natural gas services for the proposed project are provided by the Southern California Gas Company (SoCalGas). As shown in Table 9, the project is projected to generate an annual demand for natural gas totaling approximately 3,174,058 cubic feet (cf). According to the 2018 California Gas Report, SoCalGas is forecasted to require 2,591 million cf per day, or 945,715 million cf per year in 2019, the Project's build out year (California Gas and Electrical Utilities, 2018). The project's increased natural gas demand accounts for approximately 0.0003 percent of SoCalGas' projected natural gas demand for the year 2019. Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the Project's demand for natural gas. Therefore, impacts related to natural gas would be less than significant.

The project would increase the demand for fuel resources. The project's estimated operational gasoline and diesel fuel use is provided in Table 9. As shown in Table 9, the project is projected to generate an annual demand for gasoline totaling approximately 67,625 gallons per year and generate annual demand for diesel totaling approximately 6,993 gallons.

Mobile source emissions result from employees traveling to and from the project site, use of on-site vehicles, trucks carrying waste to the project site from collection routes, trucks, and truck deliveries and pickups. Mobile source emissions are based on the number of inbound and outbound truck trips and the number of employee trips to and from the Project site. Mobile emissions from these sources were estimated using emission factors from CARB's Motor Vehicle Emissions Inventory EMFAC model. The most recent version is EMFAC 2014, which "represents [California Air Resources Board's] current understanding of motor vehicle travel activities and their associated emission levels." The estimated mobile operational emissions for gasoline, and diesel are provided in Table 9. The project's fuel consumption accounts for a small percentage of the entire Los Angeles County; with gasoline accounting for approximately 0.0019 percent, and 0.0012 percent for diesel. Demand for electricity or natural gas would not result in an increase that exceeds available supply or distribution infrastructure capabilities; thus impacts would be less than significant.

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Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
19. MANDATORY FINDINGS OF SIGNIFICANCE —				
a) Does the project have the potential to 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, 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?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

a) **Less Than Significant Impact.** As discussed above, the proposed project would not degrade the habitat of a fish or wildlife species due to the lack of suitable habitat on the project site. The project site does not contain significant historical resources that would be impacted by project implementation. Compliance with mitigation identified would ensure impacts associated with cultural resources would be reduced to less than significant. Therefore, impacts would be less than significant.

b) **Less-Than Significant Impact** A cumulative impact would occur if the proposed project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. No direct or indirect significant impacts were identified for the proposed project, and no mitigation measures are required. It is not anticipated that there would be a substantial number of concurrent construction projects in the vicinity such that the proposed project would contribute to a temporary cumulative impact. Because no impacts are anticipated with implementation of the proposed project, there would be no cumulative impacts once the project is completed. Therefore, the proposed project would not result in a cumulatively considerable impact.

c) **Less Than Significant Impact** The proposed project would not result in environmental impacts that would affect the health or safety of human beings, directly or indirectly. Therefore, impacts would be less than significant and there would be no additional significant effects.

Appendix A

Air Quality and Greenhouse Gas Emissions Worksheets

ESA

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Construction AQ Emissions

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Air Quality Construction Analysis

Unmitigated Construction Scenario

Regional Emissions Summary	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Source				lb/day		
Demolition -2018	4	42	24	<1	3	2
Site Preparation-2018	3	31	15	<1	7	4
Grading-2018	3	47	21	<1	6	3
Grading-2019	3	44	20	<1	5	3
Foundations/Concrete Pour-2019	4	58	27	<1	4	2
Building Construction - 2019	3	29	26	<1	3	2
Architectural Coating-2019	52	3	4	<1	<1	<1
Paving-2019	2	15	16	<1	1	1
Overlapping Phases						
2019	**ROG**	**NOX**	**CO**	**SO2**	**Total PM10**	**Total PM2.5**
Building Construction + Architectural Coating	56	45	41	<1	4	3
Building Construction + Architectural Coating+ Paving	58	47	45	<1	5	3
Daily Maximum Emissions	**58**	**58**	**45**	**<1**	**7**	**4**
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Air Quality Construction Analysis

Unmitigated Construction Scenario

Localized Emissions Summary	NOX	CO	PM10 Total	Total PM2.5
Source			**lb/day**	
Demolition -2018	38	22	3	2
Site Preparation-2018	30	13	6	4
Grading-2018	31	17	4	3
Grading-2019	28	16	4	3
Foundations/Concrete Pour-2019	23	18	1	1
Building Construction - 2019	23	18	1	1
Architectural Coating-2019	2	2	<1	<1
Paving-2019	15	15	1	1
Overlapping Phases				
2019	**NOX**	**CO**	**Total PM10**	**Total PM2.5**
Building Construction + Architectural Coating	38	33	2	2
Building Construction + Architectural Coating+ Paving	40	35	2	2
Daily Maximum Emissions	**40**	**35**	**6.3**	**4.0**
SCAQMD Localized Significance Thresholds	82	842	7	5
Exceeds Threshold?	**No**	**No**	**No**	**No**

Air Quality Construction Analysis

Regional Maximums Source	ROG	NOX	CO	SO2 lb/day	Total PM10	Total PM2.5
Demolition -2018	3.93	42.12	23.84	0.05	3.00	2.03
Site Preparation-2018	3.00	31.18	14.51	0.03	6.54	4.12
Grading-2018	3.34	47.19	20.62	0.07	6.40	3.39
Grading-2019	3.12	43.95	20.16	0.07	5.38	3.04
Foundations/Concrete Pour-2019	3.65	58.22	26.61	0.12	3.79	2.06
Building Construction - 2019	3.45	29.40	25.92	0.06	3.30	1.85
Architectural Coating-2019	52.20	2.55	3.71	0.01	0.49	0.26
Paving-2019	1.96	15.27	15.58	0.02	1.08	0.85
Overlapping Phases						
2019	**ROG**	**NOX**	**CO**	**SO2**	**Total PM10**	**Total PM2.5**
Building Construction + Architectural Coating	55.7	44.7	41.5	0.1	4.4	2.7
Building Construction + Architectural Coating+ Paving	57.6	47.2	45.2	0.1	4.9	3.0
Daily Maximum Emissions	**57.61**	**58.22**	**45.21**	**0.12**	**6.54**	**4.12**

Air Quality Construction Analysis

Summer	Onsite Emissions						Offsite Emissions					
Source	ROG	NOX	CO	SO2	Total PM10	Total PM2.5	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
	lb/day						lb/day					
Demolition -2018	3.72	38.32	22.30	0.04	2.60	1.91	0.20	3.74	1.53	0.01	0.40	0.12
Site Preparation-2018	2.86	30.38	13.43	0.02	6.29	4.05	0.12	0.80	1.08	0.00	0.25	0.07
Grading-2018	2.77	30.67	16.58	0.03	4.01	2.73	0.55	16.29	3.85	0.04	2.38	0.66
Grading-2019	2.58	28.35	16.29	0.03	3.86	2.59	0.52	15.40	3.69	0.04	1.52	0.45
Foundations/Concrete Pour-2019	2.51	22.71	18.31	0.03	1.38	1.30	1.10	35.11	7.74	0.09	2.41	0.76
Building Construction - 2019	2.51	22.71	18.31	0.03	1.38	1.30	0.87	6.64	7.60	0.03	1.92	0.55
Architectural Coating-2019	52.05	2.45	2.46	0.00	0.17	0.17	0.14	0.10	1.26	0.00	0.32	0.09
Paving-2019	1.85	15.19	14.68	0.02	0.86	0.79	0.10	0.07	0.90	0.00	0.23	0.06

Regional Emissions	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Demolition -2018	3.9	42.1	23.8	0.05	3.00	2.03
Site Preparation-2018	3.0	31.2	14.5	0.03	6.54	4.12
Grading-2018	3.3	47.0	20.4	0.07	6.40	3.39
Grading-2019	3.1	43.7	20.0	0.07	5.38	3.04
Foundations/Concrete Pour-2019	3.6	57.8	26.1	0.12	3.79	2.06
Building Construction - 2019	3.4	29.3	25.9	0.06	3.30	1.85
Architectural Coating-2019	52.2	2.5	3.7	0.01	0.49	0.26
Paving-2019	2.0	15.3	15.6	0.02	1.08	0.85

Overlapping Phases						
2019	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Building Construction + Architectural Coating	55.6	44.6	41.5	0.1	4.4	2.7
Building Construction + Architectural Coating+ Paving	57.5	47.2	45.2	0.1	4.9	3.0
Daily Maximum Emissions	**57.53**	**57.82**	**45.21**	**0.12**	**6.54**	**4.12**

Air Quality Construction Analysis

Winter	Onsite Emissions						Offsite Emissions					
Source	ROG	NOX	CO	SO2	Total PM10	Total PM2.5	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
	lb/day						lb/day					
Demolition -2018	3.72	38.32	22.30	0.04	2.60	1.91	0.21	3.79	1.52	0.01	0.40	0.12
Site Preparation-2018	2.86	30.38	13.43	0.02	6.29	4.05	0.13	0.80	1.02	0.00	0.25	0.07
Grading-2018	2.77	30.67	16.58	0.03	4.01	2.73	0.57	16.52	4.04	0.04	2.39	0.66
Grading-2019	2.58	28.35	16.29	0.03	3.86	2.59	0.54	15.60	3.87	0.04	1.52	0.45
Foundations/Concrete Pour-2019	2.51	22.71	18.31	0.03	1.38	1.30	1.14	35.51	8.29	0.09	2.41	0.77
Building Construction - 2019	2.51	22.71	18.31	0.03	1.38	1.30	0.94	6.69	7.18	0.03	1.92	0.55
Architectural Coating-2019	52.05	2.45	2.46	0.00	0.17	0.17	0.15	0.10	1.14	0.00	0.32	0.09
Paving-2019	1.85	15.19	14.68	0.02	0.86	0.79	0.11	0.07	0.81	0.00	0.23	0.06

Regional Emissions	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Demolition -2018	3.9	42.1	23.8	0.05	3.00	2.03
Site Preparation-2018	3.0	31.2	14.4	0.03	6.54	4.12
Grading-2018	3.3	47.2	20.6	0.07	6.40	3.39
Grading-2019	3.1	44.0	20.2	0.07	5.38	3.04
Foundations/Concrete Pour-2019	3.7	58.2	26.6	0.12	3.79	2.06
Building Construction - 2019	3.5	29.4	25.5	0.06	3.30	1.85
Architectural Coating-2019	52.2	2.6	3.6	0.01	0.49	0.26
Paving-2019	2.0	15.3	15.5	0.02	1.08	0.85

Overlapping Phases						
2019	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Building Construction + Architectural Coating	55.7	44.7	41.0	0.1	4.4	2.7
Building Construction + Architectural Coating+ Paving	57.6	47.2	44.6	0.1	4.9	3.0
Daily Maximum Emissions	**57.61**	**58.22**	**44.57**	**0.12**	**6.54**	**4.12**

Air Quality Construction Analysis

Localized Emissions	Onsite Emissions			
Source	NOX	CO	Total PM10	Total PM2.5
	lb/day			
Demolition -2018	38.32	22.30	2.60	1.91
Site Preparation-2018	30.38	13.43	6.29	4.05
Grading-2018	30.67	16.58	4.01	2.73
Grading-2019	28.35	16.29	3.86	2.59
Foundations/Concrete Pour-2019	22.71	18.31	1.38	1.30
Building Construction - 2019	22.71	18.31	1.38	1.30
Architectural Coating-2019	2.45	2.46	0.17	0.17
Paving-2019	15.19	14.68	0.86	0.79

Localized Emissions	NOX	CO	Total PM10	Total PM2.5
Demolition -2018	38.3	22.3	2.60	1.91
Site Preparation-2018	30.4	13.4	6.29	4.05
Grading-2018	30.7	16.6	4.01	2.73
Grading-2019	28.3	16.3	3.86	2.59
Foundations/Concrete Pour-2019	22.7	18.3	1.38	1.30
Building Construction - 2019	22.7	18.3	1.38	1.30
Architectural Coating-2019	2.4	2.5	0.17	0.17
Paving-2019	15.2	14.7	0.86	0.79

Overlapping Phases				
2019	NOX	CO	Total PM10	Total PM2.5
Building Construction + Architectural Coating	37.9	33.0	2.2	2.1
Building Construction + Architectural Coating+ Paving	40.3	35.5	2.4	2.3
Daily Maximum Emissions	**40.35**	**35.45**	**6.29**	**4.05**

Carcom Cannabis-Construction

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	220.00	1000sqft	1.38	220,000.00	0
Other Asphalt Surfaces	1.37	Acre	1.37	59,677.20	0
Parking Lot	106.00	Space	0.95	42,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
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

Project Characteristics -

Land Use - Based on building footprint of 60,000

Construction Phase -

Demolition -

Grading -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	40.00
tblConstructionPhase	NumDays	230.00	92.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	17.00
tblGrading	AcresOfGrading	8.50	4.00
tblGrading	MaterialExported	0.00	5,969.00
tblLandUse	LotAcreage	5.05	1.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	78.00	96.00
tblTripsAndVMT	HaulingTripNumber	746.00	856.00
tblTripsAndVMT	HaulingTripNumber	0.00	496.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	54.00
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	10.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	23.00	16.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00

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					
2018	3.9140	46.9651	23.8353	0.0732	12.2838	1.9567	13.8844	6.6849	1.8221	8.1577	0.0000	7,664.4832	7,664.4832	1.2433	0.0000	7,695.5658
2019	57.5255	57.8191	45.2131	0.1225	7.7716	2.4652	9.2293	3.7319	2.3116	5.0752	0.0000	12,859.2808	12,859.2808	1.5634	0.0000	12,893.4826
Maximum	**57.5255**	**57.8191**	**45.2131**	**0.1225**	**12.2838**	**2.4652**	**13.8844**	**6.6849**	**2.3116**	**8.1577**	**0.0000**	**12,859.2808**	**12,859.2808**	**1.5634**	**0.0000**	**12,893.4826**

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					
2018	3.9140	46.9651	23.8353	0.0732	4.9368	1.9567	6.5375	2.6464	1.8221	4.1192	0.0000	7,664.4832	7,664.4832	1.2433	0.0000	7,695.5658
2019	57.5255	57.8191	45.2131	0.1225	3.9217	2.4652	5.3794	1.6926	2.3116	3.0358	0.0000	12,859.2808	12,859.2808	1.5634	0.0000	12,893.4826
Maximum	**57.5255**	**57.8191**	**45.2131**	**0.1225**	**4.9368**	**2.4652**	**6.5375**	**2.6464**	**2.3116**	**4.1192**	**0.0000**	**12,859.2808**	**12,859.2808**	**1.5634**	**0.0000**	**12,893.4826**

