PLANNING COMMISSION STAFF REPORT

APPLICATION:	**Planned Development (PD-27), Alexan Foothills Specific Plan and Development Project ZA2019-0003, SP2019-0002, GPC2019-0003, TPM2019-0005, and CUP2019-0013**	**AGENDA ITEM: PH-1**	
PREPARED BY:	**John Mayer Senior Planner Teresa Santilena Associate Planner**	**MEETING DATE:**	**January 15, 2020**

SUBJECT: Environmental Impact Report/Planning Commission Resolution No. 2019-0012; General Plan Amendment GPA2019-0003/Planning Commission Resolution No. 2019-0013; Alexan Foothills Specific Plan SP2019-0002/Planning Commission Resolution No. 2019-0014; Zoning Code Amendment ZA2019-0003/Planning Commission Resolution No. 2019-0020/Ordinance No. 2019-13; General Plan Conformity Finding 2019-0003; Tentative Parcel Map No. 82326; and Conditional Use Permit CUP2019-0013.

1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040)

REQUEST: Amend the General Plan's Land Use Element to change the land use designation of a 9.6 acre city block from Manufacturing to Planned Development with new development standards entitled PD-27 (Planned Development - Area 27), amend the City's Zoning Code to re-classify that area from Manufacturing (M) Zone to Planned Development (PD) Zone, and an application for a Specific Plan, Tentative Parcel Map, and Conditional Use Permit for the Alexan Foothills Specific Plan including: a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls. The project site is 6.77 acres in size and involves the consolidation of eight parcels.

APPLICANT: City of Monrovia (for General Plan and Zoning Amendments)
415 South Ivy Avenue
Monrovia, CA 91016

Trammell Crow Residential (for Specific Plan and Development Project)
5790 Fleet Street, Suite 140
Carlsbad, CA 92008

ENVIRONMENTAL DETERMINATION: Environmental Impact Report (EIR)
State Clearinghouse (SHC) No. 2018101058

BACKGROUND: The planning area/subject site encompasses a 9.6-acre City block that is zoned "Manufacturing" and is located just west of the City's Station Square Transit Village, Planned Development-Area 12 (PD-12). Station Square is an 80-acre planning area that was established for the return of mass transit and the development of a high density residential transit village around the Monrovia Gold Line station. This area is currently undergoing a rapid transformation from an industrial, commercial, and single-family residential area to a mixed-use, higher density transit-oriented district with improved public spaces and enhanced public facilities. The MODA apartment complex was completed in 2019 and features 261 units. In 2018, the City Council approved the Station Square South Specific Plan and Richman development project that would feature 296 dwelling units. At this time, there are two mixed use projects in the process of obtaining City approvals in Station Square. These include the 127 Pomona mixed use "Fifield" project (310 units) and the Arroyo at Monrovia Station mixed use project (302 units).

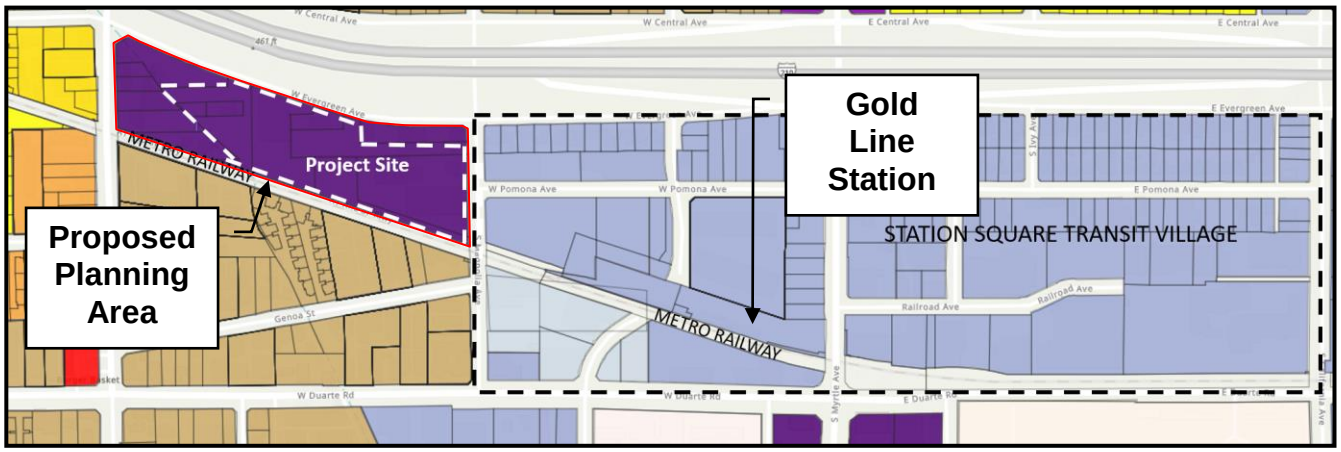


Figure 1. Planning Area/Project Site and Station Square Transit Village

In 2017, the Trammell Crow Residential Company approached the City about developing a high-density apartment complex, just west of the Station Square neighborhood. However, the land use designation for that area is zoned for manufacturing uses. Since this location is within walking distance of the Gold Line station (0.2 mile), staff agreed that there is an opportunity to expand the availability of high density residential development in this area. In 2018, staff began preparing amendments to the General Plan and Zoning Code that would change the land use designation of a 9.6-acre city block from "Manufacturing" to Planned Development Area 27 (PD-27), Station Square West. This change would allow up to 518 dwelling units within the 9.6-acre planning area. In November 2018, Trammell Crow submitted a draft Specific Plan and drawings for a new 436-unit apartment complex within a 6.77 acre portion of that planning area.

The 9.6 acre city block would be divided into three distinct areas under the proposed PD-27 (Areas A, B, and C). Each area has specific guidelines that address and respond to existing conditions and allow for future development, similar to the way Station Square is planned. Trammel Crow is proposing the Alexan Foothills Specific Plan and development project within

Area B of the new PD-27 district. The proposed specific plan identifies the long-term vision and objectives for private development and public improvements within the 6.77 acre area of PD-27. The applicant is also proposing to implement that specific plan with the development of a multi-family development project to include a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls.

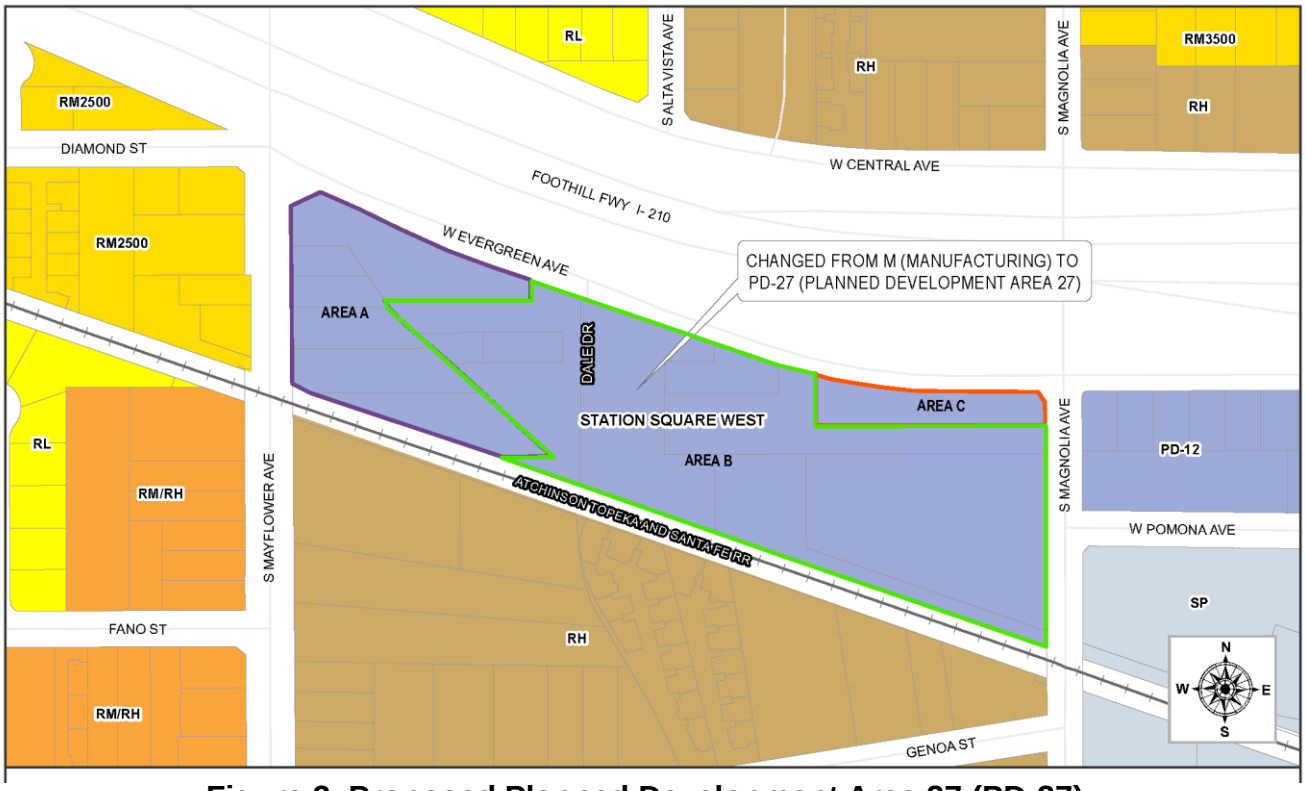


Figure 2. Proposed Planned Development Area 27 (PD-27)

Trammel Crow Residential would need to consolidate eight separate parcels into one parcel in order to develop the site.

This application requires the approval of the City Council. Both the Planning Commission and the Development Review Committee serve as advisory bodies to the City Council. The actions of the Commission will be in the form of recommendations to the City Council. The requested entitlements are as follows:

1. **General Plan Amendment** to change the land use designation of the 9.6 acre city block from Manufacturing to Planned Development – Area 27 (PD-27). This amendment includes a series of development standards and regulations for PD-27. The amendment also includes a "Specific Plan" overlay for a 6.77 acre portion of PD-27 for the Alexan Foothills Specific Plan (PCR2019-0013).

2. **Alexan Foothills Specific Plan** to establish development standards, design guidelines and permitted land uses for the 6.77-acre development site. (PCR2019-0014)

3. **Zoning Text and Map Amendment** to change the zoning designation of the 9.6 acre city block from "M" (Manufacturing Zone) to "PD-27" (Planned Development) and for

the 6.77 acre portion of that block (identified as Area B) to be zoned "SP" for the Alexan Foothills Specific Plan. (PCR2019-0020/Ordinance No. 2019-13).

4. **General Plan Conformity Finding** that the proposed vacation of Dale Drive (within the Alexan Foothills development site) conforms to the provisions of the City's General Plan. (GPC2019-0003)

5. **Vesting Tentative Parcel Map** to consolidate eight parcels into one 6.77 acre parcel. (TPM 82326)

6. **Conditional Use Permit** to allow construction of a 5-story, 436-unit apartment complex and a seven story 8-level parking garage for 798 stalls. (CUP2019-0013)

Prior to making its recommendation on the above, the Commission must first consider and provide its recommendation on an Environmental Impact Report (EIR) for the proposed General Plan amendment, Zoning Code amendments, the Alexan Foothills Specific Plan, and development project pursuant to the California Environmental Quality Act (CEQA). The Planning Commission will receive all public testimony regarding these application components. Following the public hearing portion of the meeting, the Commission's action will be to make a recommendation to the City Council whether to approve or not to approve these elements of the project.

SUBJECT PROPERTIES: The PD-27 planning area encompasses 9.6 acres of land consisting of one City block. It is bounded by West Evergreen Avenue to the north, the Gold Line Light Rail tracks to the south, South Magnolia Avenue to the east, and South Mayflower Avenue to the west. Although it is zoned for manufacturing uses, it is developed with a mix of nonconforming single family homes, as well as commercial and industrial uses. These properties are designated for Manufacturing in the General Plan and are zoned "M" (Manufacturing). This 9.6 acre area is surrounded by the following land uses:

Table 1. Existing Land Uses

North (Across West Evergreen Avenue):	
General Plan:	N/A
Zoning:	N/A
Land Use:	I-210 Freeway
South (Across Light Rail Tracks):	
General Plan:	Residential High (54 Du/Ac)
Zoning:	RH (Residential High Density)
Land Use:	Multi-Family Residential Developments
East (Across South Magnolia Avenue):	
General Plan:	Planned Development (Planned Development – Area 12)
Zoning:	PD-12 (Station Square Transit Village Residential, Industrial, and Station Square North neighborhoods)
Land Use:	Single-Family Residential, Industrial, Multi-Family Residential (MODA)
West (Across South Mayflower Avenue)	
General Plan:	Medium Density Residential (5.8 – 17.4 Du/Ac)

Zoning:	RM2500 (Residential Medium 2500)
Land Use:	Single and Multi-Family Residential

The Alexan Foothills Specific Plan is a 6.77-acre development site within the PD-27 area. It is made up of eight individual parcels that are bounded by South Magnolia Avenue to the east, Evergreen Avenue to the north, and the Metro Gold Line tracks to the south. Dale Drive is a private street within the development site which would be vacated as part of the lot consolidation. The topography has a gentle slope towards the south and west where there is a concrete drainage swale owned and operated by the City. The site is currently developed with two light industrial structures, one residential unit, a vacant religious building, a commercial office building, and a paved storage lot. There are also two cellular towers on the north end of the site which would remain. There are three coast live oak trees along the western boundary of the development site, along the eastern edge of the drainage swale. Due to their size and diameter, those trees are protected by the City's Oak Tree Preservation Ordinance.

The area to the north of the site is a landscaped embankment for the Interstate-210 freeway. Land east of the development site (across South Magnolia Avenue) includes a mix of industrial buildings and single-family homes. The City has received applications to develop those areas into high density residential/commercial mixed use projects that are similar in height and style to the proposed Alexan Foothills project. The five-story MODA apartment complex is also east of the subject site all within Area PD-12. The light rail tracks of the METRO Gold Line run along the southern end of the site. A high-density residential development is just beyond the tracks to the south. The area to the west includes single-family residential development and some light industrial businesses.

DISCUSSION/ANALYSIS: The intent of the proposed Planned Development - Area 27 (PD-27) designation is to loosen the existing land use limitations which allow manufacturing uses for the 9.6 acre planning area. PD-27 would establish a new set of land use standards that encourage high density residential development in this location that is near the Station Square Transit Village. The new PD-27 designation also allows supportive commercial uses for the transit-oriented neighborhood. The proposed Alexan Foothills Specific Plan provides additional regulatory framework for the development of a multi-family residential project within a 6.77 acre portion of PD-27. The specific plan's regulations and requirements are tailored to achieve a development that complements the Station Square Transit Village. The Alexan Foothills development project includes plans for a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls.

Planned Development - Area 27 (PD-27), Station Square West

The City is proposing the Planned Development - Area 27 (PD-27) designation which takes a cue from PD-12 and divides the 9.6-acre block into three neighborhoods (Areas A, B, and C), each with their own development standards as follows:

- Area A is approximately 2.3 acres and comprises the western edge of PD-27. The parcels fronting South Mayflower Avenue are currently developed with a mixture of residential and commercial/industrial buildings. Given the residential character of the surrounding neighborhood, this area is envisioned to be a medium-high to high-density residential neighborhood. Any new multi-family residential development on land less

than two acres would be subject to the RH (Residential High Density) development standards and a maximum density of 23 dwelling units per acre. Any new commercial/industrial uses that want to go into an existing non-residential structure in this Area A will be subject to the Business Enterprise zone provisions. The construction of new non-residential buildings, or additions to existing non-residential buildings greater than 25% of existing building area will require the approval of a Conditional Use Permit.

- Area B (Project Site) is 6.77 acres and is the largest of the three neighborhoods. It has frontage on both West Evergreen and South Magnolia Avenues. Area B creates provisions for mixed-use and multi-family residential uses. Project sites that total two acres or greater may be developed at a maximum density of 64 dwelling units per acre through adoption of a Specific Plan (for a maximum of 436 units over the 6.77 acre area) and are required to include a provision for a nonresidential or flex space such as a live/work component. High-quality building design will be a primary consideration in the approval of a new development. New development will have its primary orientation towards South Magnolia Avenue and ground level interior spaces that front South Magnolia Avenue should be directly accessible from the sidewalk. Area B is the location of the proposed Alexan Foothills Specific Plan and Development project.

- Area C is the 0.56-acre parcel located on the southwest corner of West Evergreen Avenue and South Magnolia Avenue which is currently developed with three commercial/industrial buildings. Area C is envisioned to provide commercial uses that support the adjacent transit oriented neighborhood. To improve pedestrian traffic and connection to PD-12, Area C encourages the addition of storefronts to the existing complex, subject to review and approval by the Development Review Committee (DRC). If storefronts are proposed, a strong relationship between buildings and the street should be established through minimal setbacks at storefronts, matching window and door patterns, and frequent location of store entrances along the street.

  Additionally, the existing commercial/industrial complex may be permitted to be incorporated into an adjacent Specific Plan Area as a mixed-use component, through an amendment to the Specific Plan. Adaptive reuse of the existing buildings is encouraged with possible future uses including: shared creative co-working office spaces, artist studios, and micro-breweries.

The City's vision for PD-27 is a neighborhood that would be compatible with the Station Square Transit Village, provides more opportunities for housing near transit, and continues to allow small-scale commercial and industrial neighborhood-supporting uses. Benefits of the new PD-27 are as follows:

- Nonconforming Uses: The existing single family homes that are "grandfathered" and non-conforming due to the current Manufacturing zoning designation would become "conforming" and thus able to add on and expand. Existing legal commercial and industrial uses could continue to operate and expand up to 25% in floor area before triggering DRC review. Any new non-residential uses would be reviewed by the DRC to ensure potential neighborhood impacts are minimized.

- Transit Oriented Development: The proposed PD-27 standards would allow more housing near mass transit. The area-wide provisions would permit up to 518 new residential units across the 9.6 acre planning area and would concentrate the density on the east side, the area closest to Station Square and the Monrovia Gold Line station. These planning efforts will help reduce greenhouse gas emissions and vehicle miles traveled by expanding the density of residential units within walking distance of the Monrovia Gold Line Station.

- State Housing Goals: The proposed PD-27 standards align with the State of California's goal to produce more housing, while allowing the City to have input on the site and architectural design. As the State continues to review and approve Assembly Bills that emphasize high-density housing near transit stations, municipalities are further restricted as to their review processes. Adopting development standards for the overall area allows the City to prioritize high-quality design in this planning area.

- City's Housing Goals: The proposed PD-27 standards are in line with the City Council's adopted Planning HOMe program (City Council Resolution No. 2019-39). The Council has directed staff to apply for SB-2 Grant funding. The work program prioritizes projects that would facilitate the production of housing, including projects that allow re-zoning for additional housing and developing a site inventory for potential housing projects.

Alexan Foothills Specific Plan

The Trammell Crow Residential Company is proposing a Specific Plan for the development of a transit-oriented, infill, residential community. The specific plan is a planning document that is used to implement the Monrovia General Plan, specifically for the provisions of the proposed PD-27 planning area. The Alexan Foothills Specific Plan would apply to Area B of the new PD-27 which includes the following properties: 1607, 1625, and 1631 South Magnolia Avenue; 1541 South Dale Drive; and 340, 410, and 418 West Evergreen Avenue. Once the Specific Plan is adopted, all subsequent subdivision, development, public works projects, and use permits within that 6.77 acre area must be consistent with it.

The Alexan Foothills Specific Plan establishes the land use and development regulations that will be used to implement the development of a 436-unit, five-story apartment complex with an eight-level parking structure. Its main purpose is to create a residential community that will advance efforts to develop Transit Oriented Development, allowing residents to be within walking distance to the Monrovia Gold Line station. The Specific Plan also provides opportunities for live/work space, with supporting amenities. It builds on the synergy of the adjacent Station Square Transit Village Planning Area and helps project the image of Monrovia as an attractive, environmentally sustainable community.

Land use regulations, operational standards, and planning processes are included in the Specific Plan for the various components of the project (see page 64 of the Specific Plan). The Alexan Foothills Specific Plan would allow a mixture of neighborhood serving uses within the live-work spaces including food and beverage sales, fitness and instructional studios, office, and retail. Uses that have a higher potential to impact surrounding uses may also be allowed provided a Conditional Use Permit is first obtained.

Development Overview

Trammel Crow Residential Company is also proposing to implement the specific plan with the development of a multi-family development project to include a 436-unit (four units are live-work), five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls. Out of the 798 parking stalls, 632 spaces are designated for the residents, 112 spaces are reserved for guests, 34 spaces are available for public parking, and 20 are intended for apartment leasing and the four live/work units.

The apartment complex would include two pools and tenant amenity courtyards. On the South Magnolia Avenue side of the complex there would be a two-story lobby, a fitness room, and the four live-work units, all with apartments above. Three outdoor/rooftop amenity decks are planned on top of the apartment complex's fourth level. Other tenant amenities include a pet spa, bike "kitchen" (i.e., bicycle repair area), tenant lounge, centralized mail/package delivery room, and a golf simulation room. The project also allows the use of bicycle sharing and ride sharing programs by providing bike parking for METRO users and guests, and resident bicycle parking and storage.

In total, the development plan proposes approximately 376,000 square feet of net rentable space. When combined with other habitable portions of the building, such as the lounge, fitness room, and lobby area, the total floor area approximates 523,000 square feet. The residential density is 64 dwelling units per acre. The height of the residential component would be approximately 63 feet; the height of the eight-level (seven story) parking garage is approximately 71 feet.

Site Plan

The building's footprint runs along an east-west axis across the 6.77 acre site with components that extend outward and wrap around outdoor courtyards. The parking structure is located in the center of the site in order to provide convenient access for the residents and guests. The lower level of the garage will be available for METRO Gold Line riders and the general public. The primary entrance to the development and to the parking structure is from South Magnolia Avenue via a unique private street known as a woonerf. A woonerf is a street that is designed to slow down traffic and integrate safe and comfortable pedestrian, bicycling, and vehicular access. Streetscape features include overhead pendant lighting and landscaping elements such as potted plants, boulders, pavers, and bollards. A secondary entrance to the parking structure is provided from Evergreen Avenue. This secondary entrance area also provides room for loading/unloading and move-in trucks, and refuse collection. Two additional vehicular access points are located along Evergreen Avenue, but they are restricted to emergency and maintenance vehicles. An access road wraps around the west and southern ends of the property allowing the City to maintain the concrete drainage swale.