	ROG	NOx	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**	**55.83**	**0.00**	**48.44**	**58.35**	**0.00**	**45.93**	**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	12/3/2018	12/15/2018	5	10	
2	Site Preparation	Site Preparation	12/16/2018	12/23/2018	5	5	
3	Grading	Grading	12/24/2018	1/15/2019	5	17	
4	Foundations/Concrete Pour	Site Preparation	1/16/2019	1/22/2019	5	5	
5	Building Construction	Building Construction	1/23/2019	5/30/2019	5	92	
6	Architectural Coating	Architectural Coating	4/5/2019	5/30/2019	5	40	
7	Paving	Paving	5/7/2019	5/30/2019	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 330,000; Non-Residential Outdoor: 110,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Forklifts	3	8.00	89	0.20

Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundations/Concrete Pour	Welders	1	8.00	46	0.45
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	6.00	96.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	18.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	6.00	856.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	9	16.00	54.00	496.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	136.00	54.00	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	28.00	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 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6969	0.0000	1.6969	0.2569	0.0000	0.2569			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**1.6969**	**1.9386**	**3.6355**	**0.2569**	**1.8048**	**2.0618**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0832	2.9558	0.5474	7.6300e-003	0.1678	0.0114	0.1791	0.0460	0.0109	0.0569		822.5147	822.5147	0.0563		823.9211
Vendor	0.0255	0.7271	0.1811	1.5700e-003	0.0384	5.3100e-003	0.0437	0.0111	5.0800e-003	0.0161		167.1948	167.1948	0.0114		167.4793
Worker	0.0862	0.0618	0.8028	1.9600e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		195.0963	195.0963	6.6500e-003		195.2626
Total	**0.1950**	**3.7448**	**1.5313**	**0.0112**	**0.3850**	**0.0181**	**0.4031**	**0.1045**	**0.0173**	**0.1217**		**1,184.8058**	**1,184.8058**	**0.0743**		**1,186.6630**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6618	0.0000	0.6618	0.1002	0.0000	0.1002			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.6618**	**1.9386**	**2.6004**	**0.1002**	**1.8048**	**1.9050**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0832	2.9558	0.5474	7.6300e-003	0.1678	0.0114	0.1791	0.0460	0.0109	0.0569		822.5147	822.5147	0.0563		823.9211
Vendor	0.0255	0.7271	0.1811	1.5700e-003	0.0384	5.3100e-003	0.0437	0.0111	5.0800e-003	0.0161		167.1948	167.1948	0.0114		167.4793
Worker	0.0862	0.0618	0.8028	1.9600e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		195.0963	195.0963	6.6500e-003		195.2626
Total	**0.1950**	**3.7448**	**1.5313**	**0.0112**	**0.3850**	**0.0181**	**0.4031**	**0.1045**	**0.0173**	**0.1217**		**1,184.8058**	**1,184.8058**	**0.0743**		**1,186.6630**

3.3 Site Preparation - 2018

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					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.8644	30.3794	13.4264	0.0233		1.5937	1.5937		1.4662	1.4662		2,345.8986	2,345.8986	0.7303		2,364.1564
Total	**2.8644**	**30.3794**	**13.4264**	**0.0233**	**12.0442**	**1.5937**	**13.6379**	**6.6205**	**1.4662**	**8.0867**		**2,345.8986**	**2,345.8986**	**0.7303**		**2,364.1564**

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	0.0255	0.7271	0.1811	1.5700e-003	0.0384	5.3100e-003	0.0437	0.0111	5.0800e-003	0.0161		167.1948	167.1948	0.0114		167.4793
Worker	0.0970	0.0695	0.9032	2.2100e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		219.4833	219.4833	7.4800e-003		219.6704
Total	**0.1225**	**0.7967**	**1.0842**	**3.7800e-003**	**0.2396**	**6.9100e-003**	**0.2465**	**0.0644**	**6.5600e-003**	**0.0710**		**386.6781**	**386.6781**	**0.0189**		**387.1497**

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	2.8644	30.3794	13.4264	0.0233		1.5937	1.5937		1.4662	1.4662	0.0000	2,345.8986	2,345.8986	0.7303		2,364.1564
Total	**2.8644**	**30.3794**	**13.4264**	**0.0233**	**4.6972**	**1.5937**	**6.2910**	**2.5820**	**1.4662**	**4.0482**	**0.0000**	**2,345.8986**	**2,345.8986**	**0.7303**		**2,364.1564**

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	0.0255	0.7271	0.1811	1.5700e-003	0.0384	5.3100e-003	0.0437	0.0111	5.0800e-003	0.0161		167.1948	167.1948	0.0114		167.4793
Worker	0.0970	0.0695	0.9032	2.2100e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		219.4833	219.4833	7.4800e-003		219.6704
Total	**0.1225**	**0.7967**	**1.0842**	**3.7800e-003**	**0.2396**	**6.9100e-003**	**0.2465**	**0.0644**	**6.5600e-003**	**0.0710**		**386.6781**	**386.6781**	**0.0189**		**387.1497**

3.4 Grading - 2018

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					6.3113	0.0000	6.3113	3.3432	0.0000	3.3432			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.3113**	**1.5513**	**7.8626**	**3.3432**	**1.4272**	**4.7704**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

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	0.4366	15.5037	2.8710	0.0400	2.1004	0.0596	2.1600	0.5407	0.0570	0.5978		4,314.1705	4,314.1705	0.2951		4,321.5470
Vendor	0.0255	0.7271	0.1811	1.5700e-003	0.0384	5.3100e-003	0.0437	0.0111	5.0800e-003	0.0161		167.1948	167.1948	0.0114		167.4793
Worker	0.0862	0.0618	0.8028	1.9600e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		195.0963	195.0963	6.6500e-003		195.2626
Total	**0.5483**	**16.2926**	**3.8548**	**0.0435**	**2.3177**	**0.0664**	**2.3840**	**0.5992**	**0.0634**	**0.6626**		**4,676.4616**	**4,676.4616**	**0.3131**		**4,684.2889**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4614	0.0000	2.4614	1.3038	0.0000	1.3038			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**2.4614**	**1.5513**	**4.0127**	**1.3038**	**1.4272**	**2.7311**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

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	0.4366	15.5037	2.8710	0.0400	2.1004	0.0596	2.1600	0.5407	0.0570	0.5978		4,314.1705	4,314.1705	0.2951		4,321.5470
Vendor	0.0255	0.7271	0.1811	1.5700e-003	0.0384	5.3100e-003	0.0437	0.0111	5.0800e-003	0.0161		167.1948	167.1948	0.0114		167.4793
Worker	0.0862	0.0618	0.8028	1.9600e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		195.0963	195.0963	6.6500e-003		195.2626
Total	**0.5483**	**16.2926**	**3.8548**	**0.0435**	**2.3177**	**0.0664**	**2.3840**	**0.5992**	**0.0634**	**0.6626**		**4,676.4616**	**4,676.4616**	**0.3131**		**4,684.2889**

3.4 Grading - 2019

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					6.3113	0.0000	6.3113	3.3432	0.0000	3.3432			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**6.3113**	**1.3974**	**7.7087**	**3.3432**	**1.2856**	**4.6288**		**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

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	0.4138	14.6589	2.8057	0.0395	1.2430	0.0544	1.2974	0.3303	0.0520	0.3823		4,263.9736	4,263.9736	0.2909		4,271.2455
Vendor	0.0231	0.6865	0.1660	1.5600e-003	0.0384	4.5500e-003	0.0430	0.0111	4.3500e-003	0.0154		165.7318	165.7318	0.0110		166.0060
Worker	0.0784	0.0545	0.7189	1.9000e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		188.9583	188.9583	5.9100e-003		189.1060
Total	**0.5152**	**15.4000**	**3.6906**	**0.0430**	**1.4603**	**0.0603**	**1.5206**	**0.3888**	**0.0577**	**0.4464**		**4,618.6637**	**4,618.6637**	**0.3078**		**4,626.3575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4614	0.0000	2.4614	1.3038	0.0000	1.3038			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**2.4614**	**1.3974**	**3.8588**	**1.3038**	**1.2856**	**2.5894**	**0.0000**	**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

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	0.4138	14.6589	2.8057	0.0395	1.2430	0.0544	1.2974	0.3303	0.0520	0.3823		4,263.9736	4,263.9736	0.2909		4,271.2455
Vendor	0.0231	0.6865	0.1660	1.5600e-003	0.0384	4.5500e-003	0.0430	0.0111	4.3500e-003	0.0154		165.7318	165.7318	0.0110		166.0060
Worker	0.0784	0.0545	0.7189	1.9000e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		188.9583	188.9583	5.9100e-003		189.1060
Total	**0.5152**	**15.4000**	**3.6906**	**0.0430**	**1.4603**	**0.0603**	**1.5206**	**0.3888**	**0.0577**	**0.4464**		**4,618.6637**	**4,618.6637**	**0.3078**		**4,626.3575**

3.5 Foundations/Concrete Pour - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**	**0.0000**	**1.3802**	**1.3802**	**0.0000**	**1.2958**	**1.2958**		**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.8151	28.8795	5.5276	0.0778	1.7335	0.1071	1.8406	0.4751	0.1025	0.5776		8,400.4265	8,400.4265	0.5731		8,414.7529
Vendor	0.2082	6.1789	1.4937	0.0140	0.3456	0.0409	0.3865	0.0995	0.0392	0.1387		1,491.5864	1,491.5864	0.0987		1,494.0537
Worker	0.0784	0.0545	0.7189	1.9000e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		188.9583	188.9583	5.9100e-003		189.1060
Total	**1.1017**	**35.1129**	**7.7402**	**0.0937**	**2.2579**	**0.1495**	**2.4074**	**0.6220**	**0.1429**	**0.7649**		**10,080.9712**	**10,080.9712**	**0.6777**		**10,097.9126**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**	**0.0000**	**1.3802**	**1.3802**	**0.0000**	**1.2958**	**1.2958**	**0.0000**	**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.8151	28.8795	5.5276	0.0778	1.7335	0.1071	1.8406	0.4751	0.1025	0.5776		8,400.4265	8,400.4265	0.5731		8,414.7529
Vendor	0.2082	6.1789	1.4937	0.0140	0.3456	0.0409	0.3865	0.0995	0.0392	0.1387		1,491.5864	1,491.5864	0.0987		1,494.0537
Worker	0.0784	0.0545	0.7189	1.9000e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		188.9583	188.9583	5.9100e-003		189.1060
Total	**1.1017**	**35.1129**	**7.7402**	**0.0937**	**2.2579**	**0.1495**	**2.4074**	**0.6220**	**0.1429**	**0.7649**		**10,080.9712**	**10,080.9712**	**0.6777**		**10,097.9126**

3.6 Building Construction - 2019

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	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**		**1.3802**	**1.3802**		**1.2958**	**1.2958**		**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.2082	6.1789	1.4937	0.0140	0.3456	0.0409	0.3865	0.0995	0.0392	0.1387		1,491.5864	1,491.5864	0.0987		1,494.0537
Worker	0.6661	0.4635	6.1110	0.0161	1.5202	0.0118	1.5320	0.4032	0.0109	0.4141		1,606.1451	1,606.1451	0.0502		1,607.4009
Total	**0.8742**	**6.6424**	**7.6047**	**0.0301**	**1.8658**	**0.0528**	**1.9185**	**0.5027**	**0.0501**	**0.5527**		**3,097.7315**	**3,097.7315**	**0.1489**		**3,101.4546**

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	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**		**1.3802**	**1.3802**		**1.2958**	**1.2958**	**0.0000**	**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.2082	6.1789	1.4937	0.0140	0.3456	0.0409	0.3865	0.0995	0.0392	0.1387		1,491.5864	1,491.5864	0.0987		1,494.0537
Worker	0.6661	0.4635	6.1110	0.0161	1.5202	0.0118	1.5320	0.4032	0.0109	0.4141		1,606.1451	1,606.1451	0.0502		1,607.4009
Total	**0.8742**	**6.6424**	**7.6047**	**0.0301**	**1.8658**	**0.0528**	**1.9185**	**0.5027**	**0.0501**	**0.5527**		**3,097.7315**	**3,097.7315**	**0.1489**		**3,101.4546**

3.7 Architectural Coating - 2019

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	51.6947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3553	2.4472	2.4551	3.9600e-003		0.1717	0.1717		0.1717	0.1717		375.2641	375.2641	0.0317		376.0565
Total	**52.0500**	**2.4472**	**2.4551**	**3.9600e-003**		**0.1717**	**0.1717**		**0.1717**	**0.1717**		**375.2641**	**375.2641**	**0.0317**		**376.0565**

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	0.1371	0.0954	1.2581	3.3200e-003	0.3130	2.4400e-003	0.3154	0.0830	2.2400e-003	0.0853		330.6769	330.6769	0.0103		330.9355
Total	**0.1371**	**0.0954**	**1.2581**	**3.3200e-003**	**0.3130**	**2.4400e-003**	**0.3154**	**0.0830**	**2.2400e-003**	**0.0853**		**330.6769**	**330.6769**	**0.0103**		**330.9355**

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	51.6947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3553	2.4472	2.4551	3.9600e-003		0.1717	0.1717		0.1717	0.1717	0.0000	375.2641	375.2641	0.0317		376.0565
Total	**52.0500**	**2.4472**	**2.4551**	**3.9600e-003**		**0.1717**	**0.1717**		**0.1717**	**0.1717**	**0.0000**	**375.2641**	**375.2641**	**0.0317**		**376.0565**

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	0.1371	0.0954	1.2581	3.3200e-003	0.3130	2.4400e-003	0.3154	0.0830	2.2400e-003	0.0853		330.6769	330.6769	0.0103		330.9355
Total	**0.1371**	**0.0954**	**1.2581**	**3.3200e-003**	**0.3130**	**2.4400e-003**	**0.3154**	**0.0830**	**2.2400e-003**	**0.0853**		**330.6769**	**330.6769**	**0.0103**		**330.9355**

3.8 Paving - 2019

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	1.5170	15.1932	14.6826	0.0226		0.8564	0.8564		0.7902	0.7902		2,200.0788	2,200.0788	0.6746		2,216.9439
Paving	0.3377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8547**	**15.1932**	**14.6826**	**0.0226**		**0.8564**	**0.8564**		**0.7902**	**0.7902**		**2,200.0788**	**2,200.0788**	**0.6746**		**2,216.9439**

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	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	**0.0980**	**0.0682**	**0.8987**	**2.3700e-003**	**0.2236**	**1.7400e-003**	**0.2253**	**0.0593**	**1.6000e-003**	**0.0609**		**236.1978**	**236.1978**	**7.3900e-003**		**236.3825**

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	1.5170	15.1932	14.6826	0.0226		0.8564	0.8564		0.7902	0.7902	0.0000	2,200.0788	2,200.0788	0.6746		2,216.9439
Paving	0.3377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8547**	**15.1932**	**14.6826**	**0.0226**		**0.8564**	**0.8564**		**0.7902**	**0.7902**	**0.0000**	**2,200.0788**	**2,200.0788**	**0.6746**		**2,216.9439**

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	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	**0.0980**	**0.0682**	**0.8987**	**2.3700e-003**	**0.2236**	**1.7400e-003**	**0.2253**	**0.0593**	**1.6000e-003**	**0.0609**		**236.1978**	**236.1978**	**7.3900e-003**		**236.3825**