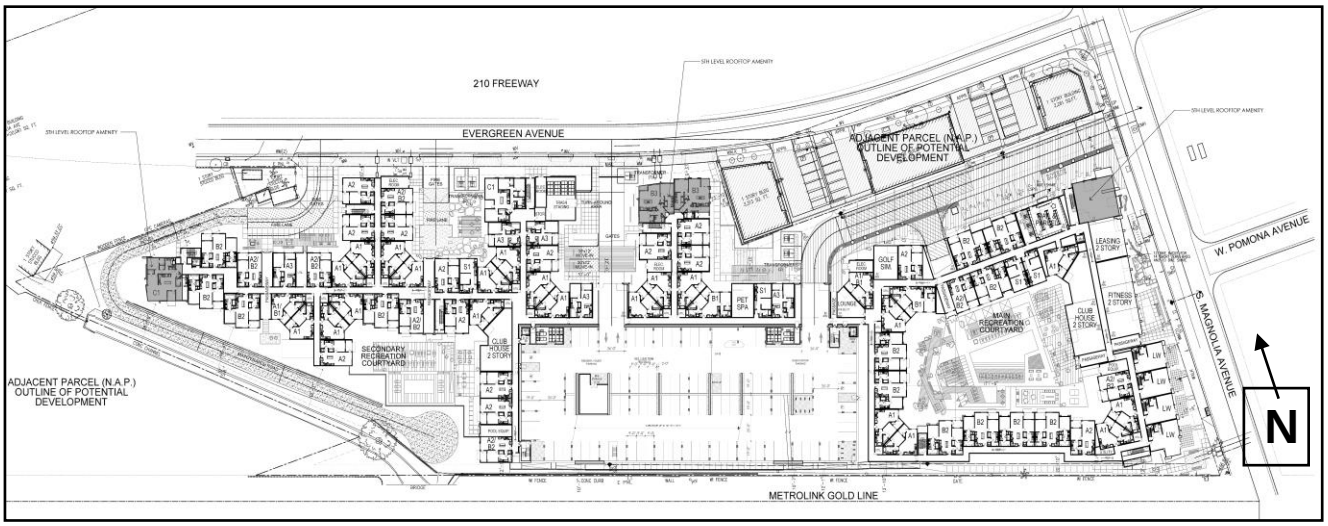


Figure 3. Alexan Foothills Development Plan

The building wall along the South Magnolia side of the project is designed to create an "urban feel" in response to the walkable nature of the Station Square Transit Village across the street. The project architect created an urban space (1,560 square feet) and pedestrian-scaled building façades along the South Magnolia elevation. That urban space, referred to as a "public courtyard" would be landscaped with shade trees and public amenities for bike parking and seating. The dwelling units are organized around two primary recreation courtyards; each one has a swimming pool and a "club house" recreation room. There are three additional courtyards and green spaces that are designed for community gathering spaces.

Floor Plans

The 436-unit apartment complex has five floor levels. Residential unit types include: studios, one-bedrooms, two-bedrooms, three-bedrooms, and four live/work units. They range in sizes from 561 square feet to 1,481 square feet. Most units have patios and balconies and they range in size from approximately 60 to 76 square feet in area. Unit count and sizes by floor plan types are shown in Table 2. The four live/work units face South Magnolia Avenue. The ground floor component of those units contain the "work" area; the living space is directly above it. The work area of these units could be used for neighborhood-serving commercial businesses, compatible with residential development. Table 3-1 of the Alexan Foothills Specific Plan lists the types of uses that would be permitted and conditionally permitted.

Table 2. Unit Floor Plans

Unit Type	Number of Units	Unit Size Range
Studio	20	561 s.f.
One Bedroom	250	686-745 s.f.
Two Bedroom	147	981-1,246 s.f.
Three Bedroom	15	1,481 s.f.
Total	436	375,729 s.f.

Three outdoor/rooftop amenity decks are planned on top of the fourth level, and accessed from the building's fifth level. These decks provide views of the San Gabriel Mountains to the north. Other tenant amenities include a pet spa, dog park, residents' lounge, club houses, two

swimming pools and spas, fire pits, outdoor kitchens and dining areas, centralized mail/package delivery room, golf simulation room, and similar amenities. The residents would also have access to private bicycle racks and storage.

The parking garage would be seven stories containing eight levels. There is a "Level 0" where public parking will be provided. Level 0 is on the southern half of the parking structure's ground level and slopes down slightly below grade. Upon entry into the parking garage, residents are directed to an electronic entry gate and their guests are directed to a separate turnout lane where they may use a callbox to gain access beyond the gate. The live/work customers are directed to the live/work spaces located on Level 1, outside of the gate. The general public is directed to the garage's lower level where there would be paid public parking spaces controlled with a ticket kiosk/entry arm. The parking garage would provide 629 parking spaces for residents on Levels 1 to 7, and 115 spaces for residents' guests on Levels 1 to 5. The applicant is providing 34 paid public spaces on Level 0.

Building Elevations

The project design uses a mix of articulation, balconies, and changes in color and material to help minimize the massing impacts. The exterior material is primarily a float stucco finish; however, there are elements of vertical hardie plank siding and porcelain bronze color tiles. The residential windows feature vinyl (dark clay color) frames by Milgard. Some balcony railings are made of glass while others are made of metal slats. The total height of the apartment complex is 62'-6", measured to the top of the roof stair tower. The overall height of the parking structure is slightly taller than the surrounding apartment complex. The height to the top of its stair tower is 71'-4".

The east elevation (facing South Magnolia Avenue) is designed to embrace the street's "urbanized feel". The facades of the live/work units are designed to be visually distinct from the other units with floor-to-ceiling storefront windows and door systems with signage areas for tenant identification. The residents' fitness center and leasing office are also located on this elevation and feature similar window and door systems. The south elevation of the parking structure provides an opportunity to display public art visible to the Gold Line riders

Figure 4. Perspective from South Magnolia Avenue

coming into Monrovia. The applicant is proposing a “zoetrope”, which is a linear display of images that visually appear animated while the train is in motion.

Vesting Tentative Parcel Map (TMP) No. 82326 and General Plan Conformity Finding

The proposal would consolidate eight parcels of land into one parcel. A Tentative Map is a precise engineering document that details the location and dimensions of the parcel boundaries in an approved subdivision of four or less parcels. The Tentative Map review process is used to evaluate the proposed subdivision in terms of compliance with City standards, and the appropriateness of the subdivision’s design. The “Vesting” Tentative Parcel Map differs from a standard tentative map in that the developer has a vested right to proceed with the project in substantial compliance with the ordinances, policies, and standards that were in effect at the time the application was considered complete by the City. The Applicant must complete certain conditions of approval (Data Sheet 2) before submitting a Final Parcel Map for City Council approval.

There is a 25 foot wide easement to the City (South Dale Drive) that is used for maintenance access to the concrete drainage swale. That easement would be vacated as part of the lot consolidation. A condition of approval (Data Sheet 2, Condition 2) would require a new easement to access the drainage swale for maintenance. The Planning Commission must first make a finding that the street vacation conforms to the provisions of the City’s General Plan pursuant to Section 65402 of the Government Code. Since Dale Drive primarily exists to provide access to the drainage swale, this street is not an essential roadway for circulation purposes, nor does it appear that the street vacation will result in a diversion or modification of existing patterns.

Conditional Use Permit

The Zoning Code requires a Conditional Use Permit (CUP) for new multi-family construction and lot consolidation. In addition to the findings specified in MMC Section 17.52.200, the Commission must also find that the proposed consolidation will not result in the demolition of a residential structure with architectural or known historic value. On August 29, 2018, the Monrovia Historic Preservation Commission determined that the residential buildings at 1607 South Magnolia Avenue (built circa 1910-1930) and 340 West Evergreen Avenue (built circa 1949) do not have historic value and would not meet the criteria for state, regional, or local designation.

The proposed Planning Conditions (Data Sheet 1) address requirements for the submittal of final design details, exterior lighting plans, parking management standards, payment of development impact fees, public safety measures, and construction site management standards. The proposed Public Works Conditions (Data Sheet 2) includes requirements for filing the Final Parcel Map, installation of infrastructure and offsite improvements, and connection to utilities.

General Plan and Zoning Amendments

The intent of the proposed Planned Development - Area 27 (PD-27) designation is to provide a set of land use standards and regulations to encourage high density residential development near Station Square and provide supportive commercial uses to the transit-oriented neighborhood. The proposed request includes the following components:

- <u>General Plan Amendment (Text and Map).</u> The General Plan Amendment proposes to amend the text of the Land Use Element of the General Plan. It would change the

land use designation from Manufacturing to Planned Development – Area 27 (PD-27) for properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue. The proposed PD-27 development standards and regulations are included in "Exhibit A" of PCR2019-0013.

- Zone Change (Map). The proposed Zone Change would amend the Official Zoning Map by changing the zoning designations of the properties at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue from M (Manufacturing), to PD-27 (Planned Development—Area 27). The proposed Ordinance No. 2019-13, which would implement Zone Change ZA2019-0003 is included in "Exhibit B" of PCR2019-0020.

- Zoning Amendment (Code). The Monrovia Municipal Code (MMC) must be amended to add the "Alexan Foothill Specific Plan" to the list of specific plans that have already been adopted. This code section specifies that the provisions adopted in a specific plan shall be considered to be the development standards for the plan. The Zoning Map also requires an ordinance amending the map to change the existing PD (Planned Development) zone to the SP (Specific Plan) zone.

Environmental Impact Report

The Environmental Impact Report is made up of two parts. The first part is the Draft Environmental Impact Report (DEIR) which contains the primary analysis of the project's potential environmental impacts and supporting documents (the appendices). The DEIR was made available and circulated for public comment and review for 90 days. The second part is the Final Environmental Impact Report (FEIR) and it includes a list of everyone who commented on the DEIR, copies of all the written comment letters, responses to all comments received during circulation of the DEIR, and responses to those comments. The FEIR also includes all the minor corrections and required revisions to the DEIR in response to the comments.

- Draft Environmental Impact Report (DEIR). The DEIR that was prepared for this project includes a "programmatic analysis" which studied the environmental effects of implementing the proposed General Plan Amendment and Zoning Code Amendment (PD-27). In a "program EIR", potential development outside the Alexan Foothills Specific Plan (Areas A and C) is examined. The DEIR was also prepared as a "project-level" EIR for the Alexan Foothills Specific Plan and development project. This "project-level EIR" focuses primarily on the changes in the environment that could result from the development of the project. It examined all phases of buildout of the Alexan Foothills Specific Plan including planning, construction, and operation.

  Each environmental issue was analyzed in the same manner, starting with a discussion of the existing environmental setting, including physical conditions and pertinent planning and regulatory framework. Out of the 18 environmental issue areas, 11 of them were determined to be potentially significant including: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geologic, Hazards & Hazardous Materials, Hydrology, Noise and Vibration, Public Services and Recreation,

Transportation/Circulation, and Utilities and Service Systems. All 11 of those issue areas will require standard conditions and mitigation measures which will reduce the potential impacts down to the "less than significant" level. A summary of the environmental impacts and mitigation measures may be found in Section 2.3 of the Draft EIR, pages 2-4 to 2-32. Alternatives to the project may be found in Section 2.4.

A 45-day public review period began on Thursday, September 26, 2019 and it was to end on the night of the Planning Commission hearing, November 13, 2019. Prior to the conclusion of the public review period, an administrative error was discovered. The Air Quality section (Chapter 7) was inadvertently omitted from the draft EIR document. This chapter was added back in to the Draft EIR and was made available for new 45-day comment period. The public and reviewing government agencies had an opportunity to review and comment on the Draft EIR, in its entirety, between November 22, 2019 and December 26, 2019.

A Notice of Availability (NOA)/public hearing notice was prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of the NOA was to inform the public that the Draft EIR was completed and ready for review. It was mailed to all the property owners within a 300-foot radius of the subject property, and anyone who requested notification about the project. The notice was published in the Monrovia Weekly on November 11, 2019. The notice provided a description of the project, the locations where the Draft EIR may be reviewed, and it advertised the Planning Commission's January 15, 2020 public hearing.

- Final Environmental Impact Report (FEIR). The Final EIR includes: 1) all the comments received on the Draft EIR, 2) responses to those comments, and 3) revisions to the Draft EIR. Each commenter was assigned a code (e.g., L1, L2, L3 etc.). Each of the commenter's remarks is further assigned a code for tracking the individual responses to comments (e.g., L1.1, L1.2, L2.1, L2.2 etc.). Chapter 2 contains the Draft EIR comments that were received during the first 45-day review period including: L.A. County Fire Department, Cal Trans, L.A. County Sanitation District, SoCal Gas, and an e-mail from Mike Antos, a resident that lives near the project site. Please see Chapter 2 of the FEIR, pages 2-1 to 2-26 for responses to comments that were received during the first 45-day review period. Chapter 3 contains the Draft EIR comments that were received during the second 45-day review period including: L.A. County Fire Department and Metro. The responses to those comments may be found in Chapter 3 of the FEIR, pages 3-1 to 3-9.

  Chapter 4 includes minor revisions to the Draft EIR. Revisions to the Air Quality and Greenhouse Gas Emissions chapters were made in order to achieve consistency with the environmental documents that have been prepared for the proposed Arroyo and Fifield mixed use projects nearby. Based on a full build-out of the PD-27 area, the updated air quality calculations showed that the emission levels now exceed a Tier 3 screening level within the four-tiered significance threshold system developed by the South Coast Air Quality Management District. However, the updated emission levels did not exceed the significance threshold of the fourth tier which would otherwise have resulted in a significant impact. As a result, there are no new significant impacts, and no new mitigation measures are required as a result of the minor adjustments to the GHG emissions calculations. Other revisions were made in response to the comments

received during the Draft EIR comment periods. All text revisions are indicated by strike-through (deleted text) and underlining (added text) as errata to the Draft EIR.

The revisions do not trigger a recirculation of the Draft EIR because it does not meet the following criteria listed in CEQA Guidelines Section 15088.5 (Recirculation of an EIR Prior to Certification) as follows:

1. No new significant environmental impacts related to the project or any new mitigation measures were identified;
2. No substantial increase in the severity of an environmental impact has been identified; and
3. No additional feasible project alternative or mitigation measure has been identified that would clearly lessen the significant environmental impacts of the project.

Traffic Impact Fee

The City conducted an Area Traffic Study and devised a Traffic Impact Fee (TIF) program to address the cumulative traffic effects of proposed development in the vicinity of the Monrovia Gold Line Station. The TIF includes each project's fair share cost of the traffic study and any recommended mitigation measure identified for a project's specific impact. Based on a traffic study prepared for the proposed project, the analysis showed that the Alexan Foothills project would create one significant impact at the intersection of Myrtle Avenue and Central Avenue and the Interstate 210 (I-210) westbound ramps. These impacts can be mitigated with physical improvements. Payment of the TIF will fully satisfy the project's mitigation obligation for the necessary improvements. The City Council adopted the TIF on October 2, 2019 and it became effective on November 16, 2019.

Open Space

The City of Monrovia Land Use and Circulation Element EIR identified a potential impact on park resources associated with build-out of the greater Station Square Transit Village area and included a mitigation measure requiring projects with 200 or more residential units to dedicate three acres of parkland for every 1,000 residents. Given that land is limited, the Applicant would be required to pay an in-lieu fee as mitigation, as an alternative to the dedication of parkland.

The proposed public open space that is planned within the development, including the South Magnolia courtyard (1,565 square feet) will count towards this requirement. At the time the plans are submitted for plan check, the final open space requirement will be determined as stated in Condition No. 13 (Data Sheet 1).

Alternatively, the Applicant has the option of assisting the City with forming a Community Facilities District and approving a special tax in an amount necessary to fund the public open space. If the Community Facilities District is formed and such special tax is approved, then this parkland dedication or in-lieu fee requirement would be satisfied.

Monrovia Art in Public Places

This residential project is subject to the City's Public Art Ordinance (MMC §15.44.050). One percent of the project cost is required to be applied to public art on the site or it can be placed in the City's Art in Public Places fund. Use of public art funds and proposed art work are approved by the Monrovia Art in Public Places Committee.

Alternatively, the Applicant has the option of assisting the City with forming a Community Facilities District and approving a special tax in an amount necessary to fund the public art. If the Community Facilities District is formed and such special tax is approved, then the requirement of compliance with MMC Chapter 15.44 or payment of the in lieu fee would be satisfied. The public art requirement is addressed in Condition No. 23 (Data Sheet 1).

Public Outreach

On September 7, 2017, Trammell Crow hosted a neighborhood meeting to allow members of the public to learn more about the project and to ask questions of the developer. All of the property owners and occupants within a 300' radius of the site received an invitation to the meeting. Over the past year, the City has provided ongoing status updates to the community, Commission and City Council on the various development applications in order to solicit additional input on this and other proposed projects. This includes the City's website (Development Spotlight page), the website BuildingMonrovia.com, and the City Manager's weekly updates. In addition, all legally required public hearing noticing has occurred.

Development Review Committee Review

Staff presented the project to the Development Review Committee (DRC) at a public meeting held on October 23, 2019. Staff responded to the DRC's questions regarding the proposed public parking, security plans, bicycle parking, refuse collection, and the live-work component. During public comment, John Lima of Robert Brkich Construction made complimentary remarks about the project; however, raised concerns that his business operations might have a negative effect on the new residents. The applicant responded that the project has a substantial set back from the joint property line. Furthermore, the applicant noted that the project is amongst other sources of noise generated by the light rail train and I-210 Freeway; and his selection of construction materials will ensure the residents are not impacted by neighboring industrial uses. The Fire Chief also requested that the applicant work with the Fire Department to ensure a ladder will have sufficient room within the woonerf where strings of overhead lighting is planned. There was no further public testimony provided at the meeting. Ultimately, the DRC unanimously voted in favor of advising the Planning Commission to recommend approval of the project to the City Council.

Conclusion

The proposal would amend the General Plan and Zoning Code to establish a new Planned Development land use designation for 9.6 acres of land zoned Manufacturing, just west of the Station Square Transit Village. The amendments include new development standards intended to encourage additional high density residential development and provide supportive commercial uses to that transit-oriented neighborhood. The Alexan Foothills Specific Plan and development project would help fulfill those objectives with the construction of a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls.

Staff believes that the proposed planning area standards and development project will complement the transit village setting and enhance the character of the area. The height and architectural elements of the Alexan Foothills project would be compatible with the other high density developments that are underway in the Station Square Transit Village. The building's design features, public open spaces with adequate amenities for comfortable social interaction, and promote an increased level of pedestrian activity. The project will also increase the variety and availability of housing within the City. The residents' close proximity to the Monrovia Gold Line Station and the opportunities for services within the ground floor

live-work space along South Magnolia Avenue will help promote walkability. Overall, the project will extend the benefits of the Station Square Transit Village by providing infill development that is architecturally compatible with existing and future development.

RECOMMENDATION: The Development Review Committee and Staff recommend approval of the project applications as presented in this Staff Report. If the Planning Commission concurs with Staff's recommendation then, following the public hearing, the appropriate actions would be to adopt Planning Commission Resolution No. 2019-012 (recommending approval of the EIR); adopt Planning Commission Resolution No. 2019-013 (recommending approval of the Zoning Ordinance and Map Amendment); adopt Planning Commission Resolution No. 2019-014 (recommending approval of the Alexan Foothills Specific Plan); and recommend approval of Tentative Parcel Map No. 82326, Conditional Use Permit CUP2019-0013, and General Plan Conformity GPC2019-0003.

The Planning Commission of the City of Monrovia hereby finds, determines and resolves as follows:

1. The Planning Commission has independently reviewed and considered the Environmental Impact Report (EIR) that was prepared pursuant to the requirements of the California Environmental Quality Act ("CEQA") and the City's local CEQA Guidelines and hereby makes a finding of adequacy with the EIR and recommends that the City Council certify the EIR as the environmental clearance for the project including: General Plan Amendment (GPA2019-0003), the Alexan Foothills Specific Plan (SP2019-0002), Zoning Ordinance and Map Amendment (ZA2019-0003), Tentative Parcel Map No. 82326, Conditional Use Permit (CUP2019-0013), and the General Plan Conformity finding (GPC2019-0003) as set forth in Planning Commission Resolution No. 2019-0012.

2. The Planning Commission finds that the custodian of records for all other materials that constitute the record of proceeding upon which this decision is based is with the Planning Division Manager. Those documents are available for public review in the Planning Division located at 415 South Ivy Avenue, Monrovia, California, 91016.

3. The Planning Commission hereby finds that the proposed vacation of South Dale Drive as discussed in this Staff Report is in conformity with the City of Monrovia General Plan. This finding shall be reported to the City Council.

4. The Planning Commission, in the exercise of its independent judgment hereby makes the findings listed on attached Data Sheet No. 3 for TPM 82326 and CUP2019-0013, which are incorporated herein by this reference.

5. The Planning Commission hereby recommends approval to the City Council of Tentative Parcel Map No. 82326, Conditional Use Permit CUP2019-0013, Specific Plan SP2019-0002, Zoning Ordinance and Map Amendment ZA2019-0003, subject to the attached Planning Conditions on Data Sheet No. 1, Public Works Conditions on Data Sheet No. 2, and recommendations in the Staff Report, all of which are incorporated herein by this reference.

MOTIONS:

A. Close the public hearing and adopt Planning Commission Resolution No. PCR2019-0012 recommending approval to the City Council of the Environmental Impact Report.

B. Find that the proposed street vacation of Dale Drive is in conformity with the General Plan as presented in the Staff Report.

C. Adopt Planning Commission Resolution No. 2019-0013 recommending approval to the City Council of a General Plan Amendment that would change the land use designation of a 9.6 acre city block from Manufacturing to Planned Development, and a Specific Plan overlay for a 6.77 acre portion of that city block for the Alexan Foothills Specific Plan.

D. Adopt Planning Commission Resolution No. 2019-0014 recommending City Council approval and adoption of the “Alexan Foothills Specific Plan”.

E. Adopt Planning Commission Resolution No. 2019-0020 recommending City Council approval and adoption of Ordinance No. 2019-13 which is a Zoning Code Amendment that would change the zoning designation of a 9.6 acre city block from Manufacturing to Planned Development, and “SP” for a 6.77 acre portion of that city block for the Alexan Foothills Specific Plan.

F. Recommend to the City Council the approval of TPM 82326 and CUP2019-0013 as presented in the Staff Report.

DATA SHEET 1 — Planning Conditions

Tentative Parcel Map
No. 82326
Conditional Use Permit
CUP2019-0013

Alexan Foothill Project
1625 S Magnolia Ave.
1607 S Magnolia Ave.
1631 S Magnolia Ave.
1541 S Dale Dr.
310 W Evergreen Ave.
410 W Evergreen Ave.
418 W Evergreen Ave.

Development of the subject property and operations on the site must remain in substantial conformance at all times with the request and application forms and plans for Tentative Parcel Map (TPM 82836) and Conditional Use Permit (CUP2019-0013) to build a 436-unit, five-story apartment complex and an eight-level (seven stories above ground) parking structure containing 798 parking spaces submitted by the Applicant, as approved by the City Council and placed on file in the office of the Planning Division, except as modified by the conditions imposed by the Planning Commission and by subsequent modifications determined by the Director of Community Development to be in substantial compliance with the conditions of approval. The term "Applicant" as used herein shall include the applicant, the property developer, the property owner, and all successors in interest to this Subdivision Map and Conditional Use Permit.

DEVELOPMENT STANDARDS

1. The development shall comply at all times with all standards, regulations, requirements, guidelines and conditions set forth in "Alexan Foothills Specific Plan."

2. All final building/architectural materials shall be submitted to the Planning Division Manager for review and approval prior to building permit issuance. The review of final materials shall include, but not be limited to, float finish plaster, lap siding, porcelain tiles, flange trim, wood trellis slats, vinyl window frames, aluminum store fronts, metal mesh railings, metal slat railings, glass railings, perforated panels, concrete masonry unit planter walls, metal wall panels, color schemes, and exterior light fixtures.

3. The final decorative artwork element proposed on the south exterior wall of the parking garage (the "zoetrope" as described in the Alexan Specific Plan, Section 2.3.3) shall be submitted to the Development Review Committee for review and approval. If this exterior wall feature is proposed as a public art piece, the final design details shall be submitted to the Art and Public Places Committee for review and approval.

4. Placement and design of mailboxes shall be reviewed and approved by both the U.S. Postal Service and the Planning Division prior to installation and shall not be placed in the public right-of-way.

5. All roof mounted mechanical equipment shall be completely screened from street view adjacent to the site by perimeter parapet walls, subject to review and approval by the Community Development Director.

6. Ground level mechanical equipment shall be screened through the use of landscaping or enclosures. Final screening method is subject to review and approval by the

Community Development Director and clearance requirements by all utility company specifications.

7. Applicant shall ensure that the exterior portions of all Project structures (including, but not limited to, roofs, balconies, decks, fences, stairs, stairways, walls, signs and fixtures), as well as sidewalks, driveways and parking areas are operated and maintained to prevent dilapidation, deterioration or disrepair consistent with Monrovia Code of Ordinances Section 8.12.030.

8. Electrical power lines, telephone lines, and any other transmission lines (including, without limitation, cable television lines, data transmission lines, communication lines, other utility lines, etc.) along the frontage of this project property, and within the development, shall be placed underground and provided to each unit.

9. All utilities and structures such as gas meters, electrical meters, and telephone pedestal-mounted terminal boxes, surface mounted electrical transformers, or other potential obstructions shall be noted on the plans in locations that will not impair public access and in compliance with the Americans With Disabilities Act with provisions for appropriate screening to the satisfaction of the Community Development Director. These structures shall be incorporated into the building design whenever possible so as not to be visible from the public right-of-way. Any equipment in the landscaped areas shall be noted on the landscape/hardscape plan with provisions for appropriate screening. Electrical transformers shall not be located in front of or within the 1,565 square foot public courtyard area on South Magnolia, adjacent to the Leasing Office (identified in the Alexan Specific Plan as the “Terminal”). If transformers are proposed within these areas they shall be vaulted and placed underground.

10. No exterior lighting shall be installed without the approval of the Planning Division Manager. All exterior lighting shall be designed, arranged, and installed so as to confine direct rays onto the premises and to direct light away from adjacent structures.

11. Reflective glass, metallic, and other highly reflective and glare producing materials shall not be used in new building construction. This Condition shall be printed on all construction drawings.

LANDSCAPING

12. A Landscape and Irrigation Plan prepared by a licensed Landscape Architect shall be submitted to the Planning Division for plan check showing the size, type, and location of all planting areas and shall incorporate the following conditions of approval:

    a. Landscaping shall be a combination of trees, shrubs, groundcover, and turf except on the rooftop decks.

    b. All landscaping, including the landscaping located within the public open space and amenity areas, shall be maintained by the applicant and shall include a permanent automatic irrigation sprinkler system.

c. Any unimproved City right-of-way contiguous with the property shall be landscaped and maintained by the Applicant and shall be incorporated into the required landscape plan.

d. Hardscape improvements shall be provided in all common areas. The common areas shall incorporate amenities for residents of the development to the satisfaction of the Community Development Director. The improvements shall be indicated on the final landscape/hardscape plan.

e. A landscape documentation package that complies with the requirements of the Model Water Efficient Landscape Ordinance shall be submitted to the Planning Division for review and approval prior to landscape construction. A Landscape Certificate of Completion shall be submitted to the Planning Division at the completion of the installation, prior to request for a final inspection and Certificate of Occupancy.

13. Public Open Space Easement. An easement for the 1,565 square foot public courtyard area on South Magnolia (as identified in the Alexan Specific Plan as the "Terminal"), and adjacent to the building's leasing office shall be for public access, to the satisfaction of the Community Development Director, City Engineer and City Attorney. This public area shall be constructed and maintained by the Applicant or its successors in interest.

14. A Public Open Space and Amenity Plan shall be prepared in coordination with the Landscape and Irrigation Plan showing the amenities proposed within the 1,565 square foot public courtyard area on South Magnolia to the satisfaction of the Community Development Director. The amenity improvements shall include, at a minimum, decorative permanent seating, trash receptacles, and decorative hardscape.

PARKING

15. The parking structure driveway entrance shall be surfaced with Portland cement concrete (3 1/2" minimum), interlocking pavers, or other suitable materials, which shall be submitted to the Planning Division Manager and Public Works Department prior to installation for review and approval.

16. A minimum of 34 public parking spaces shall be provided. The public parking spaces shall be clearly marked and shall be open and accessible to the public from 6:00 AM to 12:00 AM. Before any change is made in these hours, approval shall be obtained from the Development Review Committee. No resident parking shall be permitted in the designated public parking spaces. Signage shall be provided to advise residents of this restriction.

17. Driveway ramps shall be a maximum 15% grade.

18. Storage for a minimum of 44 short-term bicycle parking spaces and 224 long-term bicycle parking spaces shall be provided onsite in a location that is satisfactory to the Director of Community Development. The 44 short-term bicycle parking spaces, plus

the 14 spaces intended for the Leasing and Metrolink riders (total 58 bicycle parking spaces) shall be made available to the public.

19. A final parking management plan shall be submitted to the Planning Division for the review and approval of the Planning Division Manager. In addition to identifying how the private residential parking area and the paid public parking area will be managed separately and securely from each other, the parking management plan shall also identify the location of the residential, residential guest, live/work, public paid parking, Electrical Vehicle charging station, postal services, and Americans with Disabilities Act (ADA) parking stalls within the parking structure, as well as identify the location of the bicycle storage areas for the 282 bicycles on the development site.

20. To prevent potential spillover parking impacts from the project into surrounding residential neighborhoods, the Applicant shall prepare and submit a "Parking and Circulation Management Plan" to the Director of Community Development (the "Parking Plan") for review and approval prior to issuance of a certificate of occupancy. The Parking Plan shall identify various strategies and commitments by the Applicant to prevent spillover parking impacts to nearby residential neighborhoods caused by future project tenants, employees and patrons. At minimum, the Parking Plan shall require the following:

    a. A provision in the Rules and Regulations of all residential and commercial leases prohibiting tenants and employees from parking on surrounding residential streets.

    b. A prohibition on tenants applying for neighborhood permit parking passes should they become available.

    c. A requirement to conduct a parking utilization study one year from issuance of the project's certificate of occupancy if requested by the Director of Community Development. The utilization study must demonstrate that on-site parking is adequate to meet project demand. If the study shows project parking demand exceeds the supply of off-street parking within the project, the Applicant shall propose measures to reduce spillover parking impacts, subject to review and approval by the Director of Community Development. Such parking reduction strategies may include, but are not limited to, (i) valet parking for commercial tenants, (ii) provision of transit passes and/or ride-share subsidies for tenants who contractually commit not to own or lease a single occupancy vehicle and (iii) demonstration of best efforts by the applicant to lease off-site parking spaces for project tenants and commercial employees within the vicinity of the project site.

21. To address potential spillover parking impacts from the project into the surrounding residential neighborhoods, Applicant shall also prepare and submit a "Parking Violation Eviction Program" to the Community Development Director for review and approval prior to issuance of a certificate of occupancy. The Parking Violation Eviction

Program shall layout a review and determination process that will result in the identification and eviction of any of the Applicant's residential and / or commercial tenants for violation of the parking regulations contained in the Applicant's lease Rules and Regulations, as outlined above. Furthermore, the Parking Violation Eviction Program shall contain provisions which allow the City to initiate a review, and to participate in the adjudication process.

DEVELOPMENT IMPACT FEES

22. Open Space. The Applicant shall enter into an agreement with the City, which must meet with the approval of the City Manager or his/her designee, and be acceptable in form and substance to the City Attorney, to provide Open Space pursuant to the requirements of the Land Use Element of the General Plan. The agreement shall require the Applicant to provide land dedicated for Open Space or an in-lieu fee to cover either the purchase of land for Open Space or the maintenance of the Open Space. The Open Space land dedication and/or in-lieu fee is determined based upon 3.0 acres of land per 1,000 residents (130.68 square feet per resident) potentially generated by the development. Required open space shall be 85,465 square feet of land, which was calculated by multiplying 130.68 square feet per resident by 654 residents. The number of residents was calculated based on a projected occupancy of 1.5 persons per unit. The in lieu fee shall be calculated by multiplying the required open space by the Fair Market Value of the land as determined by an appraisal. Alternatively, the Applicant also has the option of taking all actions necessary to assist the City with forming a Community Facilities District and approving a special tax in an amount necessary to fund the public open space. If the Community Facilities District is formed and such special tax is approved, then this parkland dedication or in-lieu fee requirement would be satisfied.

23. Public Art. In compliance with MMC Chapter 15.44 (Art in Public Places), the Applicant shall either pay the in-lieu fee for arts or provide public art on the site. Alternatively, the Applicant also has the option of taking all actions necessary to assist the City with forming a Community Facilities District and approving a special tax in an amount necessary to fund the public art. If the Community Facilities District is formed and such special tax is approved, then the requirement of compliance with MMC Chapter 15.44 or payment of the in lieu fee would be satisfied.

CONSTRUCTION SITE REQUIREMENTS

24. A Construction Impact Mitigation Plan shall be submitted to the Planning Division for review and approval and must be approved prior to the start of any demolition or construction. The Construction Impact Mitigation Plan shall include the following measures: 1) that no construction parking be permitted on Pomona Avenue (between Magnolia and Primrose Avenues); and 2) that the delivery and hauling route minimize the use of Pomona Avenue (between Magnolia and Primrose Avenues) during the construction phases of the project.

25. The Applicant shall provide temporary perimeter fencing with view obscuring material during construction. If graffiti is painted or marked in any way upon the premises or on an adjacent area under the control of the Applicant (including without limitation, any temporary perimeter construction fencing or the permanent wall), the graffiti shall be

removed or painted over by Applicant within twenty-four hours, unless any law in effect imposes a shorter time period. Fencing may be removed prior to landscape installation with Planning Division approval.

26. One waterproof sign (36" x 48") in both English and Spanish noting construction hours and a phone number for contact shall be posted on each street frontage prior to grading or construction.

GENERAL REQUIREMENTS

27. In addition to Planning (Data Sheet No. 1) and Public Works (Data Sheet No. 2) conditions of approval, the Applicant shall also comply with all requirements of the Monrovia Municipal Code, the Building Division, and the Fire Department that are directly applicable to the project.

28. The mitigation measures and standard conditions identified in the Environmental Impact Report Mitigation Monitoring and Reporting Program (State Clearinghouse No. 2018101058), and the construction impact mitigation plan, shall be incorporated herein as conditions of approval of the project.

29. Any violation of these conditions of approval or the Monrovia Municipal Code may be subject to the Administrative Fine Ordinance, other available remedies and/or revocation or modification of this permit at the discretion of the City Attorney and City Prosecutor.

30. The Applicant shall submit the required filing fee for submittal of the Notice of Determination to the Los Angeles County Clerk and for submittal of the Environmental Impact Report to the State Department of Fish and Wildlife one day after final approval of the project. The applicant may request that the City file a fee exemption request with the State Department of Fish and Wildlife, provided, however, the Applicant deposits with the City the required filing fee one day after final approval of the project. In the event the State Department of Fish and Wildlife grants the exemption, the unused portion of the filing fee shall be refunded to the Applicant.

31. The Applicant shall, within 30 days after approval by the City Council, submit to the Community Development Department his/her written consent to all of the conditions of approval contained in Data Sheet Numbers 1 and 2. Tentative Parcel Map No. 82326 and Conditional Use Permit CUP2019-0013 shall be void and of no force or effect unless such written consents are submitted to the City within the 30 day period.

32. The Final Parcel Map for the proposed lot consolidation shown on this Vesting Tentative Parcel Map (TPM) No. 82326 must satisfy the requirements of Section 16.20.010 et seq. of the Monrovia Municipal Code and be filed with and deemed a complete filing by the City Engineer. The development to which the Conditional Use Permit applies must begin, within twenty-four months after the Tentative Parcel Map was conditionally approved, or TPM 82326 and CUP2019-0005 will expire without further action by the City. The map expiration date may be extended as allowed by the Monrovia Municipal Code.

33. All of the above conditions shall be complied with prior to issuance of the Certificate of Occupancy, unless an earlier compliance period is specified as part of a condition.

34. Indemnification. As a condition of approval, the Applicant agrees to defend, indemnify, protect and hold harmless City, its officers, officials, employees, agents and volunteers from and against any and all claims, actions, or proceeding against the City, its officers, officials, employees, agents and/or volunteers to attack, set aside, void or annul, an approval of the City, Planning Commission or City Council concerning this permit and the project. Such indemnification shall include damages, judgments, settlements, penalties, fines, defensive costs or expenses (including, but not limited to, interest, attorneys' fees and expert witness fees), or liability of any kind related to or arising from such claim, action, or proceeding. The City shall promptly notify the Applicant of any claim, action, or proceeding. Nothing contained herein shall prohibit City from participating in a defense of any claim, action or proceeding in accordance with the Subdivision Map Act and from choosing counsel to defend the City.

PUBLIC SAFETY CONDITIONS

35. The final parking garage design, and related pedestrian walkways that connect it to the greater project area, shall be reviewed and approved by the Chief of Police prior to the issuance of building permits. The final design shall incorporate safety measures and design details to deter loitering within the parking garage stairwells.

36. Security Management Plan. Prior to the issuance of a certificate of occupancy, the Applicant shall submit a Site Security Management Plan for approval by the Chief of Police, which shall incorporate features such as lighting, gating and recorded video surveillance within all public open space areas, including the parking garage.

FIRE DEPARTMENT CONDITIONS

37. Fire access shall be provided per CFC 503. A Fire Access Plan shall be submitted for review.

38. Fire protection water supply shall be provided per CFC 507.

39. Fire hydrants shall be provided along all public roads and on-site access roads. Hydrants shall be within 120 feet of the structure and spaced at no more than 200 feet. The minimum fire flow shall be 2,000 gpm at 20 psi. A Fire Access Plan shall be submitted for review.

40. A Class I standpipe system shall be provided in all stairwells on all levels including the roof as set forth by Building Code and Fire Code 905.

41. An automatic fire sprinkler system and fire alarm as set forth by Fire Code 903 and 907.

42. Dwelling units and common areas shall be provided with visible alarm notification appliances.

43. Smoke alarms shall be provided in each room for sleeping purposes and at a point centrally located in the corridor or area giving access to each separate sleeping area.

44. Carbon monoxide alarms shall be provided either within all sleeping units or else the dwelling units shall be provided with a carbon monoxide alarm system that protects all common areas per Fire Code 915.

45. A minimum of one fire rated stairwell shall extend to the roof for each building. Provide stairways to roof for west and east buildings.

46. For each building, at least one rated exit stairwell shall be accessible from the exterior on the ground level. Knox boxes shall be provided adjacent to all exit stairwell exterior doors at approved locations. A Knox box shall also be provided adjacent to the main entrance of all buildings at an approved location.

47. All buildings shall have a minimum of one elevator capable of accommodating general stretcher dimensions.

48. An approved number or address shall be provided on all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Numbers shall be a minimum of 6-inch high by ½-inch stroke and be a contrasting background.

49. Portable fire extinguishers shall be installed per the CFC.

50. An Emergency Responder Radio coverage system shall be provided for all buildings.

51. A minimum of one standpipe system for use during construction shall be provided. Such standpipe shall be installed when the progress of construction is not more than 40 feet in height above the lowest level of fire department access.

52. If a portion of the building is considered a high rise (highest occupied floor level is greater than 75' above fire department access level) then all of the provisions of CBC 403 would apply, including a secondary water supply (e.g. water tank).

53. As referenced in Data Sheet 2 (Public Works Conditions), Condition No. 2(a)(v) requires a new easement for access to a drainage channel along the westerly boundary of the site in order to service the existing storm cannel. This City access easement shall be in conformance with the approved site plan and shall be built to City Standards and approved by the City Engineer.

54. The installation method of the pendant lighting across the Woonerf shall be reviewed and approved by the Fire Department to the issuance of a building permit. The spacing and location of the lighting shall take into account fire truck ladders. The installation method shall also consider quick removal of the lights in an emergency. Such methods may include a Knox Box, master switch, or any means necessary to cut the power and safely remove the lights in an emergency.

DATA SHEET 2 Public Works Conditions

Tentative Parcel Map
No. 82326
Conditional Use permit
CUP 2019-0013

Alexan Foothill Project
1625 S Magnolia Ave
1607 S Magnolia Ave.
1631 S Magnolia Ave.
1541 Dale Drive
418 W Evergreen Ave.

Development shall be subject to the conditions of approval listed below, and if so indicated, the condition(s) shall be satisfied before the Final Map is filed in the Department of Public Services (Public Works Division) for review and approval. The term "Applicant" shall include, without limitation, the applicant, the property developer, the property owner, and all subsequent owners of each parcel.

Engineering Conditions

1) **Prior to the approval of the tentative map**, the Applicant shall agree to the conditions as outlined herein and provide the following:
   a) Provide "Will Serve" letters from all utilities proposing to serve this development. Indicating the feasibility and conditions of providing service to the development.
   b) Identify and show on tentative map the proposed layout and design of the development and how it will accomplish the conditions as outlined herein.

2) **Prior to any permitting of development**, except for those conditions where improvements are bonded per Section 16 of the City Municipal Code, the Applicant shall provide the following:

   a) Final Parcel Map for the merger of existing parcels

      i) The Applicant shall submit a Final Parcel Map as required by the City's Municipal Code, Chapter 16 – Subdivisions.

      ii) Prior to filing the Final Map with the Department Public Services (Public Works Division), the Applicant shall provide a current title report (Parcel Map Guarantee) for the project site located in the City of Monrovia. The title report and guarantee is required and such documents shall show all fee interest holders; all interest holders whose interest could ripen into a fee; all trust deeds, together with the name of the trustee; and all easement holders and supporting documents accompanying the title report.

      iii) All easements and dedications shown on the approved tentative parcel map and those not shown but to be recorded, such as: Covenants, Conditions & Restrictions (CC&Rs) must be recorded and accounted for at the time of the Final Map approval.

      iv) Applicant shall dedicate additional rights of way if determined in the review of the improvement plans if they are needed (i.e. Utility backflow devices, traffic control appurtenances, street light foundations, storm drain encroachments, ADA sidewalk and driveway push backs from obstructions in street right of way.)

      v) The Property is subject to certain easements shown or dedicated on the map of Parcel Map No. 7763 recorded July 13, 1978 and on file in Book 97, Page 73, of Parcel Maps, in favor of the City (collectively, the "Easements").

The City agrees to cause the Easements to be terminated concurrently with or prior to the recordation of the parcel map for the property development. The City is in agreement with the vacation of all city easements for sewer and drainage maintenance, with the condition of a new easement for drainage channel maintenance access along the westerly boundary to service the existing storm cannel. A city access easement shall be in conformance with the approve concept plan, and be recorded with projects final parcel map. The maintenance access area shall be built to City Standards and approved by the City Engineer. The city will not maintain or accept ownership any of the sewer lines within the project site.

City ownership of sewer lines and maintenance starts after the connection of private line at the city main line in Magnolia right of way.

vi) A Final Map prepared by or under the direction of a Licensed Land Surveyor or Licensed Civil Engineer legally authorized to practice land surveying in the State of California must be filed in the Department of Public Services (Public Works Division) for review and approval and processed through the City Engineer prior to being filed with the Los Angeles County Recorder.

vii) Prior to filing the Final Map (or after filling financial surety or bonds) with the Department of Public Services (Public Works Division) for review and approval, the Applicant's surveyor or engineer shall set durable monuments to the satisfaction of the City Engineer in conformance with Section 66495 of Subdivision Map Act, or bond for these monuments per Section 16 of the City Municipal Code.

viii) Improvement plans and an engineer's estimate of the improvements, using the departments approved unit rates, shall be submitted to the City Engineer for approval, once approved the applicant shall provide the required improvements or bonding for improvements per Section 16 of the Municipal Code prior to the recordation of the Final Map. No security or bond will be released in partial amounts. When the project has been completed in full, the finial punch list is complete, and the notice of completion filed with the appeal time frames expired, then and only then, will the bonds will be release with a formal request to the City Engineer, and processed though the City Clerk Office.

ix) Prior to filing the Final Map and obtaining financial surety or bonds for recordation the developer shall execute a subdivision agreement with the City of Monrovia and shall adhere to the requirements of this subdivision agreement including a 10% warranty bond for a period of 3 years from the date of completion and acceptance.

x) Prior to filing the Final Map with the Department of Public Services (Public Works Division) for review and approval the applicant shall provide street improvements per the approved off-site encroachment plans for this project, or bond for these improvements per Section 16 of the City Municipal Code. Improvements shall include, but are not limited to, driveway modifications, new driveways, removal of abandoned driveways, sidewalk improvements, ADA improvements, replacement of damaged curb and gutter, and street resurfacing and/or slurry seal of street pavement within the boundary of the existing right-of-way along the frontage of this project property, or any damage due to construction of this project to the satisfaction of the City Engineer.

b) Site Plan showing: survey monuments, boundaries, easements and right-of-ways

i) Submit existing site plan, topographic map of the project site, grading, drainage and utility plan to Public Works Division for review and approval. The plans shall indicate existing and proposed structures, miscellaneous facilities if applicable and all utilities applicable within the project site. The plans shall be prepared on a 24" x 36" sheets with City standard title block stamped and signed by a Registered Professional Civil Engineer in the State of California. The submittal of the plans shall include: a hydrology report, a geotechnical report, required design calculations, a cost estimate, a plan check fee, and an inspection fee. The final submittal for final approval shall include a mylar of the approved grading, drainage and utility plans. The applicant shall use the assigned drawing number obtained from Public Works for this project. Partial or incomplete submittals will not be accepted.

ii) All site plans, grading plans, drainage plans and street improvement plans shall be coordinated for consistency prior to the issuance of any permits.

c) Water Improvements

i) The Applicant shall install multiple water services to Monrovia's water system to serve the entire development for domestic and fire usage within the City of Monrovia to the specifications of the City Engineer. Applicant shall provide the needed water demand information for the proposed development for the City Water Consultant to complete a feasibility study for this development and then prepare plans for the mitigation measures as recommended by the feasibility study; or pay fair share "fee-in-lieu-of" the needed improvements, or install and convey needed improvements as outlined in the feasibility study. Applicant shall reimburse the City for all consultant fees for the feasibility study and all City of Monrovia incurred installation costs.

Water demand information to include:
(1) Fire flow demand (GPM) and duration for this project as dictated by the California Fire and Building Code and City of Monrovia Fire Department.
(2) Location of all proposed fire hydrants to meet the fire flow demand.
(3) Location of fire sprinkler connections with the demand flows.
(4) Domestic Demand (GPM) and connection locations.
(5) Indication of all private lines and backflow connections.

Contact Consulting City Engineer, Brad Merrell for coordination of this feasibility study. bmerrell@ci.monrovia.ca.us Phone 760-900-7526

ii) All water lines within the project site shall be a private systems maintained by the project and not the City of Monrovia's responsibility. The project shall provide adequate backflow at the transition from right of way to the private/public utility easement. The City of Monrovia shall not be responsible for the any utility within the easement after the backflow and meters.

iii) All backflow devices will be reduced pressure double check valves from the state approved list. Developer/owner will provide testing of all state approved devices prior to operation and on an annual basis. If testing is not provided, city has the right to test at the owner's expense for said testing. If test fails owner shall replace approved device at their cost with approval from city water personnel.

iv) The applicant will be responsible for all costs to connect to the City water system and installation of all new fire hydrants off the City system. The developer shall prepare

engineered plans, approved by the City Engineer, and pay for all construction, equipment, testing and inspection for the connections, hydrants and services. These plans to be on separate improvement plans and submitted to Public Works for approval and construction/encroachment permits

v) The project water usage and standby charges will be per the newly adopted rate schedule: Monrovia ordinance 2018-01.

d) Waste Water Improvements

i) The Applicant shall install sanitary sewers to Monrovia's sewer system to serve the entire development within the City of Monrovia to the specifications of the City Engineer. Applicant shall provide the needed waste water flow information for the proposed development for the City Waste Water Consultant to complete a feasibility study for this development and then prepare plans for the mitigation measures as recommended by the feasibility study. Applicant shall reimburse the City for all consultant fees for the feasibility study and all City of Monrovia incurred installation costs.

Waste Water Flow information to include:
(1) Location, design flow and size of all waste water lateral connections to main lines that are needed.
(2) Location of any lift stations and force lateral connections (if needed).
(3) Indication of all private lines on-site that will be designed using public works standards (Green book) and not designed using the California Plumbing Code. Any waste water lines using manholes and slopes less than 2.0 percent.