Carcom Cannabis-Construction

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	220.00	1000sqft	1.38	220,000.00	0
Other Asphalt Surfaces	1.37	Acre	1.37	59,677.20	0
Parking Lot	106.00	Space	0.95	42,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
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

Project Characteristics -

Land Use - Based on building footprint of 60,000

Construction Phase -

Demolition -

Grading -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	40.00
tblConstructionPhase	NumDays	230.00	92.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	17.00
tblGrading	AcresOfGrading	8.50	4.00
tblGrading	MaterialExported	0.00	5,969.00
tblLandUse	LotAcreage	5.05	1.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	78.00	96.00
tblTripsAndVMT	HaulingTripNumber	746.00	856.00
tblTripsAndVMT	HaulingTripNumber	0.00	496.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	54.00
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	10.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	23.00	16.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00

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					
2018	3.9251	47.1887	23.8252	0.0723	12.2838	1.9570	13.8845	6.6849	1.8224	8.1578	0.0000	7,569.7676	7,569.7676	1.2573	0.0000	7,601.2013
2019	57.6148	58.2173	44.5742	0.1206	7.7716	2.4659	9.2304	3.7319	2.3122	5.0762	0.0000	12,651.9461	12,651.9461	1.5663	0.0000	12,686.9710
Maximum	**57.6148**	**58.2173**	**44.5742**	**0.1206**	**12.2838**	**2.4659**	**13.8845**	**6.6849**	**2.3122**	**8.1578**	**0.0000**	**12,651.9461**	**12,651.9461**	**1.5663**	**0.0000**	**12,686.9710**

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					
2018	3.9251	47.1887	23.8252	0.0723	4.9368	1.9570	6.5376	2.6464	1.8224	4.1193	0.0000	7,569.7676	7,569.7676	1.2573	0.0000	7,601.2013
2019	57.6148	58.2173	44.5742	0.1206	3.9217	2.4659	5.3805	1.6926	2.3122	3.0369	0.0000	12,651.9461	12,651.9461	1.5663	0.0000	12,686.9710
Maximum	**57.6148**	**58.2173**	**44.5742**	**0.1206**	**4.9368**	**2.4659**	**6.5376**	**2.6464**	**2.3122**	**4.1193**	**0.0000**	**12,651.9461**	**12,651.9461**	**1.5663**	**0.0000**	**12,686.9710**

	ROG	NOx	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**	**55.83**	**0.00**	**48.44**	**58.35**	**0.00**	**45.93**	**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	12/3/2018	12/15/2018	5	10	
2	Site Preparation	Site Preparation	12/16/2018	12/23/2018	5	5	
3	Grading	Grading	12/24/2018	1/15/2019	5	17	
4	Foundations/Concrete Pour	Site Preparation	1/16/2019	1/22/2019	5	5	
5	Building Construction	Building Construction	1/23/2019	5/30/2019	5	92	
6	Architectural Coating	Architectural Coating	4/5/2019	5/30/2019	5	40	
7	Paving	Paving	5/7/2019	5/30/2019	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 330,000; Non-Residential Outdoor: 110,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Forklifts	3	8.00	89	0.20

Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundations/Concrete Pour	Welders	1	8.00	46	0.45
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	6.00	96.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	18.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	6.00	856.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	9	16.00	54.00	496.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	136.00	54.00	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	28.00	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 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6969	0.0000	1.6969	0.2569	0.0000	0.2569			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**1.6969**	**1.9386**	**3.6355**	**0.2569**	**1.8048**	**2.0618**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0857	2.9971	0.5936	7.4900e-003	0.1678	0.0116	0.1794	0.0460	0.0111	0.0571		807.7606	807.7606	0.0589		809.2319
Vendor	0.0267	0.7283	0.2010	1.5300e-003	0.0384	5.3900e-003	0.0438	0.0111	5.1600e-003	0.0162		162.4539	162.4539	0.0122		162.7595
Worker	0.0937	0.0677	0.7266	1.8300e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		182.5087	182.5087	6.2300e-003		182.6644
Total	**0.2061**	**3.7931**	**1.5212**	**0.0109**	**0.3850**	**0.0184**	**0.4034**	**0.1045**	**0.0176**	**0.1220**		**1,152.7231**	**1,152.7231**	**0.0773**		**1,154.6557**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6618	0.0000	0.6618	0.1002	0.0000	0.1002			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.6618**	**1.9386**	**2.6004**	**0.1002**	**1.8048**	**1.9050**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0857	2.9971	0.5936	7.4900e-003	0.1678	0.0116	0.1794	0.0460	0.0111	0.0571		807.7606	807.7606	0.0589		809.2319
Vendor	0.0267	0.7283	0.2010	1.5300e-003	0.0384	5.3900e-003	0.0438	0.0111	5.1600e-003	0.0162		162.4539	162.4539	0.0122		162.7595
Worker	0.0937	0.0677	0.7266	1.8300e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		182.5087	182.5087	6.2300e-003		182.6644
Total	**0.2061**	**3.7931**	**1.5212**	**0.0109**	**0.3850**	**0.0184**	**0.4034**	**0.1045**	**0.0176**	**0.1220**		**1,152.7231**	**1,152.7231**	**0.0773**		**1,154.6557**

3.3 Site Preparation - 2018

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					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.8644	30.3794	13.4264	0.0233		1.5937	1.5937		1.4662	1.4662		2,345.8986	2,345.8986	0.7303		2,364.1564
Total	**2.8644**	**30.3794**	**13.4264**	**0.0233**	**12.0442**	**1.5937**	**13.6379**	**6.6205**	**1.4662**	**8.0867**		**2,345.8986**	**2,345.8986**	**0.7303**		**2,364.1564**

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	0.0267	0.7283	0.2010	1.5300e-003	0.0384	5.3900e-003	0.0438	0.0111	5.1600e-003	0.0162		162.4539	162.4539	0.0122		162.7595
Worker	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	**0.1321**	**0.8045**	**1.0184**	**3.5900e-003**	**0.2396**	**6.9900e-003**	**0.2466**	**0.0644**	**6.6400e-003**	**0.0711**		**367.7761**	**367.7761**	**0.0192**		**368.2569**

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	2.8644	30.3794	13.4264	0.0233		1.5937	1.5937		1.4662	1.4662	0.0000	2,345.8986	2,345.8986	0.7303		2,364.1564
Total	**2.8644**	**30.3794**	**13.4264**	**0.0233**	**4.6972**	**1.5937**	**6.2910**	**2.5820**	**1.4662**	**4.0482**	**0.0000**	**2,345.8986**	**2,345.8986**	**0.7303**		**2,364.1564**

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	0.0267	0.7283	0.2010	1.5300e-003	0.0384	5.3900e-003	0.0438	0.0111	5.1600e-003	0.0162		162.4539	162.4539	0.0122		162.7595
Worker	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	**0.1321**	**0.8045**	**1.0184**	**3.5900e-003**	**0.2396**	**6.9900e-003**	**0.2466**	**0.0644**	**6.6400e-003**	**0.0711**		**367.7761**	**367.7761**	**0.0192**		**368.2569**

3.4 Grading - 2018

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					6.3113	0.0000	6.3113	3.3432	0.0000	3.3432			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.3113**	**1.5513**	**7.8626**	**3.3432**	**1.4272**	**4.7704**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

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	0.4495	15.7201	3.1135	0.0393	2.1004	0.0608	2.1612	0.5407	0.0581	0.5989		4,236.7835	4,236.7835	0.3087		4,244.5006
Vendor	0.0267	0.7283	0.2010	1.5300e-003	0.0384	5.3900e-003	0.0438	0.0111	5.1600e-003	0.0162		162.4539	162.4539	0.0122		162.7595
Worker	0.0937	0.0677	0.7266	1.8300e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		182.5087	182.5087	6.2300e-003		182.6644
Total	**0.5699**	**16.5162**	**4.0411**	**0.0427**	**2.3177**	**0.0676**	**2.3853**	**0.5992**	**0.0646**	**0.6638**		**4,581.7460**	**4,581.7460**	**0.3271**		**4,589.9244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4614	0.0000	2.4614	1.3038	0.0000	1.3038			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**2.4614**	**1.5513**	**4.0127**	**1.3038**	**1.4272**	**2.7311**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

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	0.4495	15.7201	3.1135	0.0393	2.1004	0.0608	2.1612	0.5407	0.0581	0.5989		4,236.7835	4,236.7835	0.3087		4,244.5006
Vendor	0.0267	0.7283	0.2010	1.5300e-003	0.0384	5.3900e-003	0.0438	0.0111	5.1600e-003	0.0162		162.4539	162.4539	0.0122		162.7595
Worker	0.0937	0.0677	0.7266	1.8300e-003	0.1788	1.4300e-003	0.1803	0.0474	1.3100e-003	0.0487		182.5087	182.5087	6.2300e-003		182.6644
Total	**0.5699**	**16.5162**	**4.0411**	**0.0427**	**2.3177**	**0.0676**	**2.3853**	**0.5992**	**0.0646**	**0.6638**		**4,581.7460**	**4,581.7460**	**0.3271**		**4,589.9244**

3.4 Grading - 2019

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					6.3113	0.0000	6.3113	3.3432	0.0000	3.3432			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**6.3113**	**1.3974**	**7.7087**	**3.3432**	**1.2856**	**4.6288**		**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

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	0.4259	14.8562	3.0356	0.0388	1.2430	0.0554	1.2984	0.3303	0.0530	0.3833		4,186.5951	4,186.5951	0.3041		4,194.1964
Vendor	0.0242	0.6870	0.1848	1.5100e-003	0.0384	4.6200e-003	0.0430	0.0111	4.4200e-003	0.0155		160.9898	160.9898	0.0118		161.2844
Worker	0.0853	0.0597	0.6486	1.7700e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		176.7449	176.7449	5.5200e-003		176.8830
Total	**0.5354**	**15.6030**	**3.8691**	**0.0421**	**1.4603**	**0.0614**	**1.5217**	**0.3888**	**0.0587**	**0.4475**		**4,524.3298**	**4,524.3298**	**0.3214**		**4,532.3637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4614	0.0000	2.4614	1.3038	0.0000	1.3038			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**2.4614**	**1.3974**	**3.8588**	**1.3038**	**1.2856**	**2.5894**	**0.0000**	**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

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	0.4259	14.8562	3.0356	0.0388	1.2430	0.0554	1.2984	0.3303	0.0530	0.3833		4,186.5951	4,186.5951	0.3041		4,194.1964
Vendor	0.0242	0.6870	0.1848	1.5100e-003	0.0384	4.6200e-003	0.0430	0.0111	4.4200e-003	0.0155		160.9898	160.9898	0.0118		161.2844
Worker	0.0853	0.0597	0.6486	1.7700e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		176.7449	176.7449	5.5200e-003		176.8830
Total	**0.5354**	**15.6030**	**3.8691**	**0.0421**	**1.4603**	**0.0614**	**1.5217**	**0.3888**	**0.0587**	**0.4475**		**4,524.3298**	**4,524.3298**	**0.3214**		**4,532.3637**

3.5 Foundations/Concrete Pour - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**	**0.0000**	**1.3802**	**1.3802**	**0.0000**	**1.2958**	**1.2958**		**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.8391	29.2682	5.9805	0.0764	1.7335	0.1092	1.8426	0.4751	0.1045	0.5795		8,247.9837	8,247.9837	0.5990		8,262.9588
Vendor	0.2175	6.1832	1.6635	0.0136	0.3456	0.0416	0.3872	0.0995	0.0398	0.1393		1,448.9079	1,448.9079	0.1061		1,451.5592
Worker	0.0853	0.0597	0.6486	1.7700e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		176.7449	176.7449	5.5200e-003		176.8830
Total	**1.1419**	**35.5111**	**8.2926**	**0.0918**	**2.2579**	**0.1521**	**2.4101**	**0.6220**	**0.1455**	**0.7675**		**9,873.6364**	**9,873.6364**	**0.7106**		**9,891.4010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**	**0.0000**	**1.3802**	**1.3802**	**0.0000**	**1.2958**	**1.2958**	**0.0000**	**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.8391	29.2682	5.9805	0.0764	1.7335	0.1092	1.8426	0.4751	0.1045	0.5795		8,247.9837	8,247.9837	0.5990		8,262.9588
Vendor	0.2175	6.1832	1.6635	0.0136	0.3456	0.0416	0.3872	0.0995	0.0398	0.1393		1,448.9079	1,448.9079	0.1061		1,451.5592
Worker	0.0853	0.0597	0.6486	1.7700e-003	0.1788	1.3900e-003	0.1802	0.0474	1.2800e-003	0.0487		176.7449	176.7449	5.5200e-003		176.8830
Total	**1.1419**	**35.5111**	**8.2926**	**0.0918**	**2.2579**	**0.1521**	**2.4101**	**0.6220**	**0.1455**	**0.7675**		**9,873.6364**	**9,873.6364**	**0.7106**		**9,891.4010**

3.6 Building Construction - 2019

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	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**		**1.3802**	**1.3802**		**1.2958**	**1.2958**		**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.2175	6.1832	1.6635	0.0136	0.3456	0.0416	0.3872	0.0995	0.0398	0.1393		1,448.9079	1,448.9079	0.1061		1,451.5592
Worker	0.7252	0.5077	5.5132	0.0151	1.5202	0.0118	1.5320	0.4032	0.0109	0.4141		1,502.3318	1,502.3318	0.0469		1,503.5052
Total	**0.9427**	**6.6909**	**7.1767**	**0.0287**	**1.8658**	**0.0534**	**1.9192**	**0.5027**	**0.0507**	**0.5533**		**2,951.2397**	**2,951.2397**	**0.1530**		**2,955.0644**

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	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
Total	**2.5115**	**22.7062**	**18.3139**	**0.0288**		**1.3802**	**1.3802**		**1.2958**	**1.2958**	**0.0000**	**2,778.3097**	**2,778.3097**	**0.6904**		**2,795.5700**

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	0.2175	6.1832	1.6635	0.0136	0.3456	0.0416	0.3872	0.0995	0.0398	0.1393		1,448.9079	1,448.9079	0.1061		1,451.5592
Worker	0.7252	0.5077	5.5132	0.0151	1.5202	0.0118	1.5320	0.4032	0.0109	0.4141		1,502.3318	1,502.3318	0.0469		1,503.5052
Total	**0.9427**	**6.6909**	**7.1767**	**0.0287**	**1.8658**	**0.0534**	**1.9192**	**0.5027**	**0.0507**	**0.5533**		**2,951.2397**	**2,951.2397**	**0.1530**		**2,955.0644**

3.7 Architectural Coating - 2019

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	51.6947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3553	2.4472	2.4551	3.9600e-003		0.1717	0.1717		0.1717	0.1717		375.2641	375.2641	0.0317		376.0565
Total	**52.0500**	**2.4472**	**2.4551**	**3.9600e-003**		**0.1717**	**0.1717**		**0.1717**	**0.1717**		**375.2641**	**375.2641**	**0.0317**		**376.0565**