Contact Consulting City Engineer, Brad Merrell for coordination of this feasibility study. bmerrell@ci.monrovia.ca.us Phone 760-900-7526

ii) The applicant shall provide evidence of payment and approval for connection of units to LA County Waste Water System.

iii) All sewer/waste water laterals extending to the mainline in the public right of way to be the maintenance responsibility of the project. The prevention of root intrusion at connection and within the on-site system shall be the projects responsibility.

iv) The applicant will be responsible for all costs to connect to the City waste water system. The developer shall prepare engineered plans, approved by the City Engineer, and pay for all construction, equipment, testing and inspection for the connections. These plans to be on separate improvement plans and submitted to Public Works for approval and construction/encroachment permits

e) Geotechnical Investigation and Report

i) Prior to issuance of a grading permit or encroachment permit, Applicant shall provide geotechnical report that addresses earthwork and foundation recommendations, including but not limited to, earthwork, retaining walls and foundation construction adjacent to the existing structures located on the property, pavement structural sections and recommendations. The geotechnical report shall include data regarding the nature, distribution and strengths of existing soils, conclusions and recommendations for grading procedures, design criteria for and identified corrective measures, and opinions and recommendations regarding existing conditions and proposed grading. The report shall also include subsurface geology of the site, degree

of seismic hazard if any, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, opinions and recommended design criteria to mitigate any identified geologic hazards including locations of surface and subsurface fault lines in the area as applicable. Provide off-site and on-site pavement structural section to be address with recommendation based on Traffic indexes and R values, per Caltrans methods. Provide percolation/infiltration testing for Low Impact Design (LID) standards and avoid areas of infiltration around building foundations and subterranean walls.

ii) The geotechnical engineers for the project shall sign a title block on the Grading and LID plans stating that the recommendations of the project geotechnical report have been followed in the approved plans that he or she is signing.

f) Hydrology Report and Hydraulic Calculations

Applicant shall provide hydrology study and hydraulic calculations per L.A. County standards, for mitigation of off-site and on-site flows tributary to these structures and conveyances. And shall obtain permits from the county for all connections or modifications to their system. The outfall of this project after meeting LID standards shall have direct connection to the City/County Strom Drain System and not be directed to City of Monrovia streets.

All connections to the City/County System shall be permitted by the County and City and evidence of the County work permit and completion provided to the City of Monrovia prior to final acceptance of the project.

g) Grading Plan

i) Grading plan shall conform to MMC Chapter 15.28 and be prepared on a 24" x 36" sheets with City title block. Required improvements may be shown on the grading plan along with site drainage.

ii) Applicant shall provide an analysis and construct required infiltration and/or treatment of storm water from impervious surfaces prior to reaching direct connections leading to the main storm drainage system.

iii) All required mitigation measures identified in the soils engineer's and geologist's reports shall be incorporated into the grading/drainage plans and a made a part thereof.

iv) The lot shall mitigate its own drainage increase and thereby not impacting off-site drainage structures.

v) Grading plan to provide a scaled detail cross section at each property line where the project is in cut or fill greater than 0.5 feet. Provide in relation to the adjacent property existing conditions: set back dimensions, retaining wall dimensions and encroachments, ground and finish surface elevations, cut and fill slopes including code setbacks, and direction of flow indicators.

h) Utility Coordination Plan

i) Applicant shall submit a utility plan showing all proposed utility cuts for services such as Water, Sewer, Fire Department Stand Pipe, Gas, Edison, Telephone, Cable TV, etc. The utility plan must be submitted and approved prior to issuance of

encroachment permits for off-sites improvements. Private utility plans including sewer, water, gas, including all abandoned, or to be removed facilities, etc. for the proposed development shall be submitted for review and approval by the City Engineer. Pay all applicable fees for Engineering Division services for issuance of Public Works permits.

ii) Any existing city sewer or water line connection to be abandon, due to non-use, shall be abandon at the main line in the street and not at the curb or right of way line.

iii) Applicant shall underground all overhead utilities fronting this project site. Specifically on the west side of Magnolia Avenue from the Rail Road Tracks to the most northerly frontage of Magnolia. The south side of Evergreen along the property frontage.

i) Off-site Street Improvement Plans

i) The project development shall remove and replace any curb, gutter, sidewalk, driveway approach or street pavement found by the City Engineer to be broken, uplifted, damaged or not meeting current ADA standards along the frontage of this project, or in conjunction with any utility work serving this project. All ADA requirements shall be satisfied by the Applicant. This condition applies on public right-of-way along property frontages on Magnolia and Evergreen.

ii) All work such as but not limited to demolition, construction and improvements within the public right-of-way shall be subject to review and approval of the Public Works Division, and will require construction and encroachment permit from the City's Public Works Division, prior to start of any construction. All work within the public right-of-way shall be in accordance with applicable standards of the City of Monrovia, Standard Specifications for Public Works Construction ("Green Book", latest edition) and the Manual on Uniform Traffic Control Devices (MUTCD, latest edition), and further that construction equipment ingress and egress be controlled by a plan approved by the City Engineer.

iii) Applicant shall obtain applicable permits for all work to be done within the public right-of-way from the Public Works Division and shall pay all applicable fees for Engineering Division services such as plan check fee and construction inspection fee as applicable.

iv) The City requires the restoration of the existing pavement after utility installation. Restoration is required from the outer limits of the area covering and encompassing all the utility cuts as shown on the plans, but actual limits shall be determined out in the field by City Engineer. Restoration of asphalt pavement may be up to 2-inch pavement grind and 2-inch asphalt overlay and micro paving. Magnolia Avenue has been newly restored and falls within our "No-Cut Moratorium" attached.

j) Off-site landscaping improvements to be maintained by the Applicant.

i) All off-site landscaping improvements along the frontage of this project are to be the responsibility of the project for maintenance and upkeep. The watering of this landscaping in the right of way is to be supplied by the projects water service for irrigation.

k) Off-site Utility Extension/Connection Plans

i) Applicant shall connect all buildings to the public sewer. The sewer is to be constructed in the common driveways, or areas that facilitate maintenance that may

require disturbances, through new lateral(s) (sized per the feasibility study and engineered calculations, minimum 6 inches) with clean-out(s) at property line per City standard drawing S-215 and S-225. Cap off all abandoned laterals at the connection point at the main line in the street and not at the curb or right of way line to the satisfaction of the City Engineer. Indicate on the Site/Utility Plan the work to be done by the Applicant

ii) The Applicant shall comply with the requirements of MMC Section 13.12.015 Non-Storm Water Discharges, Section 13.12.02 Deposit or Discharge of Specified Substances Prohibited, Section 13.12.030 Grease Traps Required and Section 13.12.040 Maintenance of Sewer Laterals. All sewer laterals shall be maintained by the owner of the property served by such lateral in a safe and sanitary operating condition so that there is no seepage of waste at any point up to and including the junction of the sewer lateral and sewer main so that passage of waste through the lateral to the sewer main is free from stoppage and obstruction; all devices and safeguards required for the operation of sewer laterals shall be maintained in good working order. The Applicant shall provide the Department of Public Services (Public Works Division) a copy of a closed circuit television inspection report of the condition of the existing sewer lateral. If the sewer lateral needs repair, it shall be completed to the satisfaction of the City Engineer prior to commencement of the applicant's operation or prior to issuance of certificate of occupancy.

A CCTV video of the existing/proposed sewer lateral connecting to the City mainline is required for the project; a copy of the video shall be submitted to Public Works. Prior to CCTV please notify the Department of Community Services (Public Works Division) requesting to have the Public Works Inspector on-site to witness the inspection.

l) Traffic Engineering Conditions

i) Prepare a Traffic Impact Analysis (TIA) for the proposed development. Scope of TIA as approved by the City Consulting Traffic Engineer. The project development shall support the recommendations of their own developed approved traffic impact analysis. When traffic issues arise from unexpected shifts in traffic patterns or road hazard due to the recommendations of the analysis, the project shall cooperate and participate in the additional corrective actions needed to improve the traffic concerns of the traveling public, local residents and the city. If needed the owner/manager of project will participate in traffic committee concerns and recommendations as the need arise

ii) The City has conducted an Area Traffic Study and has adopted a Development Impact Fee (DIF) program to address the cumulative effects of major development projects on the transportation system in the vicinity of the Monrovia Gold Line Station. The DIF includes the project's fair share cost of the traffic study and the recommended mitigation measure(s) identified for that project's specific impact(s). The DIF, shall be paid prior to recording the Final Map. Payment of the DIF shall fully satisfy the project's mitigation obligation for those improvements covered by the Area Traffic Study as they relate to this project.

iii) Prepare and submit for approval: traffic control plans and staging plans for all off-site improvements and utility connections. Applicant to maintain all traffic control devices for the entire time while working within the City right of way.

m) Environmental Conditions

i) Based upon the requirements of the City's Storm Water Management Ordinance, MMC 12.36 and the Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (MS4 NPDES) Permit issued by California Regional

Water Quality Control Board, Los Angeles Region, the following shall be incorporated into the project application:

The applicant shall be responsible for the following when applicable in the code:

ii) Minimize impacts from storm water runoff on the biological integrity of natural drainage systems and water bodies in accordance with requirements under the California Environmental Quality Act (California Public Resources Code Section 21100), Section 13369 of the California Water Code, Sections 319, 402(p), and 404 of the Clean Water Act, Section 6217(g) of the Coastal Zone Act Reauthorization Amendments, Section 7 of the Environmental Protection Act, and local governmental ordinances.

iii) The applicant shall provide in a table on the title sheet of the approved grading plans for the project the following information :

1. The drainage area addressed by the project in Acres
2. The total BMP retention capacity of the project in Acre-Feet
3. The estimated total runoff volume to be retained on-site for a typical year.

n) Demolition of Existing Structures

i) The project demolition activities shall comply with the City's Construction and Demolition Recycling Program (C&D Recycling Program) by filing an application and submitting a deposit to Public Works Environmental Services prior to issuance of permits. Building, demolition, and grading permits will not be issued until the applicant provides the City with the required forms and the waste management plan has been reviewed and approved by the Environmental Services. If the Applicant chooses not to participate in the C&D Recycling Program, then the hauler must be identified on the demolition, building and grading plans.

ii) Building demolition permits will not be issued until the applicant provides copy of Air Quality Management District (AQMD) permit.

o) As-built Plans

i) Applicant shall provide to the City of Monrovia revised plans of the original size, on mylar, showing all as-built conditions for the off-site and on-site improvements prior to the release of bonds held for the completion of the map.

DATA SHEET 3 Findings

VTPM 82326/CUP2019-2013
Alexan Foothills Specific Plan and Development Project

1607 South Magnolia Avenue
1625 South Magnolia Avenue
1631 South Magnolia Avenue
1541 South Dale Drive
340 West Evergreen Avenue
410 West Evergreen Avenue
418 West Evergreen Avenue

VESTING TENTATIVE PARCEL MAP

As required by Sections 66473.5 & 66474 of the California Government Code, the decision for recommending approval of the Vesting Tentative Parcel Map No. 82326 for a transit-oriented multi-family community consisting of 436 residential units, including four live/work units, and a 798-space parking structure on a 6.77-acre (gross) site is based on the following findings:

A. That the vesting tentative parcel map consolidating eight parcels into one 6.77-acre (gross) parcel for the development of a multi-family development consisting of 436 units, including four live/work units, and a 798-space parking structure, together with the provisions for the subdivision's design and improvement, are consistent with the Monrovia General Plan, and satisfies the requirements of the Map Act and of the Municipal Code. This project will be consistent with the General Plan in that it will meet the goals of the Land Use and Housing Elements in providing additional housing opportunities in Monrovia. Additionally, it meets the goals of the Circulation Element in providing residential opportunities close to transit. Thus, it is compatible with the objectives, policies, general land uses, and programs specified in the General Plan. This project will also conform to the standards contained in Planned Development Area - 27 providing a high-density project on a 6.77-acre site close to transit that provides a 10' wide sidewalk and landscaping adjacent to the curb creating a streetscape that is inviting to pedestrians.

B. That the site is physically suitable for this type of development, in that it is relatively flat in topography and has adequate access to public streets and is developed at a density permitted by the Planned Development Area – 27 standards on a 6.77-acre (gross) property. No variances are requested for the proposed improvements.

C. That the site is physically suitable for the proposed density of development, specifically the 6.77-acre site. A minimum of two acres is required for a specific plan and the proposed "Alexan Foothills Specific Plan" is based on the density parameters pursuant to the Planned Development Area – 27. The multi-family development is a consolidation of eight parcels and accommodates a 798-space parking structure and a multi-family building with 436 residential units, including four live/work units. The proposed development will meet all of the development standards as outlined in the "Alexan Foothills Specific Plan" and no variances are requested for the proposed improvements.

D. That the design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Pursuant to the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was completed which analyzed the potential impacts that the proposed project could have on the environment. The Biological Resources Assessment within the EIR documents that the project site is located within an urbanized area with no natural habitat. With mitigation, the project would not significantly impact any sensitive plants, plant communities, fish or wildlife habitat or any sensitive species.

E. The design of the subdivision and the type of improvements are not likely to cause serious public health problems, as it will comply with all City design and safety standards, including fire suppression.

Pursuant to the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was completed which analyzed the potential impacts that the proposed project could have on the environment. The EIR identified several potential environmental impacts that would be reduced to the “less than significant” level with mitigation incorporated.

The Monrovia Police Department, located at 140 East Lime Avenue, provides law enforcement and police protection services within the City. The Monrovia Police Department provides a full range of programs, including Community Activist Policing, Neighborhood Partnerships, Drug Abuse Resistance Education (DARE), Parenting Workshops, and Safe City, Safe Campus. Data Sheet 1 (Condition No. 36) requires the submittal of a security management plan for the entire development for the review and approval by the Chief of Police prior to the issuance of a Certificate of Occupancy. Data Sheet 1 (Condition No. 35) requires the final parking structure design be submitted for the review and approval by the Chief of Police.

The City of Monrovia’s Fire and Rescue provides full-service fire protection and emergency medical services to all properties in the City. The Fire Department is responsible for 13.7 square miles of residential, commercial, and industrial uses, as well as open space brush area. Two fire stations (Fire Stations 101 and 102) each house an engine company and paramedics services, with one station housing the ladder truck and division chief (shift chief). These facilities are equipped to serve a resident population of over 40,000. For the Specific Plan project site, emergency first response is expected to come from Fire Station 102 (2055 South Myrtle Avenue).

F. The design of the subdivision and the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision, as the design will not interfere with public sidewalks, which will continue to provide access to the public along those rights-of-way. South Dale Drive is a 25 foot wide easement within the project site that provides City access to maintain a concrete drainage swale. That easement would be vacated as part of the lot consolidation; however, a condition of approval (Data Sheet 2, Condition 2) would require a new easement to access the drainage swale

for maintenance. The Planning Commission finds that the vacation of Dale Drive conforms to the provisions of the City's General Plan pursuant to Section 65402 of the Government Code. Since Dale Drive primarily exists to provide access to the drainage swale, this street is not an essential roadway for circulation purposes, nor does it appear that the street vacation will result in a diversion or modification of existing patterns.

The Specific Plan supports Policies 1.9 to 1.11 of the City's Circulation Element of the General Plan since a traffic study was prepared consistent with the City's guidelines to determine the project's impact to surrounding streets. One traffic impact was identified at the intersection of South Myrtle Avenue and Central Avenue within the traffic study. That impact can be mitigated with physical improvements to the center median on South Myrtle Avenue.

G. The City has considered the effect of the subdivision on the housing needs of the region in which the City is situated, and balanced those needs against the public service needs of its residents and available fiscal and environmental resources. The proposed development will not significantly increase the demands on available fiscal and environmental resources. The housing needs will be improved in the region by the addition of the 436 residential apartment units, including four live/work units.

H. The discharge of waste from the proposed subdivision into an existing community sewer system will not result in violation of existing requirements of the Regional Water Quality Control Board. The City provides local sewage collection service via in-street lines that connect to regional trunk lines. Data Sheet 2 (Condition No. 2.d.i.) requires that the applicant install sanitary sewers to Monrovia's sewer system to serve the entire development. According to the Draft EIR for the project, the City's wastewater capacity study indicates there is sufficient capacity for the conveyance system to accommodate the proposed 436 residential units and other developments in the area. The project includes installation of new 8" sewer lines connecting to the existing 10" sewer main in South Magnolia Avenue on the south boundary of the project frontage. the City's wastewater capacity study does not recommend any additional wastewater infrastructure to serve the Project or other proposed

The Project will connect to the City's existing stormwater system and will comply with the City's Stormwater Management Regulations (Chapter 12.36 of the Municipal Code) and implement Low Impact Development (LID) standards.

CONDITIONAL USE PERMIT

As required by Section 17.52.290 of the Monrovia Municipal Code, the decision recommending approval of Conditional Use Permit No. CUP2019-0013 for a transit-oriented multi-family community consisting of 436 residential units, including four live/work units, and a 798-space parking structure on a 6.77-acre site is based on the following findings:

A. The project site is adequate in size, shape and topography for a multi-family development consisting of 436 apartment units, including four live/work units and a

798-space parking structure on a 6.77-acre (gross) site and meets the size and dimension requirements in the Zoning Ordinance and the Specific Plan. A minimum of two acres is required for a specific plan, which this site exceeds. The proposed "Alexan Foothills Specific Plan" is based on the development parameters established by the Planned Development Area - 27 and the Monrovia Land Use Element, and complies with the established maximum caps and minimum requirements for various types of development within the parameters of the "Alexan Foothills Specific Plan". The property is also relatively flat in topography and will accommodate the proposed development without variances from the Monrovia Municipal Code.

B. The project site has sufficient access to streets and highways, adequate in width and pavement type to carry the quantity and quality of traffic generated by the proposed multi-family development consisting of 436 apartment units, including four live/work units and a 798-space parking structure on 6.77 acre site. The site is bounded by South Magnolia Avenue and Evergreen Avenue which are designated as collector streets in the Circulation Element with planned bikeway facilities. The primary street frontage is South Magnolia Avenue which has a 60-foot wide right-of-way width. Secondary access is taken from Evergreen Avenue which has a width of 46 feet. The primary vehicular access to the project site, including pedestrian and bicyclists, is through a 26 foot wide private street (or woonerf) from South Magnolia Avenue. The woonerf and a secondary access point from Evergreen Avenue provides vehicular access to the project's parking garage. A loading area and refuse collection will occur within a motor court location off of Evergreen Avenue. The project is consistent with the General Plan's goals and policies that support the use of public transportation, including light rail transit, and the use of public transportation as an alternative to automobile travel.

C. The project will be compatible with the General Plan and will not adversely impact the objectives of the General Plan, specifically, the Planned Development Area – 27 standards allow for high density residential development (64du/acre) over a minimum of two acres with the approval of a specific plan. The proposed "Alexan Foothills Specific Plan" demonstrates compliance with the Monrovia General Plan Elements related to Land Use, Circulation, Housing, Open Space, and Noise.

D. The project will comply with the applicable provisions of the zoning ordinance, specifically MMC §17.04.035. The development will comply with the development standards set forth in the "Alexan Foothills Specific Plan." No variances are requested for the proposed improvements.

E. The proposed location of the multi-family development consisting of 436 residential units, including four live/work units and a 798-space parking structure and the conditions under which it will be operated or maintained will not be detrimental to the public health, safety or welfare, nor will it be materially injurious to properties or improvements in the vicinity, as the conditions of approval and the mitigation measures in the Mitigation Monitoring and Reporting Program address potential impacts during the construction process as well as requirements for the ongoing maintenance and operation of the property.

F. The proposed project will not result in the demolition of a residential structure built prior to January 1, 1940, with architectural or know historic value. The property located at 1607 South Magnolia Avenue is currently developed with a one-story bungalow that was originally built as a primary residence circa 1910 – 1930. The property located at 340 West Evergreen Avenue is currently developed with a one-story single-family residence that was built in 1952. Given that the existing residential structures were built within the historic period (50 years of age or older) and are proposed for demolition to make way for new development, the project was required to be reviewed by the Historic Preservation Commission to determine if the properties meet the criteria for listing in the California Register of Historical Resources or the local landmark criteria and are not "historic resources" for the purposes of the California Environmental Quality Act. On August 29, 2018, the Historic Preservation Commission found that the existing residences on site do not have architectural or known historic value and Department of Parks and Recreation (DPR) Forms prepared by Pamela Daly (Daly & Associates) found that the existing developments do not have architectural or known historic value. The DPR Forms were formally approved with a California Historic Status Code of 6Z, a status code that is assigned to properties that do not meet any of the criteria required for landmark designation, by the Historic Preservation Commission on August 29, 2018.

HOUSING ACCOUNTABILITY ACT

A. The proposed development is subject to the approval requirements of the state Housing Accountability Act because the development meets or exceeds all of the applicable objective development standards contained within the Monrovia General Plan and the Alexan Foothills Specific Plan, including the density requirements, lot coverage requirements, setback requirements, and the Floor Area Ratio (FAR) requirements.

PLANNING COMMISSION RESOLUTION NO. 2019-0012

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MONROVIA RECOMMENDING THAT THE CITY COUNCIL CERTIFY THE ENVIRONMENTAL IMPACT REPORT AND APPROVE THE MITIGATION MONITORING AND REPORTING PROGRAM, AND MAKING CERTAIN FINDINGS AS REQUIRED BY THE CALIFORNIA ENVIRONMENTAL QUALITY ACT ("CEQA"), IN CONNECTION WITH THE APPROVAL OF A PLANNED DEVELOPMENT (PD-27), GENERAL PLAN AMENDMENT GPA2019-0003, ZONING CODE AMENDMENT ZA2019-0003, AND ALEXAN FOOTHILLS SPECIFIC PLAN SP2019-0002, AND DEVELOPMENT PROJECT, TENTATIVE PARCEL MAP NO. 82326, CONDITIONAL USE PERMIT CUP2019-0013, FOR THE DEVELOPMENT OF A 5-STORY, 436-UNIT APARTMENT COMPLEX AND A 7-STORY PARKING GARAGE ON PROPERTY LOCATED AT 1607, 1625, AND 1631 SOUTH MAGNOLIA AVENUE; 1541 SOUTH DALE DRIVE; AND 340, 410, AND 418 WEST EVERGREEN AVENUE. (APNS: 8507-006-041, -042. -043, -044, -022, -024, -016, AND -035).

RECITALS

(i) The City of Monrovia has initiated amendments to the General Plan and Zoning Code to change the land use designation for 9.6 acres of land from “Manufacturing” to “Planned Development” (GPA 2019-0003). Specifically, the General Plan amendment would establish Planned Development-Area 27 (PD-27), “Station Square West” as the new land use designation for that land. The 9.6 acre planning area is bounded by Evergreen Avenue to the north, the Metro Gold Line tracks to the south, South Magnolia Avenue to the east, and South Mayflower Avenue to the west. The proposed development guidelines for PD-27 would provide additional opportunities for transit-oriented development within walking distance of the Monrovia Gold Line station (0.2 mile away) by allowing up to 518 dwelling units based on a density of 54 units per acre. The proposed PD-27 designation is divided into three distinct areas (Area A, B, and C). A Zoning Ordinance and Map Amendment (ZA 2019-0003) would change the “M” (Manufacturing) zone to the “PD” (Planned Development) zone (Ordinance No. 2019-13). The 9.6 acre area includes the following addresses and Assessor Parcel Numbers (APNs): 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040).

Trammel Crow Residential Company submitted applications for the Alexan Foothills Specific Plan (SP 2019-0002) and development project within Area “B” of the proposed PD-27 district. The specific plan identifies the long-term vision and objectives for private development and public improvements within a 6.77 acre area of PD-27. Trammel Crow Residential Company is also proposing to implement that specific plan with the

development of a multi-family development project to include a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls. Out of the 798 parking stalls, 632 spaces are designated for the residents, 112 spaces are reserved for guests, 34 spaces are available to the public parking, and 20 are intended for apartment leasing and the four live/work units. The apartment complex would include two pools and tenant amenity courtyards. On the Magnolia Avenue side of the complex there would be a two-story lobby, a fitness room, and four live-work units, all with apartments above. Three outdoor/rooftop amenity decks are planned on top of the apartment complex's fourth level. Other tenant amenities include a pet spa, bike "kitchen" (i.e., bicycle repair area), tenant lounge, centralized mail/package delivery room, and a golf simulation room. The project also allows the use of bicycle sharing and ride sharing programs by providing bike parking for Metro Gold Line users and guests, and resident bicycle parking and storage. The development project would be located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, and 8507-006-024).

The applications for the Alexan Foothills Specific Plan and development project include: a General Plan Amendment (GPA 2019-0003) to designate a Specific Plan for the 6.77 acre project site approval of the Alexan Foothills Specific Plan, a Zoning Ordinance and Map Amendment (ZA 2019-0003) to designate the zoning of that 6.77 acre area as "SP" (Specific Plan), a General Plan Conformity Finding (GPC 2019-0003) affirming that the proposed vacation of Dale Drive (within the Alexan Foothills development site) conforms to the provisions of the City's General Plan, Vesting Tentative Parcel Map No. 82326 (TPM 2019-0005) to consolidate eight parcels into one 6.77 acre parcel, and a Conditional Use Permit (CUP 2019-0002) to allow construction of the 5-story, 436-unit apartment complex and a seven story 8-level parking garage for 798 stalls.

(ii) On November 13, 2019, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on the proposed amendments to the General Plan and Zoning Code and the Alexan Foothills Specific Plan and development project. At that meeting, the Planning Commission voted to continue the public hearing to the Planning Commission's January 15, 2020 regularly scheduled meeting. The continuance allowed time for a second 45-day public review period of the Draft Environmental Impact Report that was prepared for the amendments to the General Plan and Zoning Code and the Alexan Foothills Specific Plan and development project (State Clearing House No. 2018101058).

On January 15, 2020, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on the Project. At that hearing, all interested persons were given an opportunity to be heard. The Planning Commission received and considered the staff report and all the information, evidence, and testimony presented in connection with the amendments to the General Plan and Zoning Code and the Alexan Foothills Specific Plan and development project.

(iii) Environmental Review

(a) City staff determined that the amendments to the General Plan and Zoning Code and the Alexan Foothills Specific Plan and development project could have significant effects on the environment based on the project applications and accompanying technical reports. Therefore, a Draft Environmental Impact Report (Draft EIR) was prepared pursuant to the provisions of the California Environmental Quality Act (CEQA). The General Plan/Zoning Code Amendment was evaluated at the "program" level of analysis; the Alexan Foothills Specific Plan and development project was evaluated at the "project" level of analysis. The Draft EIR was circulated for public review and comments for a period of 45 days (September 26, 2019 to November 13, 2019). Prior to the conclusion of that review period, an administrative error was discovered. The Air Quality section (Chapter 7) was inadvertently omitted from the draft EIR document. That chapter was subsequently incorporated into the document and the complete Draft EIR and was recirculated made available for a second 45-day review and comment period (November 13, 2019 to December 26, 2019).

A Final EIR was prepared which includes the comments on the Draft EIR from the original 45-day review period, the comments on the Draft EIR from the second 45-day review period, responses to all comments, and minor revisions to the Draft EIR based on the comments received and to achieve consistency with the methodologies used to study air quality and greenhouse gas emissions of similar nearby projects. Based on a full build-out of the PD-27 area, the updated air quality calculations showed that the emission levels now exceed a Tier 3 screening level within the four-tiered significance threshold system developed by the South Coast Air Quality Management District. However, the updated emission levels did not exceed the significance threshold of the fourth tier which would otherwise have resulted in a significant impact. As a result, there are no new significant impacts, and no new mitigation measures are required as a result of the minor adjustments to the GHG emissions calculations.

Pursuant to the California Environmental Quality Act ("CEQA") and the City's local CEQA Guidelines, the Final EIR concludes that the General Plan and Zoning Code amendments and the Alexan Foothills Specific Plan and development project will result in significant impacts that can be mitigated to a level of "less than significant" level, provided that mitigation measures are implemented; therefore, a Mitigation Monitoring and Reporting Program was prepared.

(b) Pursuant to CEQA Guidelines Section 15072, on September 26, 2019, the City of Monrovia as lead agency, prepared a Notice of Availability announcing that the Draft EIR was available for public review. The original public review period began on September 26, 2019 and continued through November 13, 2019. Upon incorporating the omitted Chapter 7, a second Notice of Availability was published on November 11, 2019 announcing that the complete Draft EIR was available beginning on November 13, 2019, continuing through December 26, 2019.

(c) The Draft EIR for the General Plan and Zoning Code amendments and the Alexan Foothills Specific Plan and development project is comprised of the following:

the primary analysis of potential environmental impacts, the Draft EIR appendices, including documentation of the EIR scoping process and Notice of Preparation (NOP). The Draft EIR is attached hereto and incorporated herein by reference as Exhibit "A".

(d) The Final EIR for the General Plan and Zoning Code amendments and the Alexan Foothills Specific Plan and development project is comprised of the following: 1) Chapter 1 providing introductory information regarding the FEIR, 2) Chapter 2 containing a list of all commenters on the Draft EIR during the initial public comment period, copies of all written comment letters on the Draft EIR, responses to all comments received on the Original Draft EIR, (3) Chapter 3 containing a list of all commenters received during recirculation of the DEIR and responses to those comments, and (4) Chapter 4 containing minor corrections and required revisions to the DEIR. The Final EIR is attached hereto and incorporated herein by reference as Exhibit "B"

(e) As required by CEQA, the Mitigation Monitoring and Reporting Program for the General Plan and Zoning Code amendments and the Alexan Foothills Specific Plan and development project has been prepared and is attached hereto and incorporated herein by reference as Exhibit "C". The mitigation measures described therein are proposed as conditions of approval on the Project.

(iv) The custodian of records for all materials that constitute the record of proceedings upon which this decision is based is the Planning Division Manager. Those documents are available for public review in the Planning Division located at 415 South Ivy Avenue, Monrovia, California 91016.

(v) All legal prerequisites to the adoption of this Resolution have occurred.

RESOLUTION

NOW, THEREFORE, the Planning Commission of the City of Monrovia hereby finds, determines and resolves as follows:

1. The Planning Commission finds that all of the facts set forth in the Recitals of this Resolution are true and correct and are incorporated herein.

2. The Planning Commission finds that the public has been afforded ample notice and opportunity to comment on the Draft EIR, in accordance with the requirements of CEQA.

3. The Planning Commission finds that the additional information provided in the staff report accompanying the Project description, the revisions contained in the Final EIR, and the evidence presented in written and oral testimony received at the above-referenced public hearings do not represent significant new information so as to require re-circulation of any portion of the Draft EIR pursuant to CEQA Guidelines 15073.5 because the revisions to the Draft EIR do not identify any new, avoidable significant impacts; do not involve project revisions requiring new mitigation measures; and do not result in conditions

of project approval added after circulation of the Draft EIR that require changes the Draft EIR.

4. The Planning Commission has independently considered and reviewed the information in the Initial Study and Draft and Final EIRs, and all comments and responses thereto received regarding the EIR, and based upon the whole record of the proceedings before it, finds that the EIR was prepared in compliance with CEQA and the City's local CEQA Guidelines, and that the findings contained therein represent the independent judgment and analysis of the Planning Commission.

5. The Planning Commission finds that the Project's effects on the environment, with the imposition of the proposed mitigation measures, can be mitigated to an insignificant level so that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment.

6. Based on the findings and conclusions set forth above, the Planning Commission as the advisory body for the lead agency recommends to the City Council of the City of Monrovia that it review all of the documents attached hereto and find, based on its own independent review and judgment that the EIR was prepared in compliance with CEQA and the City's local CEQA Guidelines, and that the findings contained therein represent the independent judgment and analysis of the Planning Commission.

7. The Secretary of the Planning Commission shall certify to the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 15th day of January, 2020.

Gary Schaeffler, Chair
Monrovia Planning Commission

ATTEST:

APPROVED AS TO FORM:

Craig Jimenez, AICP, Secretary
Monrovia Planning Commission

Carol W. Lynch, Assistant City Attorney
City of Monrovia

Exhibit "A"
Draft Environmental Impact Report (DEIR)

A copy of the DEIR is on file in the Planning Division Manager's office. Also, an electronic copy of the DEIR is located on the City of Monrovia's website at the following link: http://www.cityofmonrovia.org/your-government/community-development/planning/development-spotlight

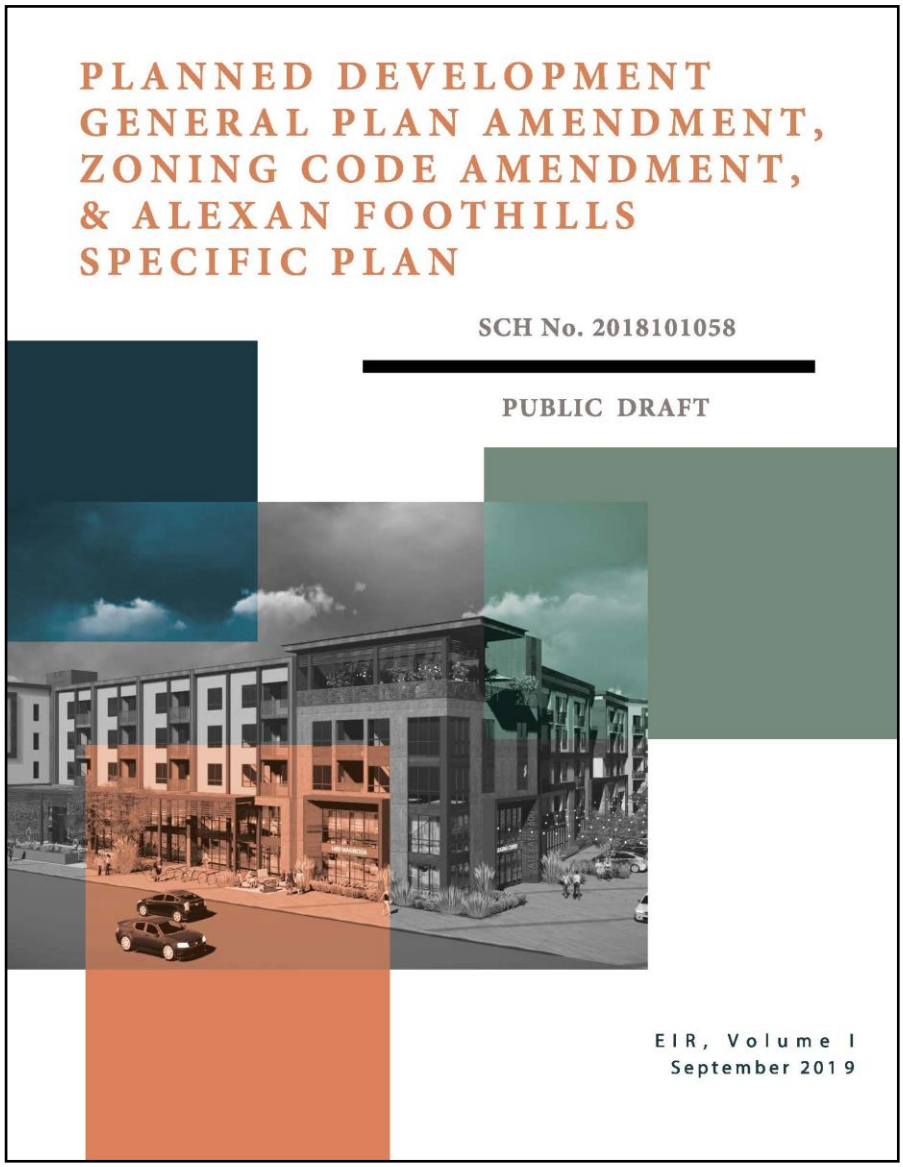


Exhibit "B"
Final Environmental Impact Report (DEIR)

A copy of the DEIR is on file in the Planning Division Manager's office. Also, an electronic copy of the DEIR is located on the City of Monrovia's website at the following link: http://www.cityofmonrovia.org/your-government/community-development/planning/development-spotlight

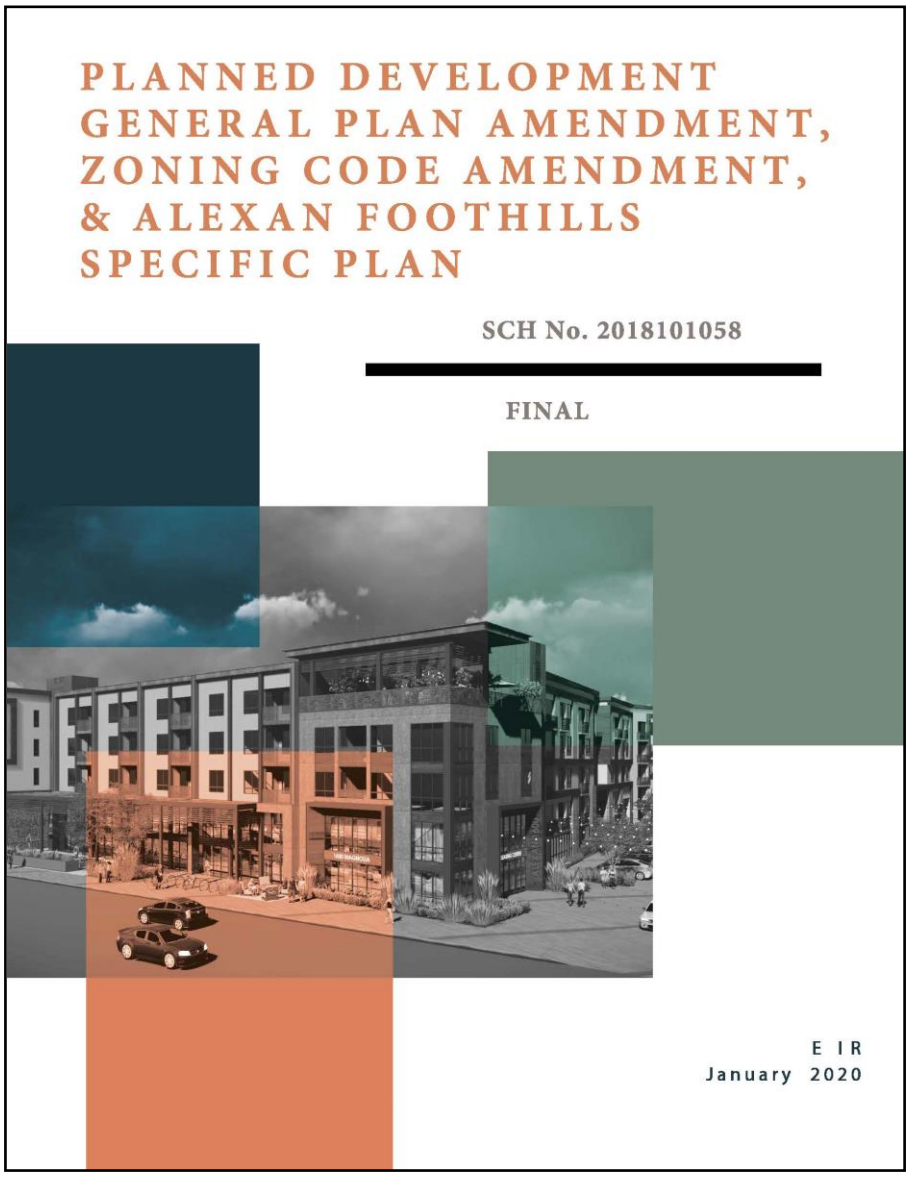


Exhibit "C"

Mitigation Monitoring and Reporting Program

A copy of the Mitigation Monitoring and Reporting Program is on file in the Planning Division Manager's office. Also, an electronic copy of the Mitigation Monitoring and Reporting Program is located on the City of Monrovia's website at the following link: http://www.cityofmonrovia.org/your-government/community-development/planning/development-spotlight

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
PD GPA, PD ZCA & ALEXAN FOOTHILLS SPECIFIC PLAN PROJECT
Approved by City Council on XXXX, 2020

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Aesthetics			
MM AES-1: Neighborhood Compatibility Design Review. To ensure compatibility with the surrounding residential neighborhood, all future development in the PD-27 area, including non-residential development, shall undergo the Neighborhood Compatibility Design Review process outlined in Section 17.12.005 of the Residential Development Standards in the Monrovia Zoning Code. **Plan Requirements and Timing:** Prior to construction of future development in the PD-27 area, the development must complete the Neighborhood Compatibility Design Review process as outlined in Section 17.12.005 of the Monrovia Zoning Code. **Monitoring:** City staff shall ensure completion of the Design Review process prior to granting land use clearance for future development.	Land Use Clearance	Prior to Issuance of Land Use Clearance	Applicant
MM AES-2: Maintenance of Construction Barriers. Prior to issuance of any construction permits, the City of Monrovia (City) Community Development Director, or designee, shall verify that all construction plans include the following note: "During construction, the Construction Contractor shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways are maintained in a visually attractive manner. In the event that unauthorized materials or markings are discovered on any temporary construction barrier or temporary pedestrian walkway, the Construction Contractor shall remove such items within 48 hours." **Requirements and Timing:** Measure shall be printed on all construction drawings. **Monitoring:** City staff shall conduct periodic site inspections during construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM AES-3: Lighting shall be directed and shielded to focus illumination onto the desired areas only and avoid light trespass into adjacent areas. Reflective glass, metallic, and other highly reflective and glare producing materials, shall not be used in new building construction. **Requirements and Timing:** Measure shall be printed on all construction drawings. **Monitoring:** City staff shall conduct periodic site inspections during construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM AES-4: Comprehensive Lighting Plan. Prior to issuance of a building permit, the applicant shall submit a comprehensive lighting plan for review and approval by the City Community Development Director, or designee. The lighting plan shall be	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During	Applicant & Construction Contractor

PLANNING COMMISSION RESOLUTION NO. 2019-0013

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MONROVIA, CALIFORNIA, RECOMMENDING APPROVAL TO THE CITY COUNCIL OF GENERAL PLAN AMENDMENT GPA2019-0003, AMENDING THE TEXT AND THE LAND USE MAP OF THE LAND USE ELEMENT OF THE GENERAL PLAN TO CREATE A NEW PLANNED DEVELOPMENT AREA AND DEVELOPMENT STANDARDS FOR THE PROPERTIES LOCATED AT 1607, 1625, 1631 SOUTH MAGNOLIA AVENUE, 302, 340, 410, 418, 450 WEST EVERGREEN AVENUE, 1541 SOUTH DALE DRIVE, AND 1512, 1516, 1518, 1522, AND 1602 SOUTH MAYFLOWER AVENUE (APNS: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040)

RECITALS

(i) The City of Monrovia has initiated an application to amend the land use map and the text of the Land Use Element of the General Plan (the "amendments"). The amendments propose to create a new Planned Development Area and development standards for the properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040). The proposed amendment to the land use map and the text of the Land Use Element is contained in General Plan Amendment GPA2019-0003, which is attached hereto and incorporated herein by this reference.

(ii) On November 13, 2019 and January 15, 2020, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on the General Plan Amendment GPA2019-0003. At the hearing, all interested persons were given an opportunity to be heard. The Planning Commission received and considered the staff report and all the information, evidence, and testimony presented in connection with this project.

(iii) Environmental Review

Pursuant to the California Environmental Quality Act ("CEQA") and the City's local CEQA Guidelines, City Staff determined that the amendments could have significant effects on the environment. Therefore, a Draft Environmental Impact Report (Draft EIR) was prepared pursuant to the provisions of CEQA. The General Plan Amendment was evaluated at the "program" level of analysis. The Planning Commission has independently reviewed the Draft EIR and Final EIR, including all comments received, and based upon the whole record before it finds that they were prepared in compliance with CEQA, that with the imposition of the mitigation measures set forth in the EIR, there is no substantial evidence that the amendments will have a significant effect on the environment, and that the findings contained therein represent the independent judgment and analysis of the Planning Commission. Based on these findings, the Planning Commission has recommended that the City Council certify the EIR for the amendments.

(iv) The custodian of records for all materials that constitute the record of proceedings upon which this decision is based is the Planning Division Manager. Those documents are available for public review in the Planning Division located at 415 South Ivy Avenue, Monrovia, California 91016.

(v) All legal prerequisites to the adoption of this Resolution have occurred.

RESOLUTION

NOW, THEREFORE, the Planning Commission of the City of Monrovia hereby finds, determines and resolves as follows:

1. The Planning Commission finds that all of the facts set forth in the Recitals of this Resolution are true and correct.

2. Adoption of General Plan Amendment GPA2019-0003 will not have a significant effect on the environment for the reasons stated above.

3. The project is in conformance with the environmental goals and policies adopted by the City.

4. General Plan Amendment GPA2019-0003 is consistent with the objectives, policies, general land uses, and programs of the City of Monrovia General Plan, and adopted goals and policies of the City:

    a. Planned Development Area 27 will provide a set of land use standards for a traditionally Manufacturing neighborhood that accommodates a variety of residential, commercial, and industrial uses (1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue). The development standards encourage high quality transit oriented development within one block of the Gold Line Light Rail station. Therefore, General Plan Amendment GPA2019-0003 is consistent with Policy 1.4 of the General Plan Land Use Element, which encourages the location of new high density residential development in close proximity (i.e., within walking distance) of the downtown, other major retail commercial areas, and/or transit facilities.

    b. The Planned Development Area 27 standards will make conforming all currently non-conforming uses within the area, which has been traditionally zoned Manufacturing. Furthermore, PD-27 adopts performance standards for commercial uses and development standards consistent with Station Square Transit Village for residential uses. Therefore, General Plan Amendment GPA2019-0003 is consistent with General Plan Land Use Policy 4.2, which requires all new development to consider existing uses in terms of neighborhood disruption, buffering, architectural styles, building materials, development patterns, and scale of buildings within the vicinity of the proposed project.

    c. The Planned Development Area 27 standards will address the potential impacts that commercial uses may have on the surrounding neighborhood. To

ensure that land uses are sensitive and do not cause a nuisance to the surrounding residential neighborhood, specific review criteria will include, but are not limited to, compliance with the performance standards outlined in the Monrovia Municipal Code (Monrovia Municipal Code Chapter 17.32), business operation standards, and a review of parking and traffic generation. All uses that are not subject to Planning Commission review and approval based on zoning standards, will require review and approval by the Development Review Committee at a noticed public meeting. Therefore, General Plan Amendment GPA2019-0003 is consistent with Land Use Policy 4.2, which requires all new development to consider existing uses in terms of neighborhood disruption, buffering, architectural styles, building materials, development patterns, and scale of buildings within the vicinity of the proposed project.

d. The Planned Development Area 27 standards allow an overall density of 518 residential units over 9.6 acres, with higher density development permitted on the east side of the Area within one block of the Gold Line Light Rail station. Therefore, General Plan Amendment GPA2019-0003 is consistent with General Plan Housing Policy 4.2, which promotes the use of flexibility in development standards to accommodate new models and approaches to providing housing, such as transit-oriented development, mixed-use, co-housing and live/work housing. Furthermore, the standards conform with General Plan Housing Policy 2.1 which encourage the development of housing that responds to diverse community needs in terms of housing types, cost and location, emphasizing locations near services and transit that promote walkability.

5. With the concurrent approval of Zone Change ZA2019-0003, the zoning regulations for the proposed Planned Development-Area 27 will be consistent with General Plan Amendment GPA2019-0003. The subject property will be zoned PD-27 and will be regulated, consistent with the General Plan, through the Area PD-27 Standards and the Monrovia Municipal Code (Zoning) (Monrovia Municipal Code Section 17.08.010).

6. General Plan Amendment GPA2019-0003 will not adversely affect the public health, safety, or welfare in that it will provide for the orderly and consistent development in the City.

7. Based upon the findings and conclusions set forth above, the Planning Commission hereby recommends approval of General Plan Amendment GPA2019-0003 to the City Council, which amends the Land Use Element by designating a new Planned Development Area and adopting Area PD-27 Development Standards and the revised land use map as set forth in “Exhibit A,” which is attached hereto and incorporated herein by this reference.