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	0.1493	0.1045	1.1351	3.1100e-003	0.3130	2.4400e-003	0.3154	0.0830	2.2400e-003	0.0853		309.3036	309.3036	9.6600e-003		309.5452
Total	**0.1493**	**0.1045**	**1.1351**	**3.1100e-003**	**0.3130**	**2.4400e-003**	**0.3154**	**0.0830**	**2.2400e-003**	**0.0853**		**309.3036**	**309.3036**	**9.6600e-003**		**309.5452**

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	51.6947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3553	2.4472	2.4551	3.9600e-003		0.1717	0.1717		0.1717	0.1717	0.0000	375.2641	375.2641	0.0317		376.0565
Total	**52.0500**	**2.4472**	**2.4551**	**3.9600e-003**		**0.1717**	**0.1717**		**0.1717**	**0.1717**	**0.0000**	**375.2641**	**375.2641**	**0.0317**		**376.0565**

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	0.1493	0.1045	1.1351	3.1100e-003	0.3130	2.4400e-003	0.3154	0.0830	2.2400e-003	0.0853		309.3036	309.3036	9.6600e-003		309.5452
Total	**0.1493**	**0.1045**	**1.1351**	**3.1100e-003**	**0.3130**	**2.4400e-003**	**0.3154**	**0.0830**	**2.2400e-003**	**0.0853**		**309.3036**	**309.3036**	**9.6600e-003**		**309.5452**

3.8 Paving - 2019

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	1.5170	15.1932	14.6826	0.0226		0.8564	0.8564		0.7902	0.7902		2,200.0788	2,200.0788	0.6746		2,216.9439
Paving	0.3377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8547**	**15.1932**	**14.6826**	**0.0226**		**0.8564**	**0.8564**		**0.7902**	**0.7902**		**2,200.0788**	**2,200.0788**	**0.6746**		**2,216.9439**

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	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**0.1067**	**0.0747**	**0.8108**	**2.2200e-003**	**0.2236**	**1.7400e-003**	**0.2253**	**0.0593**	**1.6000e-003**	**0.0609**		**220.9312**	**220.9312**	**6.9000e-003**		**221.1037**

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	1.5170	15.1932	14.6826	0.0226		0.8564	0.8564		0.7902	0.7902	0.0000	2,200.0788	2,200.0788	0.6746		2,216.9439
Paving	0.3377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8547**	**15.1932**	**14.6826**	**0.0226**		**0.8564**	**0.8564**		**0.7902**	**0.7902**	**0.0000**	**2,200.0788**	**2,200.0788**	**0.6746**		**2,216.9439**

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	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**0.1067**	**0.0747**	**0.8108**	**2.2200e-003**	**0.2236**	**1.7400e-003**	**0.2253**	**0.0593**	**1.6000e-003**	**0.0609**		**220.9312**	**220.9312**	**6.9000e-003**		**221.1037**

Operational AQ Emissions

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Regional Operational Emissions

Summer Category	ROG	NOx	CO	SO2 lb/day	PM10 Total	PM2.5 Total
Area	4.964	0.000	0.034	0.000	0.000	0.000
Energy	0.097	0.882	0.741	0.005	0.067	0.067
Mobile	1.011	4.996	13.277	0.042	3.257	0.903
Total	6.072	5.878	14.052	0.048	3.324	0.971

Winter Category	ROG	NOx	CO	SO2 lb/day	PM10 Total	PM2.5 Total
Area	4.964	0.000	0.034	0.000	0.000	0.000
Energy	0.097	0.882	0.741	0.005	0.067	0.067
Mobile	0.965	5.117	12.477	0.040	3.257	0.904
Total	6.026	5.999	13.252	0.045	3.325	0.971

Daily Maximum Category	ROG	NOx	CO	SO2 lb/day	PM10 Total	PM2.5 Total
Area	4.964	0.000	0.034	0.000	0.000	0.000
Energy	0.097	0.882	0.741	0.005	0.067	0.067
Mobile	1.011	5.117	13.277	0.042	3.257	0.904
Total	6.072	5.999	14.052	0.048	3.325	0.971
SCAQMD Regional Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Table for Report

Daily Maximum Category	ROG	NOx	CO	SO2 lb/day	PM10 Total	PM2.5 Total
Area	5	<1	<1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	1	5	13	<1	3	1
Total	6	6	14	<1	3	1
SCAQMD Regional Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Localized Operational Emissions

Summer Category	NOx	CO	PM10 Total lb/day	PM2.5 Total
Area	0.000	0.034	0.000	0.000
Energy	0.882	0.741	0.067	0.067
Total	0.883	0.775	0.067	0.067

Winter Category	NOx	CO	PM10 Total lb/day	PM2.5 Total
Area	0.000	0.034	0.000	0.000
Energy	0.882	0.741	0.067	0.067
Total	0.883	0.775	0.067	0.067

Daily Maximum Category	NOx	CO	PM10 Total lb/day	PM2.5 Total
Area	0.000	0.034	0.000	0.000
Energy	0.882	0.741	0.067	0.067
Total	0.883	0.775	0.067	0.067
SCAQMD Localized Thresholds	82	842	2	1
Exceeds Threshold?	No	No	No	No

Table for Report

Daily Maximum Category	NOx	CO	PM10 Total lb/day	PM2.5 Total
Area	<1	<1	<1	<1
Energy	1	1	<1	<1
Total	1	1	<1	<1
SCAQMD Localized Thresholds	82	842	2	1
Exceeds Threshold?	No	No	No	No

Carcom Cannabis-Operations - South Coast AQMD Air District, Summer

Carcom Cannabis-Operations

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	110.00	1000sqft	1.26	110,000.00	0
Manufacturing	55.00	1000sqft	0.00	55,000.00	0
Supermarket	55.00	1000sqft	0.00	55,000.00	0
Parking Lot	106.00	Space	0.95	42,400.00	0
Other Asphalt Surfaces	1.49	Acre	1.49	64,904.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
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

Project Characteristics -

Land Use - Footprint of Building would be 55,000 sqft. Supermarket land use category used to represent bakery portion of Project.

Vehicle Trips - Weekday trip rate applied to weekends to be conservative.

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	2.53	1.26
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	1.26	0.00
tblVehicleTrips	ST_TR	2.46	4.26
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	177.59	0.00
tblVehicleTrips	SU_TR	1.05	4.26
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	166.44	0.00
tblVehicleTrips	WD_TR	11.03	4.26
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	102.24	0.00

2.0 Emissions Summary

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	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Energy	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642
Mobile	1.0109	4.9957	13.2769	0.0424	3.2099	0.0471	3.2570	0.8590	0.0443	0.9033		4,304.3624	4,304.3624	0.2254		4,309.9974
Total	**6.0720**	**5.8784**	**14.0519**	**0.0477**	**3.2099**	**0.1143**	**3.3242**	**0.8590**	**0.1115**	**0.9705**		**5,363.3060**	**5,363.3060**	**0.2459**	**0.0194**	**5,375.2381**

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	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Energy	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642
Mobile	1.0109	4.9957	13.2769	0.0424	3.2099	0.0471	3.2570	0.8590	0.0443	0.9033		4,304.3624	4,304.3624	0.2254		4,309.9974
Total	**6.0720**	**5.8784**	**14.0519**	**0.0477**	**3.2099**	**0.1143**	**3.3242**	**0.8590**	**0.1115**	**0.9705**		**5,363.3060**	**5,363.3060**	**0.2459**	**0.0194**	**5,375.2381**

	ROG	NOx	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**

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	1.0109	4.9957	13.2769	0.0424	3.2099	0.0471	3.2570	0.8590	0.0443	0.9033		4,304.3624	4,304.3624	0.2254		4,309.9974
Unmitigated	1.0109	4.9957	13.2769	0.0424	3.2099	0.0471	3.2570	0.8590	0.0443	0.9033		4,304.3624	4,304.3624	0.2254		4,309.9974

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	468.60	468.60	468.60	1,509,577	1,509,577
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	0.00	0.00	0.00		
Total	468.60	468.60	468.60	1,509,577	1,509,577

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-	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
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Manufacturing	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Other Asphalt Surfaces	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Supermarket	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642
NaturalGas Unmitigated	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642

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	lb/day										lb/day					
General Office Building	2754.52	0.0297	0.2701	0.2268	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.0612	324.0612	6.2100e-003	5.9400e-003	325.9870
Manufacturing	3149.32	0.0340	0.3088	0.2594	1.8500e-003		0.0235	0.0235		0.0235	0.0235		370.5077	370.5077	7.1000e-003	6.7900e-003	372.7094
Other Asphalt Surfaces	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
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
Supermarket	3096.58	0.0334	0.3036	0.2550	1.8200e-003		0.0231	0.0231		0.0231	0.0231		364.3030	364.3030	6.9800e-003	6.6800e-003	366.4679
Total		**0.0971**	**0.8824**	**0.7412**	**5.2900e-003**		**0.0671**	**0.0671**		**0.0671**	**0.0671**		**1,058.8719**	**1,058.8719**	**0.0203**	**0.0194**	**1,065.1642**

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	lb/day										lb/day					
General Office Building	2.75452	0.0297	0.2701	0.2268	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.0612	324.0612	6.2100e-003	5.9400e-003	325.9870
Manufacturing	3.14932	0.0340	0.3088	0.2594	1.8500e-003		0.0235	0.0235		0.0235	0.0235		370.5077	370.5077	7.1000e-003	6.7900e-003	372.7094
Other Asphalt Surfaces	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
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
Supermarket	3.09658	0.0334	0.3036	0.2550	1.8200e-003		0.0231	0.0231		0.0231	0.0231		364.3030	364.3030	6.9800e-003	6.6800e-003	366.4679
Total		**0.0971**	**0.8824**	**0.7412**	**5.2900e-003**		**0.0671**	**0.0671**		**0.0671**	**0.0671**		**1,058.8719**	**1,058.8719**	**0.0203**	**0.0194**	**1,065.1642**

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	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Unmitigated	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765

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	0.5669					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-003	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Total	**4.9641**	**3.1000e-004**	**0.0338**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0717**	**0.0717**	**1.9000e-004**		**0.0765**

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	0.5669					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-003	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Total	**4.9641**	**3.1000e-004**	**0.0338**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0717**	**0.0717**	**1.9000e-004**		**0.0765**

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

Carcom Cannabis-Operations

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	110.00	1000sqft	1.26	110,000.00	0
Manufacturing	55.00	1000sqft	0.00	55,000.00	0
Supermarket	55.00	1000sqft	0.00	55,000.00	0
Parking Lot	106.00	Space	0.95	42,400.00	0
Other Asphalt Surfaces	1.49	Acre	1.49	64,904.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
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

Project Characteristics -

Land Use - Footprint of Building would be 55,000 sqft. Supermarket land use category used to represent bakery portion of Project.

Vehicle Trips - Weekday trip rate applied to weekends to be conservative.

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	2.53	1.26
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	1.26	0.00
tblVehicleTrips	ST_TR	2.46	4.26
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	177.59	0.00
tblVehicleTrips	SU_TR	1.05	4.26
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	166.44	0.00
tblVehicleTrips	WD_TR	11.03	4.26
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	102.24	0.00

2.0 Emissions Summary

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	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Energy	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642
Mobile	0.9652	5.1166	12.4768	0.0401	3.2099	0.0474	3.2574	0.8590	0.0447	0.9036		4,073.5604	4,073.5604	0.2247		4,079.1777
Total	**6.0264**	**5.9993**	**13.2517**	**0.0454**	**3.2099**	**0.1146**	**3.3246**	**0.8590**	**0.1118**	**0.9708**		**5,132.5039**	**5,132.5039**	**0.2452**	**0.0194**	**5,144.4185**

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	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Energy	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642
Mobile	0.9652	5.1166	12.4768	0.0401	3.2099	0.0474	3.2574	0.8590	0.0447	0.9036		4,073.5604	4,073.5604	0.2247		4,079.1777
Total	**6.0264**	**5.9993**	**13.2517**	**0.0454**	**3.2099**	**0.1146**	**3.3246**	**0.8590**	**0.1118**	**0.9708**		**5,132.5039**	**5,132.5039**	**0.2452**	**0.0194**	**5,144.4185**

	ROG	NOx	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**

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	0.9652	5.1166	12.4768	0.0401	3.2099	0.0474	3.2574	0.8590	0.0447	0.9036		4,073.5604	4,073.5604	0.2247		4,079.1777
Unmitigated	0.9652	5.1166	12.4768	0.0401	3.2099	0.0474	3.2574	0.8590	0.0447	0.9036		4,073.5604	4,073.5604	0.2247		4,079.1777

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	468.60	468.60	468.60	1,509,577	1,509,577
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	0.00	0.00	0.00		
Total	468.60	468.60	468.60	1,509,577	1,509,577

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
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Manufacturing	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Other Asphalt Surfaces	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Supermarket	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642
NaturalGas Unmitigated	0.0971	0.8824	0.7412	5.2900e-003		0.0671	0.0671		0.0671	0.0671		1,058.8719	1,058.8719	0.0203	0.0194	1,065.1642

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	lb/day										lb/day					
General Office Building	2754.52	0.0297	0.2701	0.2268	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.0612	324.0612	6.2100e-003	5.9400e-003	325.9870
Manufacturing	3149.32	0.0340	0.3088	0.2594	1.8500e-003		0.0235	0.0235		0.0235	0.0235		370.5077	370.5077	7.1000e-003	6.7900e-003	372.7094
Other Asphalt Surfaces	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
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
Supermarket	3096.58	0.0334	0.3036	0.2550	1.8200e-003		0.0231	0.0231		0.0231	0.0231		364.3030	364.3030	6.9800e-003	6.6800e-003	366.4679
Total		**0.0971**	**0.8824**	**0.7412**	**5.2900e-003**		**0.0671**	**0.0671**		**0.0671**	**0.0671**		**1,058.8719**	**1,058.8719**	**0.0203**	**0.0194**	**1,065.1642**

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	lb/day										lb/day					
General Office Building	2.75452	0.0297	0.2701	0.2268	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.0612	324.0612	6.2100e-003	5.9400e-003	325.9870
Manufacturing	3.14932	0.0340	0.3088	0.2594	1.8500e-003		0.0235	0.0235		0.0235	0.0235		370.5077	370.5077	7.1000e-003	6.7900e-003	372.7094
Other Asphalt Surfaces	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
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
Supermarket	3.09658	0.0334	0.3036	0.2550	1.8200e-003		0.0231	0.0231		0.0231	0.0231		364.3030	364.3030	6.9800e-003	6.6800e-003	366.4679
Total		**0.0971**	**0.8824**	**0.7412**	**5.2900e-003**		**0.0671**	**0.0671**		**0.0671**	**0.0671**		**1,058.8719**	**1,058.8719**	**0.0203**	**0.0194**	**1,065.1642**

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	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Unmitigated	4.9641	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765

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	0.5669					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-003	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Total	**4.9641**	**3.1000e-004**	**0.0338**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0717**	**0.0717**	**1.9000e-004**		**0.0765**

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	0.5669					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-003	3.1000e-004	0.0338	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0717	0.0717	1.9000e-004		0.0765
Total	**4.9641**	**3.1000e-004**	**0.0338**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0717**	**0.0717**	**1.9000e-004**		**0.0765**

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

Construction GHG Emissions

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Carcom Cannabis-Construction - South Coast AQMD Air District, Annual

Carcom Cannabis-Construction

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	220.00	1000sqft	1.38	220,000.00	0
Other Asphalt Surfaces	1.37	Acre	1.37	59,677.20	0
Parking Lot	106.00	Space	0.95	42,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
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

Project Characteristics -

Land Use - Based on building footprint of 60,000

Construction Phase -

Demolition -

Grading -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	40.00

tblConstructionPhase	NumDays	230.00	92.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	17.00
tblGrading	AcresOfGrading	8.50	4.00
tblGrading	MaterialExported	0.00	5,969.00
tblLandUse	LotAcreage	5.05	1.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	78.00	96.00
tblTripsAndVMT	HaulingTripNumber	746.00	856.00
tblTripsAndVMT	HaulingTripNumber	0.00	496.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	54.00
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	10.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	23.00	16.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00

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					
2018	0.0370	0.4314	0.2167	5.3000e-004	0.0684	0.0186	0.0871	0.0305	0.0173	0.0478	0.0000	49.7645	49.7645	0.0103	0.0000	50.0215
2019	1.2429	1.9371	1.5639	3.7300e-003	0.1414	0.0890	0.2304	0.0470	0.0835	0.1305	0.0000	339.9560	339.9560	0.0507	0.0000	341.2239
Maximum	**1.2429**	**1.9371**	**1.5639**	**3.7300e-003**	**0.1414**	**0.0890**	**0.2304**	**0.0470**	**0.0835**	**0.1305**	**0.0000**	**339.9560**	**339.9560**	**0.0507**	**0.0000**	**341.2239**

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					
2018	0.0370	0.4314	0.2167	5.3000e-004	0.0324	0.0186	0.0510	0.0134	0.0173	0.0306	0.0000	49.7645	49.7645	0.0103	0.0000	50.0215
2019	1.2429	1.9371	1.5639	3.7300e-003	0.1197	0.0890	0.2087	0.0358	0.0835	0.1193	0.0000	339.9558	339.9558	0.0507	0.0000	341.2237
Maximum	**1.2429**	**1.9371**	**1.5639**	**3.7300e-003**	**0.1197**	**0.0890**	**0.2087**	**0.0358**	**0.0835**	**0.1193**	**0.0000**	**339.9558**	**339.9558**	**0.0507**	**0.0000**	**341.2237**

	ROG	NOx	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**	**27.53**	**0.00**	**18.20**	**36.61**	**0.00**	**15.92**	**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	12-3-2018	3-2-2019	1.3202	1.3202
2	3-3-2019	6-2-2019	2.2838	2.2838
		Highest	2.2838	2.2838

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	12/3/2018	12/15/2018	5	10	
2	Site Preparation	Site Preparation	12/16/2018	12/23/2018	5	5	
3	Grading	Grading	12/24/2018	1/15/2019	5	17	
4	Foundations/Concrete Pour	Site Preparation	1/16/2019	1/22/2019	5	5	
5	Building Construction	Building Construction	1/23/2019	5/30/2019	5	92	
6	Architectural Coating	Architectural Coating	4/5/2019	5/30/2019	5	40	
7	Paving	Paving	5/7/2019	5/30/2019	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 330,000; Non-Residential Outdoor: 110,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Forklifts	3	8.00	89	0.20
Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundations/Concrete Pour	Welders	1	8.00	46	0.45

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	6.00	96.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	18.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	6.00	856.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	9	16.00	54.00	496.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	136.00	54.00	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	28.00	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 - 2018

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					8.4800e-003	0.0000	8.4800e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1916	0.1115	1.9000e-004		9.6900e-003	9.6900e-003		9.0200e-003	9.0200e-003	0.0000	17.5620	17.5620	4.8400e-003	0.0000	17.6830
Total	**0.0186**	**0.1916**	**0.1115**	**1.9000e-004**	**8.4800e-003**	**9.6900e-003**	**0.0182**	**1.2800e-003**	**9.0200e-003**	**0.0103**	**0.0000**	**17.5620**	**17.5620**	**4.8400e-003**	**0.0000**	**17.6830**

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	4.2000e-004	0.0153	2.8400e-003	4.0000e-005	8.3000e-004	6.0000e-005	8.8000e-004	2.3000e-004	5.0000e-005	2.8000e-004	0.0000	3.7028	3.7028	2.6000e-004	0.0000	3.7093
Vendor	1.3000e-004	3.7100e-003	9.6000e-004	1.0000e-005	1.9000e-004	3.0000e-005	2.2000e-004	5.0000e-005	3.0000e-005	8.0000e-005	0.0000	0.7494	0.7494	5.0000e-005	0.0000	0.7507
Worker	4.3000e-004	3.5000e-004	3.7300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8420	0.8420	3.0000e-005	0.0000	0.8427
Total	**9.8000e-004**	**0.0193**	**7.5300e-003**	**6.0000e-005**	**1.9000e-003**	**1.0000e-004**	**1.9800e-003**	**5.1000e-004**	**9.0000e-005**	**6.0000e-004**	**0.0000**	**5.2941**	**5.2941**	**3.4000e-004**	**0.0000**	**5.3027**

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					3.3100e-003	0.0000	3.3100e-003	5.0000e-004	0.0000	5.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1916	0.1115	1.9000e-004		9.6900e-003	9.6900e-003		9.0200e-003	9.0200e-003	0.0000	17.5620	17.5620	4.8400e-003	0.0000	17.6830
Total	**0.0186**	**0.1916**	**0.1115**	**1.9000e-004**	**3.3100e-003**	**9.6900e-003**	**0.0130**	**5.0000e-004**	**9.0200e-003**	**9.5200e-003**	**0.0000**	**17.5620**	**17.5620**	**4.8400e-003**	**0.0000**	**17.6830**

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	4.2000e-004	0.0153	2.8400e-003	4.0000e-005	8.3000e-004	6.0000e-005	8.8000e-004	2.3000e-004	5.0000e-005	2.8000e-004	0.0000	3.7028	3.7028	2.6000e-004	0.0000	3.7093
Vendor	1.3000e-004	3.7100e-003	9.6000e-004	1.0000e-005	1.9000e-004	3.0000e-005	2.2000e-004	5.0000e-005	3.0000e-005	8.0000e-005	0.0000	0.7494	0.7494	5.0000e-005	0.0000	0.7507
Worker	4.3000e-004	3.5000e-004	3.7300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8420	0.8420	3.0000e-005	0.0000	0.8427
Total	**9.8000e-004**	**0.0193**	**7.5300e-003**	**6.0000e-005**	**1.9000e-003**	**1.0000e-004**	**1.9800e-003**	**5.1000e-004**	**9.0000e-005**	**6.0000e-004**	**0.0000**	**5.2941**	**5.2941**	**3.4000e-004**	**0.0000**	**5.3027**

3.3 Site Preparation - 2018

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					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1600e-003	0.0760	0.0336	6.0000e-005		3.9800e-003	3.9800e-003		3.6700e-003	3.6700e-003	0.0000	5.3204	5.3204	1.6600e-003	0.0000	5.3618
Total	**7.1600e-003**	**0.0760**	**0.0336**	**6.0000e-005**	**0.0301**	**3.9800e-003**	**0.0341**	**0.0166**	**3.6700e-003**	**0.0202**	**0.0000**	**5.3204**	**5.3204**	**1.6600e-003**	**0.0000**	**5.3618**

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	7.0000e-005	1.8500e-003	4.8000e-004	0.0000	9.0000e-005	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3747	0.3747	3.0000e-005	0.0000	0.3753
Worker	2.4000e-004	2.0000e-004	2.1000e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4736	0.4736	2.0000e-005	0.0000	0.4740
Total	**3.1000e-004**	**2.0500e-003**	**2.5800e-003**	**1.0000e-005**	**5.8000e-004**	**1.0000e-005**	**6.1000e-004**	**1.6000e-004**	**1.0000e-005**	**1.7000e-004**	**0.0000**	**0.8483**	**0.8483**	**5.0000e-005**	**0.0000**	**0.8494**

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					0.0117	0.0000	0.0117	6.4500e-003	0.0000	6.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1600e-003	0.0760	0.0336	6.0000e-005		3.9800e-003	3.9800e-003		3.6700e-003	3.6700e-003	0.0000	5.3204	5.3204	1.6600e-003	0.0000	5.3618
Total	**7.1600e-003**	**0.0760**	**0.0336**	**6.0000e-005**	**0.0117**	**3.9800e-003**	**0.0157**	**6.4500e-003**	**3.6700e-003**	**0.0101**	**0.0000**	**5.3204**	**5.3204**	**1.6600e-003**	**0.0000**	**5.3618**

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	7.0000e-005	1.8500e-003	4.8000e-004	0.0000	9.0000e-005	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3747	0.3747	3.0000e-005	0.0000	0.3753
Worker	2.4000e-004	2.0000e-004	2.1000e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4736	0.4736	2.0000e-005	0.0000	0.4740
Total	**3.1000e-004**	**2.0500e-003**	**2.5800e-003**	**1.0000e-005**	**5.8000e-004**	**1.0000e-005**	**6.1000e-004**	**1.6000e-004**	**1.0000e-005**	**1.7000e-004**	**0.0000**	**0.8483**	**0.8483**	**5.0000e-005**	**0.0000**	**0.8494**

3.4 Grading - 2018

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					0.0205	0.0000	0.0205	0.0102	0.0000	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3200e-003	0.0920	0.0497	9.0000e-005		4.6500e-003	4.6500e-003		4.2800e-003	4.2800e-003	0.0000	8.1321	8.1321	2.5300e-003	0.0000	8.1954
Total	**8.3200e-003**	**0.0920**	**0.0497**	**9.0000e-005**	**0.0205**	**4.6500e-003**	**0.0252**	**0.0102**	**4.2800e-003**	**0.0145**	**0.0000**	**8.1321**	**8.1321**	**2.5300e-003**	**0.0000**	**8.1954**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3300e-003	0.0480	8.9300e-003	1.2000e-004	6.1800e-003	1.8000e-004	6.3600e-003	1.5900e-003	1.7000e-004	1.7700e-003	0.0000	11.6528	11.6528	8.2000e-004	0.0000	11.6733

Vendor	8.0000e-005	2.2300e-003	5.7000e-004	0.0000	1.1000e-004	2.0000e-005	1.3000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.4496	0.4496	3.0000e-005	0.0000	0.4504
Worker	2.6000e-004	2.1000e-004	2.2400e-003	1.0000e-005	5.3000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.5052	0.5052	2.0000e-005	0.0000	0.5056
Total	**1.6700e-003**	**0.0505**	**0.0117**	**1.3000e-004**	**6.8200e-003**	**2.0000e-004**	**7.0200e-003**	**1.7600e-003**	**1.9000e-004**	**1.9600e-003**	**0.0000**	**12.6076**	**12.6076**	**8.7000e-004**	**0.0000**	**12.6293**

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					8.0000e-003	0.0000	8.0000e-003	3.9800e-003	0.0000	3.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3200e-003	0.0920	0.0497	9.0000e-005		4.6500e-003	4.6500e-003		4.2800e-003	4.2800e-003	0.0000	8.1321	8.1321	2.5300e-003	0.0000	8.1953
Total	**8.3200e-003**	**0.0920**	**0.0497**	**9.0000e-005**	**8.0000e-003**	**4.6500e-003**	**0.0127**	**3.9800e-003**	**4.2800e-003**	**8.2600e-003**	**0.0000**	**8.1321**	**8.1321**	**2.5300e-003**	**0.0000**	**8.1953**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3300e-003	0.0480	8.9300e-003	1.2000e-004	6.1800e-003	1.8000e-004	6.3600e-003	1.5900e-003	1.7000e-004	1.7700e-003	0.0000	11.6528	11.6528	8.2000e-004	0.0000	11.6733
Vendor	8.0000e-005	2.2300e-003	5.7000e-004	0.0000	1.1000e-004	2.0000e-005	1.3000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.4496	0.4496	3.0000e-005	0.0000	0.4504
Worker	2.6000e-004	2.1000e-004	2.2400e-003	1.0000e-005	5.3000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.5052	0.5052	2.0000e-005	0.0000	0.5056
Total	**1.6700e-003**	**0.0505**	**0.0117**	**1.3000e-004**	**6.8200e-003**	**2.0000e-004**	**7.0200e-003**	**1.7600e-003**	**1.9000e-004**	**1.9600e-003**	**0.0000**	**12.6076**	**12.6076**	**8.7000e-004**	**0.0000**	**12.6293**

3.4 Grading - 2019

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					0.0356	0.0000	0.0356	0.0185	0.0000	0.0185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0142	0.1559	0.0896	1.6000e-004		7.6900e-003	7.6900e-003		7.0700e-003	7.0700e-003	0.0000	14.6532	14.6532	4.6400e-003	0.0000	14.7692
Total	**0.0142**	**0.1559**	**0.0896**	**1.6000e-004**	**0.0356**	**7.6900e-003**	**0.0433**	**0.0185**	**7.0700e-003**	**0.0256**	**0.0000**	**14.6532**	**14.6532**	**4.6400e-003**	**0.0000**	**14.7692**

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	2.3000e-003	0.0832	0.0160	2.2000e-004	6.7200e-003	3.0000e-004	7.0200e-003	1.7900e-003	2.9000e-004	2.0800e-003	0.0000	21.1130	21.1130	1.4800e-003	0.0000	21.1500
Vendor	1.3000e-004	3.8500e-003	9.6000e-004	1.0000e-005	2.1000e-004	3.0000e-005	2.3000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.8170	0.8170	6.0000e-005	0.0000	0.8184
Worker	4.3000e-004	3.4000e-004	3.6700e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8970	0.8970	3.0000e-005	0.0000	0.8977
Total	**2.8600e-003**	**0.0874**	**0.0206**	**2.4000e-004**	**7.9000e-003**	**3.4000e-004**	**8.2200e-003**	**2.1100e-003**	**3.2000e-004**	**2.4200e-003**	**0.0000**	**22.8270**	**22.8270**	**1.5700e-003**	**0.0000**	**22.8661**

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					0.0139	0.0000	0.0139	7.2100e-003	0.0000	7.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.1559	0.0896	1.6000e-004		7.6900e-003	7.6900e-003		7.0700e-003	7.0700e-003	0.0000	14.6532	14.6532	4.6400e-003	0.0000	14.7691
Total	**0.0142**	**0.1559**	**0.0896**	**1.6000e-004**	**0.0139**	**7.6900e-003**	**0.0216**	**7.2100e-003**	**7.0700e-003**	**0.0143**	**0.0000**	**14.6532**	**14.6532**	**4.6400e-003**	**0.0000**	**14.7691**