8. The Secretary of the Planning Commission shall certify to the adoption of this Resolution.

SIGNATURES TO FOLLOW ON NEXT PAGE

PASSED, APPROVED AND ADOPTED this 15th day of January, 2020.

Gary Schaeffler, Chair
Monrovia Planning Commission

ATTEST:

Craig Jimenez, Secretary
Monrovia Planning Commission

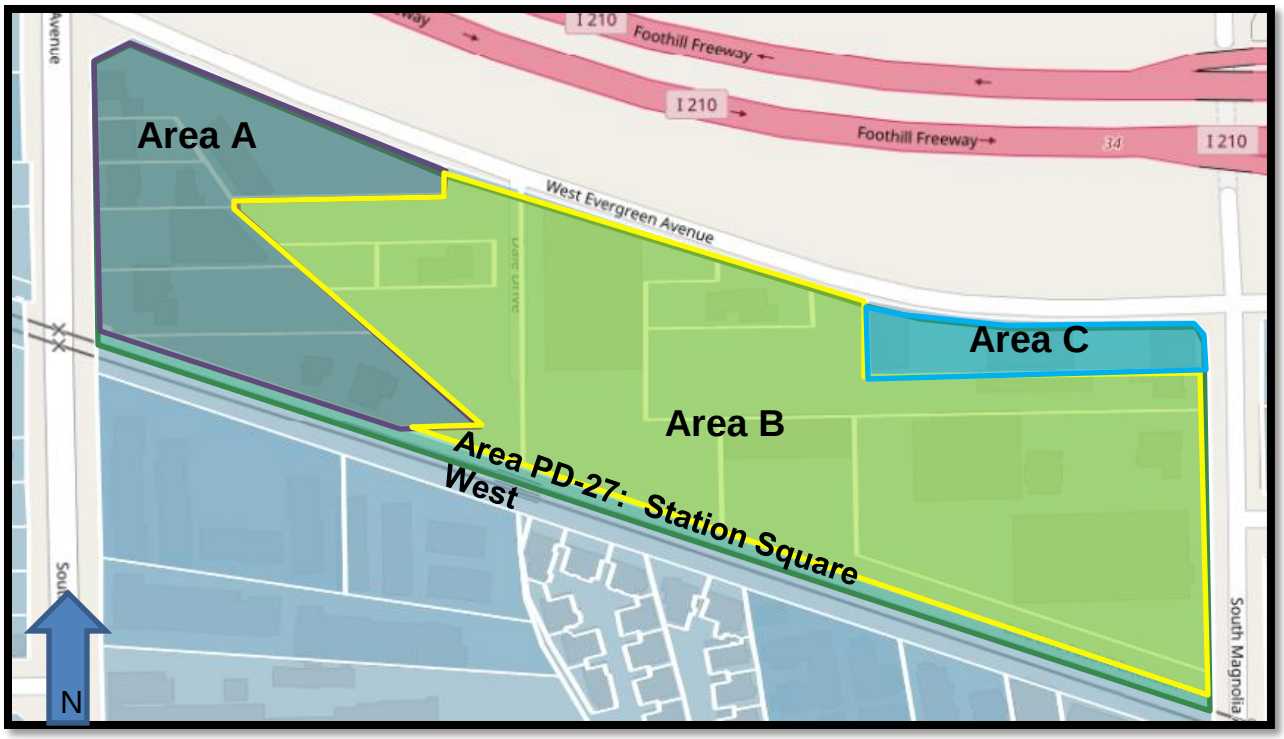
APPROVED AS TO FORM:

Carol W. Lynch, Assistant City Attorney
City of Monrovia

Exhibit "A"

General Plan Amendment GPA2019-0003
PD-27 Standards

Area PD-27: Station Square West: This is a 9.6 acre city block directly to the west of Station Square Transit Village (PD-12), bounded by Evergreen Avenue to the north, the Metro Gold Line train tracks to the south, South Magnolia Avenue to the east and South Mayflower Avenue to the west. This area has historically been zoned and developed for light- and heavy-manufacturing. The site is currently improved with a mixture of uses, including commercial/industrial businesses and legal nonconforming single family homes. Due to its proximity to the Monrovia Gold Line Station, this area is well suited to provide additional opportunities for transit-oriented development to support Station Square



Transit Village (PD-12).

General Provisions

1. A maximum PD area-wide residential build-out of 518 units shall be permitted. The maximum build-out is based on an overall density of 54 du/ac. The intensity of development shall be higher on the east end, and lower on the west end. Development proposed in excess of 518 units over the entire Planned Development Area shall require amendment of the Land Use Element of the General Plan.

2. New development shall be designed to be compatible with the Urban Design Objectives outlined in the Land Use Element for the Station Square Transit Village (PD-12) area (i.e., architecture, hardscape, landscape). New developments shall be designed to minimize massing and provide for articulation and design variety to enhance the pedestrian realm (i.e., include a pedestrian-scaled façade, provide easily identifiable pedestrian access to building entrances, etc.).

3. Existing legal uses and buildings shall be considered conforming.

4. New development located adjacent to or facing residential neighborhoods south of the Gold Line light rail tracks shall be designed to minimize potential adverse impacts, including light, glare, noise, and building mass.

5. New development with frontage on Magnolia shall incorporate streetscape that compliments Station Square Transit Village (PD-12), including architectural massing, character, and the pedestrian environment.

6. The parking requirements of the Monrovia Municipal Code shall apply. If a specific plan is proposed, a parking demand analysis may be provided.

7. A minimum of two acres is required for a specific plan.

Specific Provisions by Area

PD-27 is divided into three distinct areas. Specific guidelines have been established for each area within the Planned Development Area that address and respond to the existing conditions and allow for future development. Both the General Provisions and the Specific Provisions by Area apply to development within each area. To the extent there is a conflict between a general and specific provision, the specific provision shall control. Where both the general and specific provisions are silent, the Monrovia Municipal Code shall control.

Area A:

This area is approximately 2.3 acres and comprises the western edge of the Planned Development Area. The parcels fronting or adjacent to South Mayflower Avenue are currently developed with a mixture of residential and commercial/industrial buildings. Given the residential character of the surrounding neighborhood, this area is envisioned to be a medium-high to high-density residential neighborhood and shall be subject to the below provisions.

1. New multiple-family residential development on property totaling less than two acres shall be subject to the RH (Residential High Density) development standards and a maximum density of 23 dwelling units per acre.

2. New additions to existing residences or construction of additional units on previously developed parcels shall be subject to the RH development standards.

3. New nonresidential uses in existing nonresidential structures shall be subject to the provisions of the BE (Business Enterprise) zone.

4. The construction of new nonresidential buildings or additions to existing nonresidential buildings shall require the approval of a conditional use permit. However, a conditional use permit is not required if an addition is less than or equal to 25% of the existing building area, and the addition meets the requirements set forth in the Monrovia Municipal Code. New nonresidential buildings or additions to existing nonresidential buildings that are adjacent to residential properties shall meet the side and rear yard setback requirements of the adjacent residential zone.

Area B:

Area B is 6.77 acres and the standards include provisions for high density residential development. Given its proximity to the Monrovia METRO Gold Line Station, Area B allows for Transit Oriented Development that provides additional residential opportunities adjacent to and compatible with Station Square Transit Village (PD–12).

1. New multiple-family residential development on property that totals less than two acres shall be subject to the RH (Residential High Density) development standards and a maximum density of 54 dwelling units per acre.

2. As an incentive to provide transit-oriented development adjacent to Station Square Transit Village (PD–12), project sites that total two acres or greater may be developed at a maximum density of 64 dwelling units per acre through adoption of a Specific Plan (for a maximum of 436 units over the 6.77 acre area) and shall include a provision for a nonresidential or flex space such as a live/work component through the approval of a specific plan.

3. New development shall have its primary orientation towards South Magnolia Avenue.

4. All ground level interior spaces that front South Magnolia Avenue shall be directly accessible from the sidewalk.

5. High-quality exterior building design (signature architecture) shall be a primary consideration in the approval of a new development.
    a. If mixed-use developments are proposed, they shall: incorporate neighborhood-serving ground floor commercial space with frequent sidewalk entrances to promote pedestrian activity along the street; include communal and private open space for residents; make ground floor commercial uses visually distinct from the residential area above; distinguish residential entrances from commercial entrances; and incorporate upper floor balconies, bays, and windows that overlook the street into residential units to enliven the street elevation.
    b. If multi-family developments are proposed, they shall: introduce variation in façade and height to reduce building bulk; articulate building facades to portray a domestic scale and give identity to individual dwelling units; orient building entrances towards the street; and shall include private outdoor space for each dwelling unit.

Area C:

The 24,206 square foot parcel located on the southwest corner of West Evergreen Avenue and South Magnolia Avenue is currently developed with three commercial/industrial buildings. Area C permits commercial uses that support the adjacent transit oriented neighborhood and shall be subject to the below provisions.

1. New commercial uses in existing structures and new construction shall be subject to the provisions of the BE (Business Enterprise) zone provided they do not cause a nuisance to adjacent sites; they are carried out entirely within an enclosed building that meets high quality building design, site layout and landscape

standards, and they will harmonize with other surrounding land uses, with the following exceptions:

a. The construction of new nonresidential buildings or additions to existing nonresidential buildings shall require the approval of a conditional use permit. However, a conditional use permit is not required if an addition is less than or equal to 25% of the existing building area, and the addition meets the requirements set forth in the Business Enterprise Zone of the Monrovia Municipal Code.
b. As an incentive to provide transit related or smaller-scale neighborhood serving commercial uses providing a retail or service-oriented function, incidental retail sales of products manufactured on site may be permitted within existing commercial/industrial buildings without the provision of additional parking, subject to the review and approval of a minor conditional use permit.
c. An up to 10% reduction in required parking for new uses in existing structures may be permitted subject to a minor exception, provided that no existing parking spaces are eliminated. The removal of all parking spaces shall require approval of a Variance from the Planning Commission.

2. New light manufacturing uses shall conform to the performance standards set forth in Chapter 17.32 of the Monrovia Municipal Code pertaining to fire and explosion hazards, electrical disturbances, noise, vibration, smoke, odors, air pollution, light, and glare to minimize adverse impacts to adjacent residential development.

3. All supplies, products, materials, and equipment shall be stored within the building. Outdoor storage of supplies, products, materials, and equipment is prohibited.

4. To improve pedestrian traffic and connection to Station Square Transit Village (PD-12), the addition of well-designed storefronts to the existing commercial/industrial complex is encouraged and shall be permitted to create openings on the north and east building elevations subject to review and approval by the Development Review Committee. If storefronts are proposed, a strong relationship between buildings and the street shall be established through minimal setbacks at storefronts, matching window and door patterns, and frequent location of store entrances along the street.

5. The existing commercial/industrial complex may be permitted to be incorporated into an adjacent Specific Plan Area as a mixed-use component, through an amendment to the Specific Plan, subject to the following:
   a. Adaptive reuse of the existing buildings is encouraged. Possible uses include: shared creative co-working office spaces, artist studios, and micro-breweries.
   b. New store fronts and pedestrian paths of travel shall be oriented toward the Specific Plan Area to create pedestrian linkages.
   c. Future redevelopment of the site could include, but not be limited to, pedestrian oriented commercial uses and activities that support the transit oriented neighborhood.

PLANNING COMMISSION RESOLUTION NO. 2019-0014

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MONROVIA, CALIFORNIA, RECOMMENDING TO THE CITY COUNCIL APPROVAL OF THE ALEXAN FOOTHILLS SPECIFIC PLAN

RECITALS

(i) The City of Monrovia has initiated amendments to the General Plan and Zoning Code to change the land use designation for 9.6 acres of land from "Manufacturing" to "Planned Development" (GPA 2019-0003). Specifically, the General Plan amendment would establish Planned Development-Area 27 (PD-27), "Station Square West" as the new land use designation for that land. The 9.6 acre planning area is bounded by Evergreen Avenue to the north, the Metro Gold Line tracks to the south, South Magnolia Avenue to the east, and South Mayflower Avenue to the west. The proposed development guidelines for PD-27 would provide additional opportunities for transit-oriented development within walking distance of the Monrovia Gold Line station (0.2 mile away) by allowing up to 518 dwelling units based on a density of 54 units per acre. The proposed PD-27 designation is divided into three distinct areas (Area A, B, and C). A Zoning Ordinance and Map Amendment (ZA 2019-0003) would change the "M" (Manufacturing) zone to the "PD" (Planned Development) zone (Ordinance No. 2019-13). The 9.6 acre area includes the following addresses and Assessor Parcel Numbers (APNs): 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040).

Trammel Crow Residential Company submitted applications for the Alexan Foothills Specific Plan (SP 2019-0002) and development project within Area "B" of the proposed PD-27 district. The specific plan identifies the long-term vision and objectives for private development and public improvements within a 6.77 acre area of PD-27. Trammel Crow Residential Company is also proposing to implement that specific plan with the development of a multi-family development project to include a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls. Out of the 798 parking stalls, 632 spaces are designated for the residents, 112 spaces are reserved for guests, 34 spaces are available to the public parking, and 20 are intended for apartment leasing and the four live/work units. The apartment complex would include two pools and tenant amenity courtyards. On the Magnolia Avenue side of the complex there would be a two-story lobby, a fitness room, and four live-work units, all with apartments above. Three outdoor/rooftop amenity decks are planned on top of the apartment complex's fourth level. Other tenant amenities include a pet spa, bike "kitchen" (i.e., bicycle repair area), tenant lounge, centralized mail/package delivery room, and a golf simulation room. The project also allows the use of bicycle sharing and ride sharing programs by providing bike parking for Metro Gold Line users and guests, and resident bicycle parking and storage. The development project and the related specific plan would include the properties located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, and 8507-006-024).

The applications for the Alexan Foothills Specific Plan and development project include: approval of the Alexan Foothills Specific Plan, a Zoning Ordinance and Map Amendment (ZA 2019-0003) to designate the zoning of that 6.77 acre area as "SP" (Specific Plan), a General Plan Conformity Finding (GPC 2019-0003) affirming that the proposed vacation of Dale Drive (within the Alexan Foothills development site) conforms to the provisions of the City's General Plan, Vesting Tentative Parcel Map No. 82326 (TPM 2019-0005) to consolidate eight parcels into one 6.77 acre parcel, and a Conditional Use Permit (CUP 2019-0002) to allow construction of the 5-story, 436-unit apartment complex and a seven story 8-level parking garage for 798 stalls.

(ii) On November 13, 2019 and January 15, 2020, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on the project, including the Alexan Foothills Specific Plan. At the hearing, all interested persons were given an opportunity to be heard. The Planning Commission received and considered the staff report and all the information, evidence, and testimony presented in connection with this project.

(iii) Environmental Review

(a) Based on the information in the application and accompanying technical reports, an Environmental Impact Report (EIR), State Clearinghouse No. 2018101058, was prepared, pursuant to the California Environmental Quality Act ("CEQA") and the City's local CEQA Guidelines. The EIR identified potentially significant environmental effects that were mitigated to a level of insignificance by the imposition of mitigation measures.

(b) As set forth in Planning Commission Resolution PCR2019-0012, the Planning Commission has independently considered and reviewed the information in the Environmental Impact Report, comments on the Environmental Impact Report, the responses and revisions contained in the Final Environmental Impact Report and the Mitigation Monitoring and Reporting Program in making a recommendation on the adoption of the Alexan Foothills Specific Plan.

(iv) The custodian of records for all materials that constitute the record of the proceedings upon which this decision is based is the Planning Division Manager. Those documents are available for public review in the Planning Division located at 415 South Ivy Avenue, Monrovia, California 91016.

(v) All legal prerequisites to the adoption of this Resolution have occurred.

RESOLUTION

NOW, THEREFORE, the Planning Commission of the City of Monrovia hereby finds, determines and resolves as follows:

1. The Planning Commission finds that all of the facts set forth in the Recitals of this Resolution are true and correct.

2. For the reasons set forth above and based on the Environmental Impact Report, the adoption of the Avalon Monrovia Specific Plan, with the mitigation measures imposed on the proposed development, will not have a significant effect on the environment.

3. The proposed Specific Plan is consistent with the objectives, policies, general land uses, and programs of the City of Monrovia General Plan, and adopted goals and policies of the City.

   a. The proposed Alexan Specific Plan calls for the orderly development of a transit-oriented multi-family residential development of 436 dwelling units within close proximity to the Metro Gold Line Monrovia station. The Specific Plan provides car and bicycle parking for residents consistent with the needs of a transit-oriented project, as well as paid parking for Gold Line patrons. Included onsite amenities, private and common open spaces, recreational areas, and public open spaces contribute to a well-designed living environment. The design of the buildings, placement of structures, and the architecture have been carefully thought through to relate visually to the adjacent neighborhoods and structures. Only minor infrastructure improvements are needed to support the development planned. The Specific Plan is oriented towards South Magnolia Avenue, near to the Monrovia Gold Line Station, which helps implement the Transit Oriented Development goals of the City of Monrovia, the neighborhood, and the project. Therefore, the Specific Plan is consistent with the City of Monrovia General Plan Land Use Element goals and policies that are listed in Chapter 5, Section 5.1 (Circulation Element).

   b. The proposed specific plan would not be detrimental to the public interest, health, safety, convenience or welfare of the City. The Alexan Foothills Specific Plan allows the development of a transit-oriented multifamily residential development within 0.2 mile of the Monrovia Gold Line Station. Improvements include project design that facilitates pedestrian access to the light rail station and onsite parking standards that conform to actual parking demands and provides additional parking for the nearby Monrovia Gold Line station users. The project provides bicycle parking and storage for 14 bicycles (short term) and 268 bicycles (long term). Therefore, the Specific Plan is consistent with the City of Monrovia General Plan Circulation Element goals and policies that are listed in Chapter 5, Section 5.2 (Circulation Element).

   c. The Alexan Foothills Specific Plan will create a new housing site to facilitate the provision of a range of housing types to meet community needs, including: 436 new residential units with 20 studios, 250 one-bedroom, 147 two-bedrooms, 15 three-bedrooms, and four live/work units. Its location within 0.2 mile of the Monrovia Gold Line Station and abundance of recreational amenities promotes a healthy and sustainable Monrovia which minimizes reliance on natural resources and automobile use. Therefore, the Specific Plan is consistent with the City of Monrovia's General Plan Housing Element goals and policies that are listed in Chapter 5, Section 5.3 (Housing Element).

d. The Alexan Foothills Specific Plan complements the City's park and recreational facilities through its addition of new common and private recreational areas for the residents. Common open space and amenities include three courtyards, pool courts, and common roof decks, exceeding 67,000 square feet. The project also includes a public garden plaza. The residents' use of offsite recreational facilities could still occur and increase above existing conditions. Therefore, the development of the Alexan Foothills Specific Plan is subject to an impact mitigation measure that will require the payment of an in-lieu park impact fee that will provide parkland resources consistent with the General Plan policy of three acres of parkland per 1,000 residents. The developer of the specific plan may request the City to establish a Community Facilities District (CFD) with the approval of a special tax set at the amount determined by the City. Therefore, the Alexan Foothills Specific Plan is consistent with the Open Space Element goals and policies that are listed in Chapter 5, Section 5.4 (Open Space Element).

e. The Alexan Foothills Specific Plan allows the development of a multi-family residential structure, including live-work units near the Monrovia Gold Line Station. The development will incorporate building code requirements to attenuate interior noise. Compliance with the City's noise ordinance (MMC Chapter 9.44) will be required. Therefore, the Alexan Foothills Specific Plan is consistent with the Noise Element goals and policies that are listed in Chapter 5 Section 5.5 (Noise Element) of the General Plan.

4. The proposed Specific Plan would not be detrimental to the public interest, health, safety, convenience or welfare of the City. The Alexan Foothills Specific Plan would allow the development of a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls. The developer of this project would be subject to the conditions of approval imposed by the City's Planning, Building, Fire, and Public Works Departments. Furthermore, mitigation measures were prepared in connection with r the environmental issues that were deemed potentially significant in the EIR, which will be incorporated as conditions of approval of the project. Compliance with the conditions of approval and the Mitigation Measures will protect the public interest, health, safety, convenience and welfare.

5. The subject property is physically suitable for the requested land use designation and the anticipated land use development. Implementation of the Alexan Foothills Specific Plan will require the consolidation of eight parcels of land into one 6.77 acre parcel. The site's topography has a gentle slope towards the south and west where there is a concrete drainage swale owned and operated by the City. A 25 foot wide easement to the City (South Dale Drive), which is used for maintenance access to the concrete drainage swale, would be vacated as part of the lot consolidation. Chapter 2, Section 2.5 (Mobility Plan) calls for a maintenance easement that wraps around the western and southern edge of the site which will provide access to that

drainage swale. The Alexan Foothills Specific Plan includes a multimodal circulation plan for the 6.77 acre site for the safe movement of pedestrians, bicyclists, and motorists. The site provides multiple access points to adjacent streets (West Evergreen Avenue and South Magnolia Avenue) with sufficient space for parking, deliveries, and refuse collection. The property is void of any physical constraints, access issues, or compatibility with adjoining land uses, and is therefore physically suitable for the requested specific plan and development.

6. The proposed Specific Plan shall ensure development of desirable character, which will be compatible with existing and proposed development in the surrounding neighborhood. Objectives of the Alexan Foothill Specific Plan (Chapter 1, Section 1.7) include: upgrading the existing physical conditions of the site to an urban form that is more compatible with the adjacent Station Square Transit Village neighborhood, uses architecture and design elements to ensure high quality design and aesthetics, and enhances this portion of the Monrovia community by encouraging pedestrian activity. The Alexan Foothills Specific Plan design elements (Chapter 2, Section 2.3) require the following: a street-oriented development pattern (buildings located near the sidewalk edge) along the street where pedestrian activity is encouraged; multimodal street entrances that provide easily identifiable pedestrian and bicycle access to the site; well-defined building entrances orienting to the street; building façade and height variations that enhance visual interest; inviting public spaces; pathways, and landscaping that attract visitors and residents, and upper-floor residential balconies that overlook the street and other public spaces.

7. Based upon the findings and conclusions set forth above, the Planning Commission hereby recommends approval of the Alexan Foothills Specific Plan to the City Council as set forth in “Exhibit A” attached hereto and incorporated herein by this reference.

8. The Secretary of the Planning Commission shall certify to the adoption of this Resolution.

SIGNATURES TO FOLLOW ON NEXT PAGE

PASSED, APPROVED, AND ADOPTED this 15th day of January, 2020.

Gary Schaeffler, Chair
Monrovia Planning Commission

ATTEST:

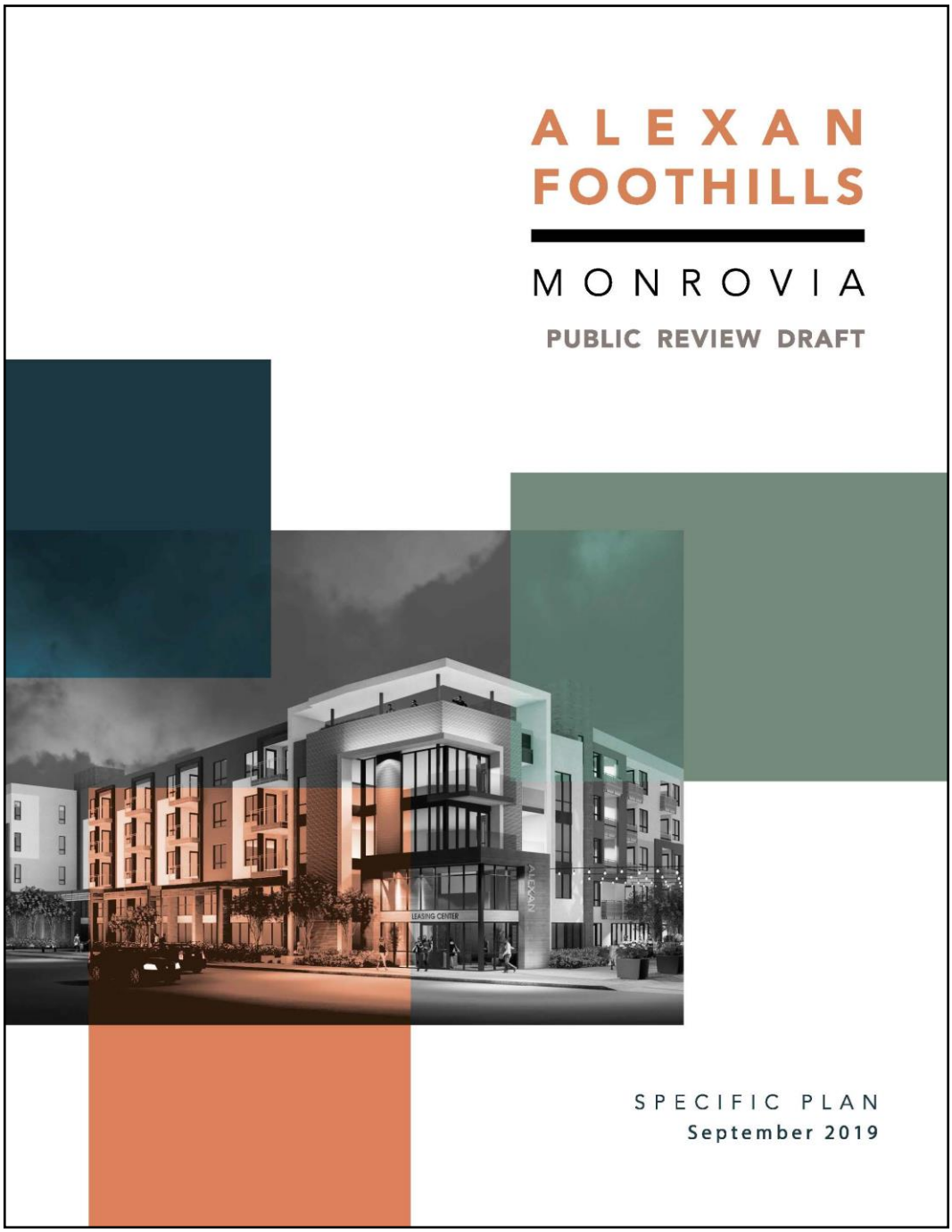
APPROVED AS TO FORM:

Craig Jimenez, AICP, Secretary
Monrovia Planning Commission

Carol W. Lynch, Assistant City Attorney
City of Monrovia

EXHIBIT A
ALEXAN FOOTHILLS SPECIFIC PLAN

A copy of the Specific Plan is on file in the Planning Division Manager's Office. Also, an electronic copy of the Alexan Foothills Specific Plan is located on the City of Monrovia's website at the following link: http://www.cityofmonrovia.org/your-government/community-development/planning/development-spotlight



PLANNING COMMISSION RESOLUTION NO. 2019-0020

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MONROVIA, CALIFORNIA, RECOMMENDING APPROVAL TO THE CITY COUNCIL OF ORDINANCE 2019-13 AND ZONE CHANGE ZA2019-0003 AMENDING THE OFFICIAL ZONING MAP FOR THE CITY OF MONROVIA SET FORTH IN SECTION 17.04.040 OF TITLE 17 (ZONING) OF THE MONROVIA MUNICIPAL CODE TO CHANGE THE M (MANUFACTURING) ZONE DESIGNATION OF THE PROPERTIES LOCATED AT 1607, 1625, 1631 SOUTH MAGNOLIA AVENUE, 302, 340, 410, 418, 450 WEST EVERGREEN AVENUE, 1541 SOUTH DALE DRIVE, AND 1512, 1516, 1518, 1522, AND 1602 SOUTH MAYFLOWER AVENUE (APNS: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040) TO PD-27 (PLANNED DEVELOPMENT - AREA 27) ZONE; TO DESIGNATE 6.77 ACRES OF PD-27 AS SPECIFIC PLAN; AND TO ADD THE ALEXAN FOOTHILLS SPECIFIC PLAN TO SECTION 17.04.035 OF TITLE 17 (ZONING) OF THE MONROVIA MUNICIPAL CODE FOR PROPERTIES LOCATED AT 1607, 1625, AND 1631 SOUTH MAGNOLIA AVENUE (APN: 8507-006-035, 8507-006-041, AND 8507-006-042); 1541 SOUTH DALE DRIVE (APN: 8507-006-044); AND 340, 410, AND 418 WEST EVERGREEN AVENUE (APN: 8507-006-016, 8507-006-043, 8507-006-022, AND 8507-006-024).

RECITALS

(i) The City of Monrovia has initiated an application to request an amendment to the Official Zoning Map (ZA2019-0003) changing the M (Manufacturing) zoning designation of the properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040) to PD Planned Development Area-27) zone as depicted on the map attached to Exhibit “A” of this Resolution. Trammel Crow Residential Company submitted an application for the Alexan Foothills Specific Plan (SP 2019-0002) for 6.77 acres of property identified as Area “B” of the proposed PD-27 district including properties located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, and 8507-006-024) as depicted on the map attached to Exhibit “A” of this Resolution.

(ii) On November 13, 2019 and January 15, 2020, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on Ordinance No. 2019-13, which implements Zone Change ZA2019-0003 by amending the Official Zoning Map as described above and a request to amend the text of the Zoning Ordinance to add 127 Pomona Specific Plan to Section 17.04.035 of Title 17 (Zoning) of the Monrovia Municipal Code for the subject property (ZA2019-0003). At the hearing, all interested persons were given an opportunity to be heard. The Planning Commission received and considered the

staff report and all the information, evidence, and testimony presented in connection with the project and the ordinance.

(iii) Environmental Review

(a) Based on the information in the application and accompanying technical reports, an Environmental Impact Report (EIR), State Clearinghouse No. 2018101058, was prepared, pursuant to the California Environmental Quality Act ("CEQA") and the City's local CEQA Guidelines. The EIR identified potentially significant environmental effects that were mitigated to an insignificant level through the imposition of mitigation measures.

(b) As set forth in Planning Commission Resolution PCR2019-0012, the Planning Commission has independently considered and reviewed the information in the Environmental Impact Report, comments on the Environmental Impact Report, the responses and revisions contained in the Final Impact Report and the Mitigation Monitoring and Reporting Program in making a recommendation on Ordinance No. 2019-13.

(iv) The custodian of records for all materials that constitute the record of the proceedings upon which this decision is based is the Planning Division Manager. Those documents are available for public review in the Planning Division located at 415 South Ivy Avenue, Monrovia, California 91016.

(v) All legal prerequisites to the adoption of this Resolution have occurred.

RESOLUTION

NOW, THEREFORE, the Planning Commission of the City of Monrovia hereby finds, determines and resolves as follows:

1. The Planning Commission finds that all of the facts set forth in the Recitals of this Resolution are true and correct.

2. For the reasons set forth above and as set forth in the EIR, the Adoption of Ordinance No. 2019-13 will not have a significant effect on the environment.

3. The Zoning Ordinance and Map amendments are in conformance with the environmental goals and policies adopted by the City.

4. Ordinance No. 2019-13 is consistent and compatible with existing land uses in the environs. The subject properties are zoned Manufacturing but contain several nonconforming single family residential uses. The Planned Development Area standards will address these nonconformities by allowing a mix of residential, commercial and industrial uses. To ensure that land uses are compatible, specific review criteria will include, but are not limited to, multifamily design review, compliance with the performance standards outlined in the Monrovia Municipal Code Chapter 17.32, business operation standards, and a

review of parking and traffic generation due to limited parking available at these properties. All uses that are not subject to Planning Commission review and approval based on zoning standards, will require review and approval by the Development Review Committee.

The Alexan Foothills Specific Plan designation provides an opportunity for new housing that facilitates a range of housing types that will meet the community's needs. Design objectives of the Alexan Foothill Specific Plan include: upgrading the existing physical conditions of the 6.77 acre site to an urban form that is more compatible with the adjacent Station Square Transit Village neighborhood; the use of architecture and design elements have been included to ensure high quality design and aesthetics, which will enhance this portion of the Monrovia community by encouraging pedestrian activity within 0.2 mile of the Monrovia Gold Line Station.

5. Ordinance No. 2019-13 is consistent with and necessary to carry out General Plan goals and policies set forth in the Land Use and other Elements of the General Plan, and to guide and direct orderly development of the City and the respective neighborhoods. The proposed PD-27 standards for these properties are contained in General Plan Amendment GPA2019-0003 and further policies in the Land Use and Housing Elements that promote the development of high density housing near transit. The proposed zone change will be compatible with the Station Square Transit Village area and will decrease the number of nonconforming properties.

6. Ordinance No. 2019-13 will not adversely affect the public health, safety, or welfare in that it will provide for orderly and consistent development in the City.

7. Based upon the findings and conclusions set forth above, the Planning Commission hereby recommends approval to the City Council of Ordinance No. 2019-13 as set forth in "Exhibit A", which is attached hereto and incorporated herein by this reference.

8. The Secretary of the Planning Commission shall certify to the adoption of this Resolution.

SIGNATURES TO FOLLOW ON NEXT PAGE

PASSED, APPROVED, AND ADOPTED this 15th day of January, 2020.

Gary Schaeffler, Chair
Monrovia Planning Commission

ATTEST:

APPROVED AS TO FORM:

Craig Jimenez, Secretary
Monrovia Planning Commission

Carol W. Lynch, Assistant City Attorney
City of Monrovia

EXHIBIT A

ORDINANCE NO. 2019-13

AN ORDINANCE OF THE CITY OF MONROVIA, CALIFORNIA, ADOPTING ZONE CHANGE ZA2019-0003 AMENDING THE OFFICIAL ZONING MAP FOR THE CITY OF MONROVIA SET FORTH IN SECTION 17.04.040 OF TITLE 17 (ZONING) OF THE MONROVIA MUNICIPAL CODE TO CHANGE THE M (MANUFACTURING) ZONE DESIGNATION OF THE PROPERTIES LOCATED AT 1607, 1625, 1631 SOUTH MAGNOLIA AVENUE, 302, 340, 410, 418, 450 WEST EVERGREEN AVENUE, 1541 SOUTH DALE DRIVE, AND 1512, 1516, 1518, 1522, AND 1602 SOUTH MAYFLOWER AVENUE (APNS: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040) TO PD-27 (PLANNED DEVELOPMENT - AREA 27) ZONE; TO DESIGNATE 6.77 ACRES OF PD-27 AS SPECIFIC PLAN; AND TO ADD THE ALEXAN FOOTHILLS SPECIFIC PLAN TO SECTION 17.04.035 OF TITLE 17 (ZONING) OF THE MONROVIA MUNICIPAL CODE FOR PROPERTIES LOCATED AT 1607, 1625, AND 1631 SOUTH MAGNOLIA AVENUE (APN: 8507-006-035, 8507-006-041, AND 8507-006-042); 1541 SOUTH DALE DRIVE (APN: 8507-006-044); AND 340, 410, AND 418 WEST EVERGREEN AVENUE (APN: 8507-006-016, 8507-006-043, 8507-006-022, AND 8507-006-024).

THE CITY COUNCIL OF THE CITY OF MONROVIA, CALIFORNIA does ordain as follows:

SECTION 1. The City of Monrovia has initiated an application to amend the Official Zoning Map (ZA2019-0003) changing the M (Manufacturing) zoning designation of the properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040) to PD Planned Development Area-27) zone as depicted on the map attached as Exhibit “A”. Trammel Crow Residential Company submitted an application to designate the Alexan Foothills Specific Plan (SP 2019-0002) for 6.77 acres of property identified as Area “B” of the proposed PD-27 district including properties located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, and 8507-006-024) as depicted on the map that is attached as Exhibit “A” to this Ordinance and a request to amend the text of the Zoning Ordinance to add the Alexan Foothills Specific Plan to Section 17.04.035 of Title 17 (Zoning) of the Monrovia Municipal Code for the subject property .

SECTION 2. On November 11, 2019 and January 15, 2020, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on Ordinance No. 2019-13, which implements Zone Change ZA2019-0003 by amending the Official Zoning Map as described above and an amendment to the text of the Zoning Ordinance to add Alexan Foothills Specific Plan to Section 17.04.035 of Title 17 (Zoning) of the Monrovia Municipal Code for the subject property. At the hearing, all interested persons were given an opportunity to be heard. The Planning Commission received and considered the staff report and all the information, evidence, and testimony presented in connection with this Ordinance.

SECTION 3. On _____, the City Council of the City of Monrovia conducted a duly noticed public hearing on this Ordinance No. 2019-13. At the hearing, all interested persons were given an opportunity to be heard. The City Council received and considered the staff report and all the information, evidence, and testimony presented in connection with this Ordinance.

SECTION 4. In accordance with California Environmental Quality Act (CEQA), a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) was filed with the State Clearinghouse, which assigned State Clearinghouse Number 2018101058. The NOP was distributed to all responsible and trustee agencies and other interested parties for a 30-day public review period commencing on October 22, 2018 and ending on November 26, 2018. On September 26, 2019 a Notice of Completion (NOC) of the DEIR was filed with the State Clearinghouse and the DEIR was distributed to agencies, interested organizations, and interested individuals by the City. A 45-day public review period for the Draft EIR was established pursuant to state law, which commenced on September 26, 2019 and ended on November 13, 2019. Prior to the conclusion of that review period, an administrative error was discovered. The Air Quality section (Chapter 7) was inadvertently omitted from the draft EIR document. That chapter was subsequently incorporated into the document, and the complete Draft EIR was recirculated and made available for a second 45-day review and comment period (November 13, 2019 to December 26, 2019). During the review period, the Planning Commission conducted a public hearing to allow the public an opportunity to comment on the adequacy of the DEIR.

SECTION 5. On _____, the City Council adopted a resolution (2020-XX) certifying the Final Environmental Impact Report for the Zoning Amendments, the proposed Alexan Foothills Specific Plan, and development project, adopting the Mitigation Monitoring and Reporting program pursuant to the California Environmental Quality Act ("CEQA").

SECTION 6. The custodian of records for all materials that constitute the record of proceeding upon which this decision is based is the City Clerk. Those documents are available for public review in the Office of the City Clerk located at 415 South Ivy Avenue, Monrovia, California 91016.

SECTION 7. All legal prerequisites to the adoption of the Ordinance have occurred.

SECTION 8. The Official Zoning Map for the City of Monrovia set forth in Title 17 (Zoning), Chapter 17.04 (General Provisions), Section 17.04.040 (Official Zoning Map) of

the Monrovia Municipal Code, is hereby amended by changing the zoning designation of the properties that are identified in Exhibit "A," attached hereto and incorporated herein by this reference, to PD-27 (Planned Development - Area 27), and for Area B of PD-27 to be designated "SP" (Specific Plan).

SECTION 9. Title 17 (Zoning), Chapter 17.04 (General Provisions), Section 17.04.035 (Relationship to Specific Plans), is hereby amended by adding the following at the end of the list of Specific Plans:

"Alexan Foothills Specific Plan."

SECTION 10. Severability. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this ordinance or the application thereof to any person or place, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remainder of this ordinance. The City Council hereby declares that it would have adopted this ordinance, and each and every section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof be declared invalid or unconstitutional.

SECTION 11. The City Clerk shall certify to the passage of this Ordinance and shall cause same to be published pursuant to state law within fifteen (15) days after its passage, and this Ordinance shall become effective thirty (30) days after its passage.

INTRODUCED this ____ day of _____, 2020.

PASSED, APPROVED, AND ADOPTED this ____ day of _____, 2020.

Tom Adams, Mayor
City of Monrovia

ATTEST:

Alice D. Atkins, CMC, City Clerk
City of Monrovia

APPROVED AS TO FORM:

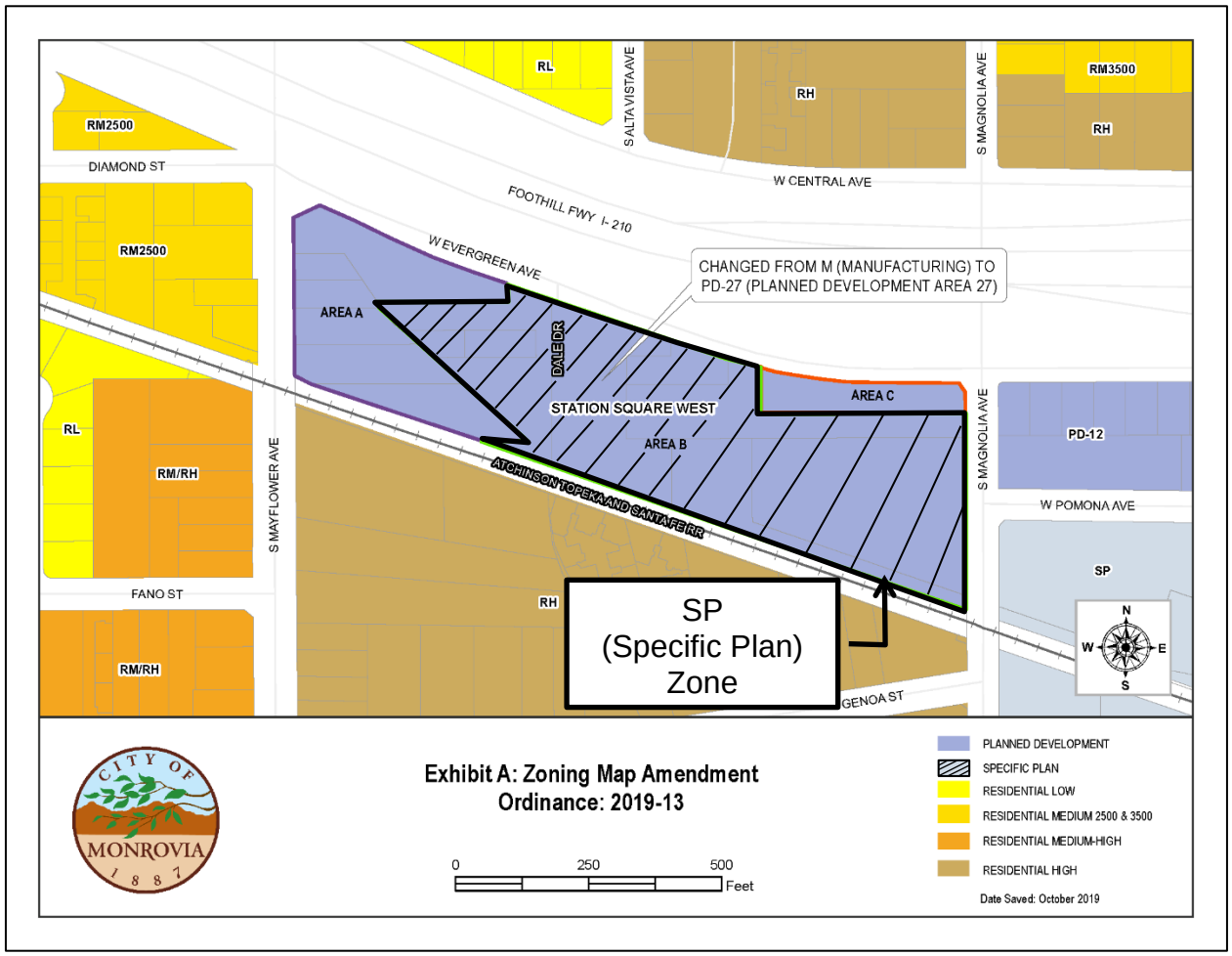
Craig A. Steele, City Attorney
City of Monrovia

ORDINANCE NO. 2019-13

EXHIBIT "A"

Map of Zone Change ZA2019-0003

Changing the M (Manufacturing) Zone to PD-27 (Planned Development-Area 27) Zone for the properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040)



Designating "AREA B" of PD-27 (Planned Development-Area 27) Zone as "SP" (Specific Plan) for the properties located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, AND 8507-006-024)

ORDINANCE NO. 2019-13

AN ORDINANCE OF THE CITY OF MONROVIA, CALIFORNIA, ADOPTING ZONE CHANGE ZA2019-0003 AMENDING THE OFFICIAL ZONING MAP FOR THE CITY OF MONROVIA SET FORTH IN SECTION 17.04.040 OF TITLE 17 (ZONING) OF THE MONROVIA MUNICIPAL CODE TO CHANGE THE M (MANUFACTURING) ZONE DESIGNATION OF THE PROPERTIES LOCATED AT 1607, 1625, 1631 SOUTH MAGNOLIA AVENUE, 302, 340, 410, 418, 450 WEST EVERGREEN AVENUE, 1541 SOUTH DALE DRIVE, AND 1512, 1516, 1518, 1522, AND 1602 SOUTH MAYFLOWER AVENUE (APNS: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040) TO PD-27 (PLANNED DEVELOPMENT - AREA 27) ZONE; TO DESIGNATE 6.77 ACRES OF PD-27 AS SPECIFIC PLAN; AND TO ADD THE ALEXAN FOOTHILLS SPECIFIC PLAN TO SECTION 17.04.035 OF TITLE 17 (ZONING) OF THE MONROVIA MUNICIPAL CODE FOR PROPERTIES LOCATED AT 1607, 1625, AND 1631 SOUTH MAGNOLIA AVENUE (APN: 8507-006-035, 8507-006-041, AND 8507-006-042); 1541 SOUTH DALE DRIVE (APN: 8507-006-044); AND 340, 410, AND 418 WEST EVERGREEN AVENUE (APN: 8507-006-016, 8507-006-043, 8507-006-022, AND 8507-006-024).

THE CITY COUNCIL OF THE CITY OF MONROVIA, CALIFORNIA does ordain as follows:

SECTION 1. The City of Monrovia has initiated an application to amend the Official Zoning Map (ZA2019-0003) changing the M (Manufacturing) zoning designation of the properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040) to PD Planned Development Area-27) zone as depicted on the map attached as Exhibit “A”. Trammel Crow Residential Company submitted an application to designate the Alexan Foothills Specific Plan (SP 2019-0002) for 6.77 acres of property identified as Area “B” of the proposed PD-27 district including properties located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, and 8507-006-024) as depicted on the map that is attached as Exhibit “A” to this Ordinance and a request to amend the text of the Zoning Ordinance to add the Alexan Foothills Specific Plan to Section 17.04.035 of Title 17 (Zoning) of the Monrovia Municipal Code for the subject property .

SECTION 2. On January 15, 2020, the Planning Commission of the City of Monrovia conducted a duly noticed public hearing on Ordinance No. 2019-13, which implements Zone Change ZA2019-0003 by amending the Official Zoning Map as described above and an amendment to the text of the Zoning Ordinance to add Alexan Foothills Specific Plan to Section 17.04.035 of Title 17 (Zoning) of the Monrovia Municipal Code for the subject property. At the hearing, all interested persons were given an opportunity to be heard. The Planning Commission received and considered the staff report and all the information, evidence, and testimony presented in connection with this Ordinance.

SECTION 3. On _____, the City Council of the City of Monrovia conducted a duly noticed public hearing on this Ordinance No. 2019-13. At the hearing, all interested persons were given an opportunity to be heard. The City Council received and considered the staff report and all the information, evidence, and testimony presented in connection with this Ordinance.

SECTION 4. In accordance with California Environmental Quality Act (CEQA), a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) was filed with the State Clearinghouse, which assigned State Clearinghouse Number 2018101058. The NOP was distributed to all responsible and trustee agencies and other interested parties for a 30-day public review period commencing on October 22, 2018 and ending on November 26, 2018. On September 26, 2019 a Notice of Completion (NOC) of the DEIR was filed with the State Clearinghouse and the DEIR was distributed to agencies, interested organizations, and interested individuals by the City. A 45-day public review period for the Draft EIR was established pursuant to state law, which commenced on September 26, 2019 and ended on November 13, 2019. Prior to the conclusion of that review period, an administrative error was discovered. The Air Quality section (Chapter 7) was inadvertently omitted from the draft EIR document. That chapter was subsequently incorporated into the document, and the complete Draft EIR was recirculated and made available for a second 45-day review and comment period (November 13, 2019 to December 26, 2019). During the review period, the Planning Commission conducted a public hearing to allow the public an opportunity to comment on the adequacy of the DEIR.