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	2.3000e-003	0.0832	0.0160	2.2000e-004	6.7200e-003	3.0000e-004	7.0200e-003	1.7900e-003	2.9000e-004	2.0800e-003	0.0000	21.1130	21.1130	1.4800e-003	0.0000	21.1500
Vendor	1.3000e-004	3.8500e-003	9.6000e-004	1.0000e-005	2.1000e-004	3.0000e-005	2.3000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.8170	0.8170	6.0000e-005	0.0000	0.8184
Worker	4.3000e-004	3.4000e-004	3.6700e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8970	0.8970	3.0000e-005	0.0000	0.8977

Total	**2.8600e-003**	**0.0874**	**0.0206**	**2.4000e-004**	**7.9000e-003**	**3.4000e-004**	**8.2200e-003**	**2.1100e-003**	**3.2000e-004**	**2.4200e-003**	**0.0000**	**22.8270**	**22.8270**	**1.5700e-003**	**0.0000**	**22.8661**

3.5 Foundations/Concrete Pour - 2019

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2800e-003	0.0568	0.0458	7.0000e-005		3.4500e-003	3.4500e-003		3.2400e-003	3.2400e-003	0.0000	6.3011	6.3011	1.5700e-003	0.0000	6.3403
Total	**6.2800e-003**	**0.0568**	**0.0458**	**7.0000e-005**	**0.0000**	**3.4500e-003**	**3.4500e-003**	**0.0000**	**3.2400e-003**	**3.2400e-003**	**0.0000**	**6.3011**	**6.3011**	**1.5700e-003**	**0.0000**	**6.3403**

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	2.0600e-003	0.0745	0.0143	1.9000e-004	4.2600e-003	2.7000e-004	4.5300e-003	1.1700e-003	2.6000e-004	1.4300e-003	0.0000	18.9066	18.9066	1.3300e-003	0.0000	18.9398
Vendor	5.3000e-004	0.0157	3.9500e-003	3.0000e-005	8.5000e-004	1.0000e-004	9.5000e-004	2.5000e-004	1.0000e-004	3.4000e-004	0.0000	3.3422	3.3422	2.3000e-004	0.0000	3.3480
Worker	1.9000e-004	1.5000e-004	1.6700e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4077	0.4077	1.0000e-005	0.0000	0.4080
Total	**2.7800e-003**	**0.0904**	**0.0199**	**2.2000e-004**	**5.5500e-003**	**3.7000e-004**	**5.9200e-003**	**1.5400e-003**	**3.6000e-004**	**1.8900e-003**	**0.0000**	**22.6566**	**22.6566**	**1.5700e-003**	**0.0000**	**22.6958**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2800e-003	0.0568	0.0458	7.0000e-005		3.4500e-003	3.4500e-003		3.2400e-003	3.2400e-003	0.0000	6.3011	6.3011	1.5700e-003	0.0000	6.3402
Total	**6.2800e-003**	**0.0568**	**0.0458**	**7.0000e-005**	**0.0000**	**3.4500e-003**	**3.4500e-003**	**0.0000**	**3.2400e-003**	**3.2400e-003**	**0.0000**	**6.3011**	**6.3011**	**1.5700e-003**	**0.0000**	**6.3402**

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	2.0600e-003	0.0745	0.0143	1.9000e-004	4.2600e-003	2.7000e-004	4.5300e-003	1.1700e-003	2.6000e-004	1.4300e-003	0.0000	18.9066	18.9066	1.3300e-003	0.0000	18.9398
Vendor	5.3000e-004	0.0157	3.9500e-003	3.0000e-005	8.5000e-004	1.0000e-004	9.5000e-004	2.5000e-004	1.0000e-004	3.4000e-004	0.0000	3.3422	3.3422	2.3000e-004	0.0000	3.3480
Worker	1.9000e-004	1.5000e-004	1.6700e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4077	0.4077	1.0000e-005	0.0000	0.4080
Total	**2.7800e-003**	**0.0904**	**0.0199**	**2.2000e-004**	**5.5500e-003**	**3.7000e-004**	**5.9200e-003**	**1.5400e-003**	**3.6000e-004**	**1.8900e-003**	**0.0000**	**22.6566**	**22.6566**	**1.5700e-003**	**0.0000**	**22.6958**

3.6 Building Construction - 2019

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	0.1155	1.0445	0.8424	1.3200e-003		0.0635	0.0635		0.0596	0.0596	0.0000	115.9403	115.9403	0.0288	0.0000	116.6605
Total	**0.1155**	**1.0445**	**0.8424**	**1.3200e-003**		**0.0635**	**0.0635**		**0.0596**	**0.0596**	**0.0000**	**115.9403**	**115.9403**	**0.0288**	**0.0000**	**116.6605**

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	9.7600e-003	0.2896	0.0726	6.4000e-004	0.0157	1.9000e-003	0.0176	4.5200e-003	1.8100e-003	6.3300e-003	0.0000	61.4966	61.4966	4.2600e-003	0.0000	61.6030
Worker	0.0302	0.0240	0.2608	7.1000e-004	0.0686	5.4000e-004	0.0692	0.0182	5.0000e-004	0.0187	0.0000	63.7669	63.7669	1.9900e-003	0.0000	63.8167
Total	**0.0400**	**0.3136**	**0.3335**	**1.3500e-003**	**0.0843**	**2.4400e-003**	**0.0867**	**0.0228**	**2.3100e-003**	**0.0251**	**0.0000**	**125.2636**	**125.2636**	**6.2500e-003**	**0.0000**	**125.4198**

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	0.1155	1.0445	0.8424	1.3200e-003		0.0635	0.0635		0.0596	0.0596	0.0000	115.9401	115.9401	0.0288	0.0000	116.6604
Total	**0.1155**	**1.0445**	**0.8424**	**1.3200e-003**		**0.0635**	**0.0635**		**0.0596**	**0.0596**	**0.0000**	**115.9401**	**115.9401**	**0.0288**	**0.0000**	**116.6604**

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	9.7600e-003	0.2896	0.0726	6.4000e-004	0.0157	1.9000e-003	0.0176	4.5200e-003	1.8100e-003	6.3300e-003	0.0000	61.4966	61.4966	4.2600e-003	0.0000	61.6030
Worker	0.0302	0.0240	0.2608	7.1000e-004	0.0686	5.4000e-004	0.0692	0.0182	5.0000e-004	0.0187	0.0000	63.7669	63.7669	1.9900e-003	0.0000	63.8167
Total	**0.0400**	**0.3136**	**0.3335**	**1.3500e-003**	**0.0843**	**2.4400e-003**	**0.0867**	**0.0228**	**2.3100e-003**	**0.0251**	**0.0000**	**125.2636**	**125.2636**	**6.2500e-003**	**0.0000**	**125.4198**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1100e-003	0.0489	0.0491	8.0000e-005		3.4300e-003	3.4300e-003		3.4300e-003	3.4300e-003	0.0000	6.8087	6.8087	5.8000e-004	0.0000	6.8231
Total	**1.0410**	**0.0489**	**0.0491**	**8.0000e-005**		**3.4300e-003**	**3.4300e-003**		**3.4300e-003**	**3.4300e-003**	**0.0000**	**6.8087**	**6.8087**	**5.8000e-004**	**0.0000**	**6.8231**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-003	2.1500e-003	0.0234	6.0000e-005	6.1400e-003	5.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6800e-003	0.0000	5.7080	5.7080	1.8000e-004	0.0000	5.7125
Total	**2.7000e-003**	**2.1500e-003**	**0.0234**	**6.0000e-005**	**6.1400e-003**	**5.0000e-005**	**6.1900e-003**	**1.6300e-003**	**4.0000e-005**	**1.6800e-003**	**0.0000**	**5.7080**	**5.7080**	**1.8000e-004**	**0.0000**	**5.7125**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1100e-003	0.0489	0.0491	8.0000e-005		3.4300e-003	3.4300e-003		3.4300e-003	3.4300e-003	0.0000	6.8087	6.8087	5.8000e-004	0.0000	6.8231
Total	**1.0410**	**0.0489**	**0.0491**	**8.0000e-005**		**3.4300e-003**	**3.4300e-003**		**3.4300e-003**	**3.4300e-003**	**0.0000**	**6.8087**	**6.8087**	**5.8000e-004**	**0.0000**	**6.8231**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-003	2.1500e-003	0.0234	6.0000e-005	6.1400e-003	5.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6800e-003	0.0000	5.7080	5.7080	1.8000e-004	0.0000	5.7125
Total	**2.7000e-003**	**2.1500e-003**	**0.0234**	**6.0000e-005**	**6.1400e-003**	**5.0000e-005**	**6.1900e-003**	**1.6300e-003**	**4.0000e-005**	**1.6800e-003**	**0.0000**	**5.7080**	**5.7080**	**1.8000e-004**	**0.0000**	**5.7125**

3.8 Paving - 2019

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	0.0137	0.1367	0.1321	2.0000e-004		7.7100e-003	7.7100e-003		7.1100e-003	7.1100e-003	0.0000	17.9629	17.9629	5.5100e-003	0.0000	18.1006
Paving	3.0400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**0.1367**	**0.1321**	**2.0000e-004**		**7.7100e-003**	**7.7100e-003**		**7.1100e-003**	**7.1100e-003**	**0.0000**	**17.9629**	**17.9629**	**5.5100e-003**	**0.0000**	**18.1006**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.9000e-004	7.5000e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8347	1.8347	6.0000e-005	0.0000	1.8362
Total	**8.7000e-004**	**6.9000e-004**	**7.5000e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8347**	**1.8347**	**6.0000e-005**	**0.0000**	**1.8362**

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	0.0137	0.1367	0.1321	2.0000e-004		7.7100e-003	7.7100e-003		7.1100e-003	7.1100e-003	0.0000	17.9629	17.9629	5.5100e-003	0.0000	18.1006
Paving	3.0400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**0.1367**	**0.1321**	**2.0000e-004**		**7.7100e-003**	**7.7100e-003**		**7.1100e-003**	**7.1100e-003**	**0.0000**	**17.9629**	**17.9629**	**5.5100e-003**	**0.0000**	**18.1006**

Mitigated Construction Off-Site

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

Worker	8.7000e-004	6.9000e-004	7.5000e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8347	1.8347	6.0000e-005	0.0000	1.8362
Total	**8.7000e-004**	**6.9000e-004**	**7.5000e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8347**	**1.8347**	**6.0000e-005**	**0.0000**	**1.8362**

Operational GHG Emissions

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Project Annual GHG Emissions

Category	$MTCO_2e$/year
Area	0.009
Electricity	1337.431
Natural Gas	176.350
Mobile	683.388
Waste	241.745
Water	259.052
Construction	13.042
Project Total	**2711.02**

Table for Report

Category	$MTCO_2e$/year
Area	<1
Electricity	1337
Natural Gas	176
Mobile	683
Waste	242
Water	259
Construction	13
Project Total	**2,711**

Electricity GHG Emissions

Cultivation Room

Annual Project Consumption (kWh)

40,000

Annual Project Consumption (MWh)

40

Southern California Edision[1]

CO_2	CH_4	N_2O	CO_2	CH_4	N_2O	CO_2	CH_4	N_2O	CO_2e
lb/MWh			GWP[2]			MT/year			
702.44	0.029	0.006	1	25	298	12.7	0.0	0.0	12.8

1 Intensity Facotrs are based on CalEEMod Default values for SoCal Edision

2 Global Warming Potentials from CARB

Carcom Cannabis-Operations - South Coast AQMD Air District, Annual

Carcom Cannabis-Operations

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	110.00	1000sqft	1.26	110,000.00	0
Manufacturing	55.00	1000sqft	0.00	55,000.00	0
Supermarket	55.00	1000sqft	0.00	55,000.00	0
Parking Lot	106.00	Space	0.95	42,400.00	0
Other Asphalt Surfaces	1.49	Acre	1.49	64,904.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
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

Project Characteristics -

Land Use - Footprint of Building would be 55,000 sqft. Supermarket land use category used to represent bakery portion of Project.

Vehicle Trips - Weekday trip rate applied to weekends to be conservative.

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	2.53	1.26
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	1.26	0.00
tblVehicleTrips	ST_TR	2.46	4.26
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	177.59	0.00
tblVehicleTrips	SU_TR	1.05	4.26
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	166.44	0.00
tblVehicleTrips	WD_TR	11.03	4.26
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	102.24	0.00

2.0 Emissions Summary

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	0.9058	4.0000e-005	4.2200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.1300e-003	8.1300e-003	2.0000e-005	0.0000	8.6800e-003
Energy	0.0177	0.1610	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	1,495.2260	1,495.2260	0.0579	0.0145	1,500.9899
Mobile	0.1718	0.9483	2.3057	7.4100e-003	0.5736	8.5900e-003	0.5822	0.1537	8.0800e-003	0.1618	0.0000	682.4657	682.4657	0.0369	0.0000	683.3881
Waste						0.0000	0.0000		0.0000	0.0000	97.5778	0.0000	97.5778	5.7667	0.0000	241.7448
Water						0.0000	0.0000		0.0000	0.0000	12.3885	205.1658	217.5543	1.2809	0.0318	259.0521
Total	**1.0953**	**1.1094**	**2.4452**	**8.3800e-003**	**0.5736**	**0.0209**	**0.5945**	**0.1537**	**0.0203**	**0.1741**	**109.9663**	**2,382.8657**	**2,492.8320**	**7.1423**	**0.0463**	**2,685.1834**

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	0.9058	4.0000e-005	4.2200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.1300e-003	8.1300e-003	2.0000e-005	0.0000	8.6800e-003
Energy	0.0177	0.1610	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	1,495.2260	1,495.2260	0.0579	0.0145	1,500.9899
Mobile	0.1718	0.9483	2.3057	7.4100e-003	0.5736	8.5900e-003	0.5822	0.1537	8.0800e-003	0.1618	0.0000	682.4657	682.4657	0.0369	0.0000	683.3881
Waste						0.0000	0.0000		0.0000	0.0000	97.5778	0.0000	97.5778	5.7667	0.0000	241.7448
Water						0.0000	0.0000		0.0000	0.0000	12.3885	205.1658	217.5543	1.2809	0.0318	259.0521
Total	**1.0953**	**1.1094**	**2.4452**	**8.3800e-003**	**0.5736**	**0.0209**	**0.5945**	**0.1537**	**0.0203**	**0.1741**	**109.9663**	**2,382.8657**	**2,492.8320**	**7.1423**	**0.0463**	**2,685.1834**

	ROG	NOx	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**

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	0.1718	0.9483	2.3057	7.4100e-003	0.5736	8.5900e-003	0.5822	0.1537	8.0800e-003	0.1618	0.0000	682.4657	682.4657	0.0369	0.0000	683.3881
Unmitigated	0.1718	0.9483	2.3057	7.4100e-003	0.5736	8.5900e-003	0.5822	0.1537	8.0800e-003	0.1618	0.0000	682.4657	682.4657	0.0369	0.0000	683.3881

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	468.60	468.60	468.60	1,509,577	1,509,577
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	0.00	0.00	0.00		
Total	468.60	468.60	468.60	1,509,577	1,509,577

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-	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
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Manufacturing	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Other Asphalt Surfaces	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
Supermarket	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	1,319.9179	1,319.9179	0.0545	0.0113	1,324.6400
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,319.9179	1,319.9179	0.0545	0.0113	1,324.6400
NaturalGas Mitigated	0.0177	0.1610	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.3081	175.3081	3.3600e-003	3.2100e-003	176.3499
NaturalGas Unmitigated	0.0177	0.1610	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.3081	175.3081	3.3600e-003	3.2100e-003	176.3499

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	1.0054e+006	5.4200e-003	0.0493	0.0414	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	53.6520	53.6520	1.0300e-003	9.8000e-004	53.9708
Manufacturing	1.1495e+006	6.2000e-003	0.0564	0.0473	3.4000e-004		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	61.3417	61.3417	1.1800e-003	1.1200e-003	61.7062
Other Asphalt Surfaces	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
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
Supermarket	1.13025e+006	6.0900e-003	0.0554	0.0465	3.3000e-004		4.2100e-003	4.2100e-003		4.2100e-003	4.2100e-003	0.0000	60.3144	60.3144	1.1600e-003	1.1100e-003	60.6729
Total		**0.0177**	**0.1610**	**0.1353**	**9.7000e-004**		**0.0122**	**0.0122**		**0.0122**	**0.0122**	**0.0000**	**175.3081**	**175.3081**	**3.3700e-003**	**3.2100e-003**	**176.3499**

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	1.0054e+006	5.4200e-003	0.0493	0.0414	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	53.6520	53.6520	1.0300e-003	9.8000e-004	53.9708
Manufacturing	1.1495e+006	6.2000e-003	0.0564	0.0473	3.4000e-004		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	61.3417	61.3417	1.1800e-003	1.1200e-003	61.7062
Other Asphalt Surfaces	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
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
Supermarket	1.13025e+006	6.0900e-003	0.0554	0.0465	3.3000e-004		4.2100e-003	4.2100e-003		4.2100e-003	4.2100e-003	0.0000	60.3144	60.3144	1.1600e-003	1.1100e-003	60.6729
Total		**0.0177**	**0.1610**	**0.1353**	**9.7000e-004**		**0.0122**	**0.0122**		**0.0122**	**0.0122**	**0.0000**	**175.3081**	**175.3081**	**3.3700e-003**	**3.2100e-003**	**176.3499**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.5389e+006	490.3265	0.0202	4.1900e-003	492.0807
Manufacturing	464750	148.0793	6.1100e-003	1.2600e-003	148.6091
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	14840	4.7283	2.0000e-004	4.0000e-005	4.7453
Supermarket	2.1241e+006	676.7838	0.0279	5.7800e-003	679.2050
Total		**1,319.9179**	**0.0545**	**0.0113**	**1,324.6400**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.5389e+006	490.3265	0.0202	4.1900e-003	492.0807
Manufacturing	464750	148.0793	6.1100e-003	1.2600e-003	148.6091
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	14840	4.7283	2.0000e-004	4.0000e-005	4.7453
Supermarket	2.1241e+006	676.7838	0.0279	5.7800e-003	679.2050
Total		**1,319.9179**	**0.0545**	**0.0113**	**1,324.6400**

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	0.9058	4.0000e-005	4.2200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.1300e-003	8.1300e-003	2.0000e-005	0.0000	8.6800e-003
Unmitigated	0.9058	4.0000e-005	4.2200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.1300e-003	8.1300e-003	2.0000e-005	0.0000	8.6800e-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	0.1035					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8019					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-004	4.0000e-005	4.2200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.1300e-003	8.1300e-003	2.0000e-005	0.0000	8.6800e-003
Total	**0.9058**	**4.0000e-005**	**4.2200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.1300e-003**	**8.1300e-003**	**2.0000e-005**	**0.0000**	**8.6800e-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	0.1035					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8019					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-004	4.0000e-005	4.2200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.1300e-003	8.1300e-003	2.0000e-005	0.0000	8.6800e-003
Total	**0.9058**	**4.0000e-005**	**4.2200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.1300e-003**	**8.1300e-003**	**2.0000e-005**	**0.0000**	**8.6800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	217.5543	1.2809	0.0318	259.0521
Unmitigated	217.5543	1.2809	0.0318	259.0521

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.5507 / 11.9827	129.7313	0.6422	0.0161	150.5824
Manufacturing	12.7188 / 0	56.8022	0.4166	0.0102	70.2682
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	6.77975 / 0.209683	31.0208	0.2221	5.4600e-003	38.2015
Total		**217.5543**	**1.2809**	**0.0318**	**259.0521**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.5507 / 11.9827	129.7313	0.6422	0.0161	150.5824
Manufacturing	12.7188 / 0	56.8022	0.4166	0.0102	70.2682
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	6.77975 / 0.209683	31.0208	0.2221	5.4600e-003	38.2015
Total		**217.5543**	**1.2809**	**0.0318**	**259.0521**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	97.5778	5.7667	0.0000	241.7448
Unmitigated	97.5778	5.7667	0.0000	241.7448

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	102.3	20.7660	1.2272	0.0000	51.4468
Manufacturing	68.2	13.8440	0.8182	0.0000	34.2979
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	310.2	62.9678	3.7213	0.0000	156.0001
Total		**97.5778**	**5.7667**	**0.0000**	**241.7448**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	102.3	20.7660	1.2272	0.0000	51.4468
Manufacturing	68.2	13.8440	0.8182	0.0000	34.2979
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	310.2	62.9678	3.7213	0.0000	156.0001
Total		**97.5778**	**5.7667**	**0.0000**	**241.7448**

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

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Appendix B
Noise

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Noise Calculations

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Project: Carcom Cannabis

Construction Noise Impact on Sensitive Receptors

Parameters

Construction Hours:	8 Daytime hours (7 am to 7 pm)
	0 Evening hours (7 pm to 10 pm)
	0 Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3

				R1 -				
Construction Phase **Equipment Type**	**No. of Equip.**	**Reference Noise Level at 50ft, Lmax**	**Acoustical Usage Factor**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**
Demolition					**100**	***94***		
Concrete Saw	1	90	20%	15	100	93	96	0
Excavator	3	81	40%	115	79	75	78	0
Rubber Tired Loader	2	79	40%	215	69	65	68	0
Site Preparation					**92**	***89***		
Rubber Tired Loader	2	79	40%	15	92	88	91	0
Tractor/Loader/Backhoe	2	80	25%	115	76	70	73	0
Grading					**91**	***88***		
Excavator	1	81	40%	15	91	87	90	0
Graders	1	85	40%	115	78	74	77	0
Rubber Tired Loader	1	79	40%	215	66	62	65	0
Tractor/Loader/Backhoe	3	80	25%	315	69	63	66	0
Building Construction					**91**	***84***		
Cranes	1	81	16%	15	91	83	86	0
Forklift	3	75	10%	115	73	63	66	0
Generator Sets	1	81	50%	215	68	65	68	0
Tractor/Loader/Backhoe	3	80	25%	315	69	63	66	0
Welders	1	74	40%	415	56	52	55	0
Foundations/Concrete Pour					**91**	***84***		
Cranes	1	81	16%	15	91	83	86	0
Forklift	3	75	10%	115	73	63	66	0
Generator Sets	1	81	50%	215	68	65	68	0
Tractor/Loader/Backhoe	3	80	25%	315	69	63	66	0
Welders	1	74	40%	415	56	52	55	0
Paving					**92**	***88***		
Cement and Mortar Mixers	2	79	40%	15	92	88	91	0
Paver	1	77	50%	115	70	67	70	0
Pavement Scarifier	2	90	20%	215	80	73	76	0
Roller	2	80	20%	315	67	60	63	0
Tractor/Loader/Backhoe	1	80	25%	415	62	56	59	0
Architectural Coating					**88**	***84***		
Air Compressor	1	78	40%	15	88	84	87	0

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

TRAFFIC NOISE ANALYSIS TOOL

Project Name: Carcom Cannabis
Analysis Scenario: Existing
Source of Traffic Volumes:

Roadway Segment	Ground Type	Distance from Roadway Center to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
East 223rd Street, between Wilmington Avenue and Alameda Street	Hard	40	45	45	45	88	0	60	67.0	67.3

Model Notes:
The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).
The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.
Accuracy of the calculation is within ±0.1 dB when comparing to TNM results.
Noise propagation greater than 50 feet is based on the following assumptions:
For hard ground, the propagation rate is 3 dB per doubling the distance.
For soft ground, the propagation rate is 4.5 dB per doubling the distance.
Vehicles are assumed to be on a long straight roadway with cruise speed.
Roadway grade is less than 1.5%.
CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

Carcom Cannabis
Vibration Source Levels
Based on Federal Transit Administration, Office of Planning and Environment

Table III. Off-Site Structural Impact Analysis

N =	1.5

Construction Equipment	Project Equipment	Equipment Peak Particle Velocity @ 25 Feet* (inches/second)	Distance to Receptor for < 0.5 PPV (Feet)	Estimated Velocity Decibels @ Distance** (VdB)	Estimated Peak Particle Velocity @ Distance*** (inches/second)
R1					
Large Bulldozer	Yes	0.089	60	76	0.024
Loaded Trucks	Yes	0.076	60	74	0.020
Small Bulldozer	Yes	0.003	60	46	0.001

Source:

U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment, *Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06)* , (2006).

Notes:

* Values taken from Table 12-2.

*** Based on the formula $PPV(D) = PPV(25\ ft) \times (25/D)^N$, where D is equal to the distance.

N = soil type classification factor (typically ranges from 1 to 1.5)

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Appendix C
Energy Calculation Worksheets

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Construction Energy Consumption

Carcom Cannabis
Construction Energy Analysis

Annual Fuel Summary

Off-Road Heavy-Duty Construction Equipment	
20,315	Diesel Consumption (gal)
On-Road Construction Equipment	
	Haul Trucks
4,541	Diesel Consumption (gal)
	Vendor Trucks
6,711	Diesel Consumption (gal)
	Workers
8,760	Gas Consumption (gal)
	Total On-Road
11,252	Total Diesel Consumption (gal)
8,760	Project Gas Consumption (gal)
31,567	**Total Gallons Diesel**
8,760	**Total Gallons Gasoline**
40,327	**Total Gallons Fuel (Gas and Diesel)**

		Fuel Saved by Anti-Idling
0.5	Estimated Project Construction Duration (years)	2815
		257
		3072

Los Angeles County Fuel Consumption (2016) [1]			**Percent of Annual Project Compared to County**
Source	**Fuel Type**	**Gallons**	
Off-Road/Vendor/Haul Trucks	Diesel	580,769,231	0.005%
Workers	Gasoline	3,577,000,000	0.0002%

Annual Electricity Summary

	Construction Water and Equipment
27,028	kWh total
	Southern California Edison Electricity Sales (2017) [2]
85,879,000,000	kWh annual
0.00003%	**Percent of Annual Project Compared to SCE**

Notes:

1. California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2016_A15_Results.xlsx. Accessed September 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.
2. Southern California Edision, 2017 Financial and Statistical Report, p.3

Carcom Cannabis

Construction Water Energy Estimates

Source	CalEEMod Construction Water Use (Mgal/yr)	Total Water Use (Mgal/yr)	Electricity Demand from water Demand (kWh)
Carcom Cannabis	2.076	2.0757	27,028
Net Total	**2.076**	**2.076**	**27,028**

CalEEMod Water Electricity Factors	Electricity Intensity Factor To Supply (kWh/Mgal)	Electricity Intensity Factor To Treat (kWh/Mgal)	Electricity Intensity Factor To Distribute (kWh/Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)
Carcom Cannabis	9727	111	1272	1911

Source: California Emissions Estimator Model (CalEEMod).

Electricity Intensity Factors - California Emissions Estimator Model (CalEEMod).

Estimated construction water use assumed to be generally equivalent to landscape irrigation, based on a factor of 20.94 gallons per year per square foot of landscaped area within the Los Angeles area (Mediterranean climate), which assumes high water demand landscaping materials and an irrigation system efficiency of 85%. Factor is therefore (20.94 GAL/SF/year) x (43,560 SF/acre) / (365 days/year) / (0.85) = 2,940 gallons/acre/day, rounded up to 3,000 gallons/acre/day. (U.S. Department of Energy, Energy Efficiency & Renewable Energy, Federal Energy Management Program. “Guidelines for Estimating Unmetered Landscaping Water Use." July 2010. Page 12, Table 4 - Annual Irrigation Factor – Landscaped Areas with High Water Requirements).

Carcom Cannabis
Construction Energy Analysis

Off-Road Equipment

	Equipment ≤ 50 hp	
pounds fuel/hp-hr (OFFROAD2011 model, ≤ 50 hp):	0.408	lb/hp-hr
diesel pounds/gallon (CARB density assumption):	7.07	lb/gal
diesel gallons/hp-hr:	0.0577	gal/hp-hr
Total <50	17,515	hp-hr
Total diesel gallons:	1,011	gal
	Equipment > 50 hp	
pounds fuel/hp-hr (OFFROAD2011 model, > 50 hp):	0.367	lb/hp-hr
diesel pounds/gallon (CARB density assumption):	7.07	lb/gal
diesel gallons/hp-hr:	0.0519	gal/hp-hr
Total >50	371,882	hp-hr
Total diesel gallons:	19,304	gal
Total diesel gallons (off-road equipment):	**20,315**	**gal**

Construction Phase	Equipment	Number	Hours/Day	HP	Load	Days	Total hp-hr
Demolition	Concrete/Industrial Saws	1	8	81	0.73	10	4,730
Demolition	Excavators	3	8	158	0.38	10	14,410
Demolition	Rubber Tired Dozers	2	8	247	0.4	10	15,808
Site Preparation	Rubber Tired Dozers	3	8	247	0.4	5	11,856
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	5	5,742
Grading	Excavators	1	8	158	0.38	17	8,165
Grading	Graders	1	8	187	0.41	17	10,427
Grading	Rubber Tired Dozers	1	8	247	0.4	17	13,437
Grading	Tractors/Loaders/Backhoes	3	8	97	0.37	17	14,643
Foundations/Concrete Pour	Cranes	1	8	231	0.29	5	2,680
Foundations/Concrete Pour	Forklifts	3	8	89	0.2	5	2,136
Foundations/Concrete Pour	Generator Sets	1	8	84	0.74	5	2,486
Foundations/Concrete Pour	Tractors/Loaders/Backhoes	3	8	97	0.37	5	4,307
Foundations/Concrete Pour	Welders	1	8	46	0.45	5	828
Building Construction	Cranes	1	8	231	0.29	92	49,305
Building Construction	Forklifts	3	8	89	0.2	92	39,302
Building Construction	Generator Sets	1	8	84	0.74	92	45,750
Building Construction	Tractors/Loaders/Backhoes	3	8	97	0.37	92	79,245
Building Construction	Welders	1	8	46	0.45	92	15,235
Paving	Cement and Mortar Mixers	2	8	9	0.56	18	1,452
Paving	Pavers	1	8	130	0.42	18	7,862
Paving	Paving Equipment	2	8	132	0.36	18	13,686
Paving	Rollers	2	8	80	0.38	18	8,755
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	18	5,168
Architectural Coating	Air Compressors	1	8	78	0.48	40	11,981
						Total >50	371,882
						Total <50	17,515

Carcom Cannabis
Construction Energy Analysis

On-Road Haul Trucks

EMFAC2014 Diesel Fuel Consumption Factor:[1]	0.1645	gallons/mile	miles/gallon
Total Haul Truck VMT:	27,040	miles	6.08
Total VMT diesel gallons (on-road haul trucks):	**4,448**		
EMFAC2014 Diesel Fuel Consumption Factor:[2]	0.8225	gallons/hour	
Total Haul Truck Idle-Hours per Year:	113	hours	
Total Idling diesel gallons (on-road haul trucks):	**93**		
Total diesel gallons (on-road haul trucks):	**4,541**	gal	

1. California Air Resources Board, EMFAC2014 (South Coast Air Basin; T7 Single Construction; Annual; CY 2019; Aggregate MY; Aggregate Speed)
2. California Air Resources Board, EMFAC2014 (South Coast Air Basin; T7 Single Construction; Annual; CY 2019; Aggregate MY; 5 miles per hour converted to hourly rate)

Phase	Total One-Way Trips	Miles/Trip	VMT	Idle Hours
Demolition	96	20	1,920	8
Site Preparation	0	20	-	-
Grading	856	20	17,120	71
Foundations/Concrete Pour	496	20	9,920	41
Building Construction	0	20	-	-
Paving	0	20	-	-
Architectural Coating	0	20	-	-
		Total Haul Truck VMT:	27,040	
		Total Idle-Hours:	113	

Focal Strategies Cannabis
Construction Energy Analysis

On-Road Vendor Trucks

EMFAC2014 Diesel Fuel Consumption Factor:[1]	0.1521	gallons/mile	miles/gallon
Total Vendor Truck VMT:	37,467	miles	6.6
Total VMT diesel gallons (on-road vendor trucks):	**5,698**		
EMFAC2014 Diesel Fuel Consumption Factor:[2]	0.7645	gallons/hour	
Total Haul Truck Idle-Hours per Year:	1,326	hours	
Total Idling diesel gallons (on-road haul trucks):	**1,013**		
Total diesel gallons (on-road haul trucks):	**6,711**	gal	

1. California Air Resources Board, EMFAC2014 (South Coast Air Basin; HHDT and MHDT; Annual; CY 2019; Aggregate MY; Aggregate Speed)
2. California Air Resources Board, EMFAC2014 (South Coast Air Basin; HHDT and MHDT; Annual; CY 2019; Aggregate MY; 5 miles per hour converted to hourly rate)

Phase	Days	Trips/Day	Miles/Trip	VMT	Idle Hours
Demolition	10	6	6.9	414	5
Site Preparation	5	6	6.9	207	3
Grading	17	6	6.9	704	9
Foundations/Concrete Pour	5	54	6.9	1,863	68
Building Construction	92	54	6.9	34,279	1,242
Paving	18	0	6.9	-	-
Architectural Coating	40	0	6.9	-	-
			Total Vendor Truck VMT:	37,467	
			Total Idle-Hours:		1,326

Carcom Cannabis
Construction Energy Analysis

On-Road Workers (LDA, LDT1, LDT2)

EMFAC2014 Gasoline Fuel Consumption Factor:[1]	0.0408	gallons/mile	miles/gallon
Total Worker VMT:	214,532	miles	24.5
Total VMT gasoline gallons (workers):	**8,760**		

1. California Air Resources Board, EMFAC2014 (South Coast Air Basin; LDA, LDT1, LDT2; CY 2019; Aggregate MY; Aggregate Speed)

Phase	Days	One-Way Trips/Day	Miles/Trip	VMT
Demolition	10	16	14.7	2,352
Site Preparation	5	18	14.7	1,323
Grading	17	16	14.7	3,998
Foundations/Concrete Pour	5	16	14.7	1,176
Building Construction	92	136	14.7	183,926
Paving	18	20	14.7	5,292
Architectural Coating	40	28	14.7	16,464
			Total Worker VMT:	**214,532**

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Operational Energy Consumption

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Carcom Cannabis
Operational Energy Analysis

Electricity	kWh/yr	GWh/yr
Project Land Uses	4,182,590	4.183
Total	**4,182,590**	**4.183**
Total (including water, see below)	**4,849,807**	**4.850**
Project Energy Consumption	**4,849,807**	**4.85**

Source: Oregon Department of Energy, Indoor Cannabis Cultivator Energy Use Estimator,2018

CalEEMod Annual Operations Output

Water	Mgal/yr
Project Land Uses	51.242
Total	**51.242**

Electricity Intensity Factors	kWh/Mgal
Electricity Factor - Supply	9,727
Electricity Factor - Treat	111
Electricity Factor - Distribute	1,272
Electricity Factor - Wastewater Treatment	1,911

Electricity from Water Demand	kWh/yr	GWh/yr
Total	**667,217**	**0.667**

Source: California Air Resources Board, CalEEMod, Version 2016.3.2.

Base water demand is based on rates provided in City of Los Angeles Department of Public Works, Sewage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, 2012.

Natural Gas	kBtu/yr	cubic foot (cf)	Per day Usage
Project Land Uses	3,285,150	3,174,058	
Project Total	**3,285,150**	**3,174,058**	8,696.05
Project Net Total	**3,285,150**	**3,174,058**	**8,696**

Source: California Air Resources Board, CalEEMod, Version 2016.3.2.

Conversion factor of 1,035 Btu per cubic foot based on United States Energy Information Administration data (see: USEIA, Natural Gas, Heat Content of Natural Gas Consumed, February 28, 2018, https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm. Accessed September 2018.)

Electricity	GWh/yr
SCE 2017 Electricity Sales	85,879
Project Annual	4.850
Existing Annual	-
Net Project Annual	4.850
Percent Net Project of LADWP	0.0056%

Source: Southern California Edison 2017 Financial and Statistical Report

Natural Gas	million cubic foot (cf)
SoCalGas 2019	945,715
Project Annual	3.174
Existing Annual	-
Net Project Annual	3.174058
Percent Net Project of SoCalGas	0.00034%

Source: California Gas and Electric Utilities, 2018 California Gas Report, p. 102, 2018.

Carcom Cannabis
Operational Energy Analysis

Fuel Usage from VMT

Annual VMT (All): 1,509,577 miles/year (from CalEEMod)

(With trip and VMT reductions from land use characteristics and proximity to public transit.)

Fuel Type:[1]	GAS	DSL	ELEC
Percent:	95.44%	3.70%	0.86%
Miles per Gallon Fuel:	21.31	7.99	-
Annual VMT by Fuel Type (miles):	1,440,752	55,868	12,957
Annual Fuel Usage (gallons):	**67,625**	**6,993**	-
Annual Fuel Usage with Emer.Gen. (gallons):		6,993	
Project Fuel Consumption	**67,625**	**6,993**	
Annual Fuel Savings from Electric Vehicles:[2]	-	-	608

	Los Angeles County Fuel Consumption [3]	
	Gasoline	Diesel
Los Angeles County:	3,577,000,000	580,769,231
Project Annual:	67,625	6,993
Percent Net Project of Los Angeles County:	0.0019%	0.0012%

Notes:

1. California Air Resources Board, EMFAC2014 (Los Angeles County; Annual; 2019, Aggregate Fleet).
2. Assumes electric vehicles would replace traditional gasoline-fueled vehicles.
3. California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2016_A15_Results.xlsx. Accessed March 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

Appendix D
Tribal **Resources Documentation**

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Native American Consultation Documentation

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CITY OF CARSON

October 17, 2018

Charles Alvarez, Chairperson
Gabrieleno-Tongva Tribe
23454 Vanowen Street
West Hills, CA 91307

SUBJECT: **AB 52 Project Notification and Request to Consult Letter for the Proposed Carcom Center Project; City of Carson, California**

Dear Chairperson Alvarez:

This letter is to inform you that the City of Carson (City) is preparing environmental documentation for the **Carcom Center Project** (proposed project) through the preparation of a Mitigated Negative Declaration (MND). The project is being prepared in compliance with the California Environmental Quality Act (CEQA) and the City is the lead agency pursuant to CEQA. The Carcom Center Project would include the development of a Cannabis Manufacturing, Distribution and Testing Center for cannabis. The proposed project includes the development of a four-story, 220,000 sf commercial/industrial/manufacturing building. The project would be used for light industrial manufacturing, distribution, delivery or testing and possibly limited nursery cultivation and research on a 3.70-acre vacant lot. The project is located at 2403 E 223rd Street in the City of Carson (**Figure 1**).

In accordance with Assembly Bill 52, you have the right to consult on the proposed project prior to the release of the MND. You have 30 calendar days from receipt of this letter to notify us in writing that you wish to consult on this project. Please provide your contact information and mail your request to:

City of Carson
Community Development Department – Planning Division
ATTN: Ethan Edwards
701 E. Carson Street
Carson, CA 90745
Email: eedwards@carson.ca.us
Phone No: 310-952-1761

Thank you for your assistance with our efforts to address tribal cultural resources that may be affected by the proposed Project.

Sincerely,

Ethan Edwards, AICP
Interim Planning Manager

Path: U:\GIS\GIS\Projects\16xxxx\D160573_07\03_MXDs_Projects\AB52\Fig1_Aerial View of Project Site and Vicinity.mxd dkaneshiro 10/17/2018

SOURCE: ESRI

Carcom Center Project

Figure 1

Aerial View of Project Site and Vicinity

ESA

CITY OF CARSON

October 17, 2018

Robert Dorame, Chairperson
Gabrieleno Tongva Indians of California Tribal Council
P.O. Box 490
Bellflower, CA 90707

SUBJECT: **AB 52 Project Notification and Request to Consult Letter for the Proposed Carcom Center Project; City of Carson, California**

Dear Chairperson Dorame:

This letter is to inform you that the City of Carson (City) is preparing environmental documentation for the **Carcom Center Project** (proposed project) through the preparation of a Mitigated Negative Declaration (MND). The project is being prepared in compliance with the California Environmental Quality Act (CEQA) and the City is the lead agency pursuant to CEQA. The Carcom Center Project would include the development of a Cannabis Manufacturing, Distribution and Testing Center for cannabis. The proposed project includes the development of a four-story, 220,000 sf commercial/industrial/manufacturing building. The project would be used for light industrial manufacturing, distribution, delivery or testing and possibly limited nursery cultivation and research on a 3.70-acre vacant lot. The project is located at 2403 E 223rd Street in the City of Carson (**Figure 1**).

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Interim Planning Manager

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SOURCE: ESRI

Carcom Center Project

Figure 1

Aerial View of Project Site and Vicinity

ESA

CITY OF CARSON

October 17, 2018

Sandonne Goad, Chairperson
Gabrieleno/Tongva Nation
106 ½ Judge John Aiso Street #231
Los Angeles, CA 90012

SUBJECT: **AB 52 Project Notification and Request to Consult Letter for the Proposed Carcom Center Project; City of Carson, California**

Dear Chairperson Goad:

This letter is to inform you that the City of Carson (City) is preparing environmental documentation for the **Carcom Center Project** (proposed project) through the preparation of a Mitigated Negative Declaration (MND). The project is being prepared in compliance with the California Environmental Quality Act (CEQA) and the City is the lead agency pursuant to CEQA. The Carcom Center Project would include the development of a Cannabis Manufacturing, Distribution and Testing Center for cannabis. The proposed project includes the development of a four-story, 220,000 sf commercial/industrial/manufacturing building. The project would be used for light industrial manufacturing, distribution, delivery or testing and possibly limited nursery cultivation and research on a 3.70-acre vacant lot. The project is located at 2403 E 223rd Street in the City of Carson (**Figure 1**).

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Interim Planning Manager

Path: U:\GIS\GIS\Projects\16xxxx\D160573_07\03_MXDs_Projects\AB52\Fig1_Aerial View of Project Site and Vicinity.mxd dkaneshiro 10/17/2018

SOURCE: ESRI

Carcom Center Project

Figure 1

Aerial View of Project Site and Vicinity

ESA

CITY OF CARSON

October 17, 2018

Anthony Morales, Chairperson
Gabrieleno/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778

SUBJECT: **AB 52 Project Notification and Request to Consult Letter for the Proposed Carcom Center Project; City of Carson, California**

Dear Chairperson Morales:

This letter is to inform you that the City of Carson (City) is preparing environmental documentation for the **Carcom Center Project** (proposed project) through the preparation of a Mitigated Negative Declaration (MND). The project is being prepared in compliance with the California Environmental Quality Act (CEQA) and the City is the lead agency pursuant to CEQA. The Carcom Center Project would include the development of a Cannabis Manufacturing, Distribution and Testing Center for cannabis. The proposed project includes the development of a four-story, 220,000 sf commercial/industrial/manufacturing building. The project would be used for light industrial manufacturing, distribution, delivery or testing and possibly limited nursery cultivation and research on a 3.70-acre vacant lot. The project is located at 2403 E 223rd Street in the City of Carson (**Figure 1**).

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701 E. Carson Street
Carson, CA 90745
Email: eedwards@carson.ca.us
Phone No: 310-952-1761

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Ethan Edwards, AICP
Interim Planning Manager

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SOURCE: ESRI

Carcom Center Project

Figure 1

Aerial View of Project Site and Vicinity

ESA

CITY OF CARSON

October 17, 2018

Andrew Salas, Chairperson
Gabrieleno Band of Mission Indians
P.O. Box 393
Covina, CA 91723

SUBJECT: **AB 52 Project Notification and Request to Consult Letter for the Proposed Carcom Center Project; City of Carson, California**

Dear Chairperson Salas:

This letter is to inform you that the City of Carson (City) is preparing environmental documentation for the **Carcom Center Project** (proposed project) through the preparation of a Mitigated Negative Declaration (MND). The project is being prepared in compliance with the California Environmental Quality Act (CEQA) and the City is the lead agency pursuant to CEQA. The Carcom Center Project would include the development of a Cannabis Manufacturing, Distribution and Testing Center for cannabis. The proposed project includes the development of a four-story, 220,000 sf commercial/industrial/manufacturing building. The project would be used for light industrial manufacturing, distribution, delivery or testing and possibly limited nursery cultivation and research on a 3.70-acre vacant lot. The project is located at 2403 E 223rd Street in the City of Carson (**Figure 1**).

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SOURCE: ESRI

Carcom Center Project

Figure 1

Aerial View of Project Site and Vicinity

ESA