SECTION 5. On _____, the City Council adopted a resolution (2020-XX) certifying the Final Environmental Impact Report for the Zoning Amendments, the proposed Alexan Foothills Specific Plan, and development project, adopting the Mitigation Monitoring and Reporting program pursuant to the California Environmental Quality Act ("CEQA").

SECTION 6. The custodian of records for all materials that constitute the record of proceeding upon which this decision is based is the City Clerk. Those documents are available for public review in the Office of the City Clerk located at 415 South Ivy Avenue, Monrovia, California 91016.

SECTION 7. All legal prerequisites to the adoption of the Ordinance have occurred.

SECTION 8. The Official Zoning Map for the City of Monrovia set forth in Title 17 (Zoning), Chapter 17.04 (General Provisions), Section 17.04.040 (Official Zoning Map) of

the Monrovia Municipal Code, is hereby amended by changing the zoning designation of the properties that are identified in Exhibit "A," attached hereto and incorporated herein by this reference, to PD-27 (Planned Development - Area 27), and for Area B of PD-27 to be designated "SP" (Specific Plan).

SECTION 9. Title 17 (Zoning), Chapter 17.04 (General Provisions), Section 17.04.035 (Relationship to Specific Plans), is hereby amended by adding the following at the end of the list of Specific Plans:

"Alexan Foothills Specific Plan."

SECTION 10. Severability. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this ordinance or the application thereof to any person or place, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remainder of this ordinance. The City Council hereby declares that it would have adopted this ordinance, and each and every section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof be declared invalid or unconstitutional.

SECTION 11. The City Clerk shall certify to the passage of this Ordinance and shall cause same to be published pursuant to state law within fifteen (15) days after its passage, and this Ordinance shall become effective thirty (30) days after its passage.

INTRODUCED this ____ day of _____, 2020.

PASSED, APPROVED, AND ADOPTED this ____ day of _____, 2020.

Tom Adams, Mayor
City of Monrovia

ATTEST:

Alice D. Atkins, CMC, City Clerk
City of Monrovia

APPROVED AS TO FORM:

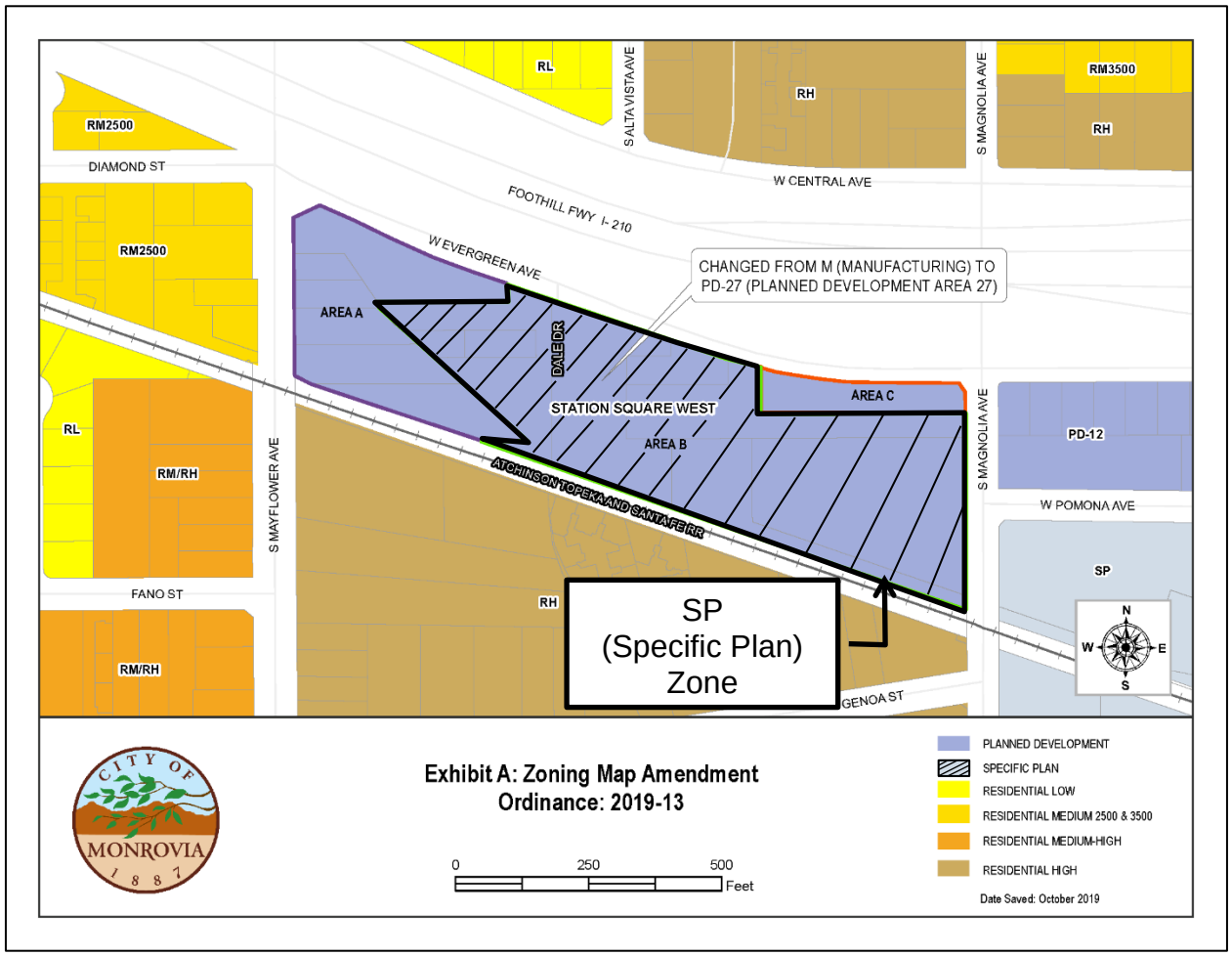
Craig A. Steele, City Attorney
City of Monrovia

ORDINANCE NO. 2019-13

EXHIBIT "A"

Map of Zone Change ZA2019-0003

Changing the M (Manufacturing) Zone to PD-27 (Planned Development-Area 27) Zone for the properties located at 1607, 1625, 1631 South Magnolia Avenue, 302, 340, 410, 418, 450 West Evergreen Avenue, 1541 South Dale Drive, and 1512, 1516, 1518, 1522, and 1602 South Mayflower Avenue (APNs: 8507-006-035, -041, -042, -034, -016, -043, -022, -024, -044 -045, -029, -030, -031, -048, -040)



Designating "AREA B" of PD-27 (Planned Development-Area 27) Zone as "SP" (Specific Plan) for the properties located at 1607, 1625, and 1631 South Magnolia Avenue (APN: 8507-006-035, 8507-006-041, and 8507-006-042); 1541 South Dale Drive (APN: 8507-006-044); and 340, 410, and 418 West Evergreen Avenue (APN: 8507-006-016, 8507-006-043, 8507-006-022, AND 8507-006-024)

PLANNED DEVELOPMENT GENERAL PLAN AMENDMENT, ZONING CODE AMENDMENT, & ALEXAN FOOTHILLS SPECIFIC PLAN

SCH No. 2018101058

FINAL

EIR

January 2020

PLANNED DEVELOPMENT GENERAL PLAN AMENDMENT, ZONING CODE AMENDMENT, & ALEXAN FOOTHILLS SPECIFIC PLAN

SCH No. 2018101058

FINAL

EIR

January 2020

City of Monrovia
415 South Ivy Avenue,
Monrovia, CA 91016
(626) 932-555
cityofmonrovia.org

MIG

TCR
Trammell Crow Residential

TABLE OF CONTENTS

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1. INTRODUCTION

The Final Environmental Impact Report (Final EIR) for the proposed 9.63-acre Planned Development (PD) General Plan Amendment (GPA) and Planned Development Zoning Code Amendment (ZCA), as well as the proposed 6.77-acre Alexan Foothills Specific Plan (Specific Plan) within a portion of the area proposed for the GPA and ZCA (i.e., ZCA Area B) has been prepared by the City of Monrovia (City), the Lead Agency, in keeping with the California Environmental Quality Act (CEQA). The City has prepared the Final EIR pursuant to the CEQA Guidelines, including Sections 15086 (Consultation Concerning Draft EIR), 15088 (Evaluation of and Responses to Comments), and 15132 (Contents of Final Environmental Impact Report). In conformance with these guidelines, the Final EIR consists of the following volumes:

1. The Draft EIR (DEIR) which was circulated for an initial 45-day public comment period beginning September 26, 2019 and ending on November 13, 2019. After discovery that Chapter 7, Air Quality, was inadvertently omitted from the DEIR, the DEIR, including Chapter 7, was recirculated between November 12, 2019 and December 26, 2019. The FEIR contains the recirculated DEIR.

2. The FEIR document, which includes (1) Chapter 1 providing introductory information regarding the FEIR, (2) Chapter 2 containing a list of all commenters on the DEIR during the initial public comment period, copies of all written comment letters on the DEIR, responses to all comments received on the Original DEIR, (3) Chapter 3 containing a list of all commenters received during recirculation of the DEIR and responses to those comments, and (4) Chapter 4 containing minor corrections and required revisions to the DEIR in response to comments.

None of the revisions to the Draft EIR represent a substantial increase in the severity of an identified significant impact or the identification of a new significant impact, mitigation measure, or alternative different from those already considered in preparing the Draft EIR.

The Draft EIR, Final EIR, and administrative record for the Project are available for review upon request at:

City of Monrovia
415 S. Ivy Avenue
Monrovia, CA 91016

Certification of this Final EIR by the Monrovia City Council must occur prior to approval of the following entitlements for the Project:

- Approval of a GPA from Manufacturing to Planned Development Area PD-27: Station Square Area West for the 9.63-acre Project area;

- Approval of a ZCA from Manufacturing to Planned Development Area (PD) for 2.86 acres (Areas A and C) within PD-27: Station Square Area West;

- Adoption of the Alexan Foothills Specific Plan for 6.77 acres (Area B) within Planned Development Area PD-27: Station Square Area West;

- Approval of a Conditional Use Permit (CUP) to authorize the construction of a 436-unit apartment complex within the Alexan Foothills Specific Plan area; and

- Approval of a Vesting Parcel Map to consolidate eight lots into one lot for the Alexan Foothills Specific Plan area.

1.2 ADEQUACY OF FINAL EIR

Under CEQA, the responses to comments on a Draft EIR must include good faith, well-reasoned responses to all comments received on the Draft EIR that raise significant environmental issues related to the project under review. If a comment does not relate to the Draft EIR or does not raise a significant environmental issue related to the project, there is no need for a response under CEQA.

In responding to comments, CEQA does not require the EIR authors to conduct every test or perform all research or study suggested by commenters. Rather, the EIR authors need only respond to significant environmental issues and need not provide all of the information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Sections 15088, 15132, and 15204).

2. RESPONSE TO COMMENTS ON THE ORIGINAL DRAFT EIR

After completion of the Draft EIR (DEIR), the Lead Agency is required under CEQA Guidelines Sections 15086 (Consultation Concerning Draft EIR) and 15088 (Evaluation of and Response to Comments) to consult with and obtain comments from other public agencies having jurisdiction by law with respect to the project, and to provide the general public with an opportunity to comment on the DEIR. Under CEQA Guidelines Section 15088, the Lead Agency is also required to respond in writing to substantive environmental points raised in the DEIR review and consultation process.

Comments on the DEIR were submitted in the form of comment letters during an initial public comment period held between September 26, 2019 and November 13, 2019. After discovery that Chapter 7, Air Quality, was inadvertently omitted from the DEIR, the DEIR, including Chapter 7, was recirculated between November 12, 2019 and December 26, 2019. CEQA Guidelines Section 15132 (Contents of Final Environmental Impact Report), subsection (b), requires that the FEIR include the full set of comments and recommendations received on the DEIR either verbatim or in summary. Section 15132, subsection (c) requires that the FEIR include "a list of persons, organizations, and public agencies commenting on the DEIR," and Section 15132, subsection (d), requires that the FEIR include "the responses of the Lead Agency to significant environmental points raised in the review and consultation process." In keeping with these guidelines, this chapter of the Final Environmental Impact Report (FEIR) includes the following sections:

- A list of commenters on the Original DEIR which lists each individual who submitted comments during the public comment period held between September 26, 2019 and November 13, 2019;

- A response to all comments received on the Original DEIR which includes copies of all letters and emails received during the public comment period.

Chapter 3 of this FEIR lists comments received during recirculation of the Public Draft EIR between November 13, 2019 and December 26, 2019 and includes responses to those comments.

2.1 LIST OF COMMENTERS

Agencies and individuals and organizations who commented on the DEIR are listed below in alphabetical order. Each comment letter is included below and assigned a code (e.g., L1, L2, L3). Each comment within each letter is further assigned a code for tracking individual responses to comments (e.g., L1.1, L1.2, L2.1, L2.2).

2.1.1 Responsible and Interested Agencies

County of Los Angeles Fire Department (L1)
State of California Department of Transportation (Caltrans) (L2)
Sanitation Districts of Los Angeles County (L3)

2.1.2 Individuals and Organizations

Mike Antos (L4)

2.2 RESPONSES TO COMMENTS

The following section includes comment letters received during the public comment period from September 26, 2019 to November 13, 2019 on the DEIR, followed by a written response to each comment. The comments and responses are correlated by code numbers shown in the right margin of each comment letter.

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

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FIRE CHIEF
FORESTER & FIRE WARDEN

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MARK RIDLEY-THOMAS
SECOND DISTRICT

SHEILA KUEHL
THIRD DISTRICT

JANICE HAHN
FOURTH DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

October 31, 2019

John Mayer, Analyst
City of Monrovia
Planning Division
415 South Ivy Avenue
Monrovia, CA 91016

Dear Mr. Mayer:

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT, "ALEXAN FOOTHILLS SPECIFIC PLAN," IS PROPOSING AMENDEMENTS TO THE GENERAL PLAN AND ZONING CODE TO CHANGE THE LAND USE DESIGNATION FOR 9.6 ACRES OF LAND FROM "MANUFACTURING" TO "PLANNED DEVELOPMENT," SPECIFICALLY, THE GENERAL PLAN AMENDMENT WOULD ESTABLISH PLANNED DEVELOPMENT-AREA 27, "STATION SQUARE WEST" AS THE NEW LAND USE DESIGNATION FOR THAT LAND, MONROVIA, FFER 2019005827

Notice of Availability of a Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

The subject property is entirely within the City of Monrovia, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department. L1.1

For any questions regarding this response, please contact Loretta Bagwell, Planning Analyst, at (323) 881-2404 or Loretta.Bagwell@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

This project is located entirely in the City of Monrovia. Therefore, the City of Monrovia Fire Department has the jurisdiction concerning this project and will be setting conditions. L1.2

This project is located in close proximity to the jurisdictional area of Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department. L1.3

For any questions regarding the report, please contact FPEA Claudia Soiza at (323) 890-4243 or Claudia.soiza@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed. L1.4

Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade.
If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site. L1.5

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

For any questions regarding this response, please contact Forestry Assistant, Joseph Brunet at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Site Mitigation Unit (SMU) is within the Health Hazardous Materials Division of the Los Angeles County Fire Department. SMU does not direct nor issue permits for environmental cleanups; SMU oversees environmental cleanups for the protection of the environment and manages associated potential human health risks and hazards. In order for SMU to oversee environmental site assessment, remediation, and mitigation measures at the project site, the applicant has to enter into a "Remedial Action Agreement" with SMU per California Health and Safety Code (HSC) Section 101480(c). SMU is currently understaffed and may not be able to oversee the project at this time due to previous commitments. Therefore, the Cal-EPA Department of Toxic Substances Control or the Los Angeles Regional Water Quality Control may have to be pursed for environmental oversight of the project site. L1.6

L1.6
Cont.

Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

If you have any additional questions, please contact this office at (323) 890-4330

Very truly yours,

Michael Y. Takeshita

MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

MYT:ac

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2.2.1 County of Los Angeles Fire Department (L1) (3 pages)

L1.1

Comment: *Planning Division*: The subject property is entirely within the City of Monrovia, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department. For any questions regarding this response, please contact Loretta Bagwell, Planning Analyst, at (3223) 881-2404 or Loretta.Bagwell@fire.lacounty.gov.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. The comment provides background information but does not comment on or request information about any environmental issues associated with the Project. Therefore, no further response is required.

L1.2

Comment: *Land Development Unit*: This project is located entirely in the City of Monrovia. Therefore, the City of Monrovia Fire Department has the jurisdiction concerning this project and will be setting conditions.

***Response*:** As noted on Page 12-12 (Chapter 12, Hazards and Hazardous Materials, of the DEIR), Monrovia Fire and Rescue is the local lead agency for emergency response in the City, although mutual aid agreements exist for neighboring cities and LACFD. No further response is required.

L1.3

Comment: This project is located in close proximity to the jurisdictional area of Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department. For any questions regarding the report, please contact FPEA Claudia Soiza at (323) 890-4243 or Claudia.soiza@fire.lacounty.gov.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L1.4

Comment: *Forestry Division – Other Environmental Concerns*: The statuary responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

***Response*:** Potential impacts in all areas raised by the commenter have already been addressed in the DEIR, as discussed below.

Fuel Modification for Very High Fire Hazard Severity Zones: As discussed in Chapter 18, Public Services and Recreation, of the DEIR, the Project area is currently developed and not located adjacent to the San Gabriel Mountains or wildland areas. The project site is not located within, or adjacent to, an area mapped by CAL FIRE or the City as a High or Very High Fire Hazard Severity Zone (VHFHSZ), nor is it in, or adjacent to, an area of state or federal responsibility. The Project area is an infill site surrounded by development with ornamental landscaping; natural fuels are absent from the areas immediately surrounding the Specific Plan area. Therefore, the Project would not pose or exacerbate wildland fire risk to residents and employees in the area and would thus not require fuel modification.

County Oak Tree Ordinance: As discussed in Chapter 8, Biological Resources, of the DEIR, the Project area contains coast live oak trees that are protected under the City's Oak Tree Protection Ordinance (>10" in diameter at least 2 feet above the ground), including three along the Specific Plan area's western border. Disturbance to these oak trees would be avoided within the proposed Alexan Foothills Specific Plan area. Specifically, grading plans require protection of these trees. Thus, less than significant impacts would occur. Future development resulting in the alteration to any/all oaks within the proposed Zoning Code Amendment (ZCA) Areas A and C would be required to comply with the City of Monrovia's Oak Tree Preservation Ordinance (Section 8.1.2), which may require a permit through the City's Development Review Committee. With mandatory compliance with the City's Oak Tree Ordinance, impacts would be less than significant. The Project site is within the City and therefore would not be subject to the County's Oak Tree Protection Ordinance.

Archaeological and Cultural Resources: There are no known archaeological or other cultural resources as discussed in Chapter 9, Cultural Resources and Tribal Cultural Resources, of the DEIR. Mitigation measures MM CUL-1 through MM CUL-5 would be required in the event archaeological or cultural resources are encountered. With mitigation, impacts would be less than significant.

Rare and Endangered species and Vegetation: As discussed in Chapter 8, Biological Resources, of the DEIR, due to the disturbed, limited, and fragmented condition of habitats on-site, native vegetation and wildlife species would not be expected to be impacted by the Project. The Project area is almost entirely hardscaped and provides very little biological resource value, other than the presence of mature oak trees. However, due to the potential marginal habitat to some species, the DEIR requires mitigation measures BIO-1 and BIO-2a through BIO-2d to reduce any potential adverse impacts.

Erosion Control and Watershed Protection: Implementation of best management practices (BMPs) during construction would minimize erosion from the site and protect water quality of the watershed during construction, as discussed in Chapter 13, Hydrology of the DEIR. In addition, drainage improvements are proposed to ensure that the Project would not result in hydromodification to the site as also discussed in Chapter 13, Hydrology and Appendix H, Hydrology and LID Report.

The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L1.5

Comment: Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured

4 ½ feet above mean natural grade. If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project. For any questions regarding this response, please contact Forestry Assistant, Joseph Brunet at (818) 890-5719.

***Response*:** The Project area contains protected coast live oak trees protected under the City's Oak Tree Protection Ordinance (>10" in diameter at least 2 feet above the ground), including three along the Specific Plan area's western border. Disturbance to these oak trees would be avoided within the proposed Alexan Foothills Specific Plan area. Specifically, grading plans require protection of these trees. Thus, less than significant impacts would occur. The Project site is within the City and therefore would not be subject to the County's Oak Tree Protection Ordinance. Nonetheless, the Project would not conflict with the Los Angeles County Oak tree Ordinance because no oak trees would be cut, destroyed, removed, relocated, damaged, or encroached upon.

Future development resulting in the alteration to any/all oaks within the proposed Zoning Code Amendment (ZCA) Areas A and C would be required to comply with the City of Monrovia's Oak Tree Preservation Ordinance (Section 8.1.2), which may require a permit through the City's Development Review Committee. With compliance with the City's mandatory requirements, impacts regarding future development in ZCA Areas A and C would be less than significant. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L1.6

Comment: *Health Hazardous Materials Division*: The Site Mitigation Unit (SMU) is within the Health Hazardous Materials Division of the Los Angeles County Fire Department. SMU does not direct nor issue permits for the environmental cleanups; SMU oversees environmental cleanups for the protection of the environment and manages associated potential human health risks and hazards. In order for SMU to oversee environmental site assessment, remediation, and mitigation measures at the project site, the applicant has to enter into a "Remedial Action Agreement" with SMU per California Health and Safety Code (HSC) Section 101480(c). SMU is currently understaffed and may not be able to oversee the project at this time due to previous commitments. Therefore, the Cal-EPA Department of Toxic Substances Control or the Los Angeles Regional Water Quality Control may have to be pursed for environmental oversight of the project site. Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

***Response*:** The DEIR acknowledges DTSC's role in environmental oversight on Page 12-11 in Chapter 12, Hazards and Hazardous Materials. The DEIR includes Mitigation Measure HAZ-1, which requires DTSC or another regulatory agency designated regulatory authority by DTSC to be notified of the results of the Environmental Site Assessments prepared for the Specific Plan. It further requires the applicant to meet all requirements of DTSC or its designee prior to issuance of grading and demolition permits. Likewise, MM HAZ-2 requires the applicant to comply with all requirements of DTSC or its designee for future development in ZCA Areas A and C. With implementation of mitigation, DTSC or its designee will provide appropriate environmental oversight for the project.

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DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS16
LOS ANGELES, CA 90012
PHONE (213) 897-6536
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

November 7, 2019

Mr. John Mayer
City of Monrovia
415 S. Ivy Avenue
Monrovia, CA 91016

RE: Alexan Foothills Specific Plan and Development Project
Vic. LA-210/PM R33.921
SCH # 2018101058
Ref. GTS # LA-2018-02038-NOP
GTS # LA-2018-02847-DEIR

Dear Mr. Mayer:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The City of Monrovia is proposing amendments to the General Plan and Zoning Code to change the land use designation for 9.6 acres of land from "manufacturing" to "Planned Development'. The proposed development would allow up to 436 dwelling units and 798-stall parking structure.

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Senate Bill 743 (2013) mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. For future project, you may reference to The Governor's Office of Planning and Research (OPR) for more information.

http://opr.ca.gov/ceqa/updates/guidelines/

Caltrans is aware of challenges that the region faces in identifying viable solutions to alleviating congestion on State and Local facilities. With limited room to expand vehicular capacity, future development should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

Caltrans supports the implementation of complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Please note the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing.

We encourage the Lead Agency to integrate transportation and land use in a way that reduces Vehicle Miles Traveled (VMT) and Greenhouse Gas (GHG) emissions by facilitating the provision of more proximate goods and services to shorten trip lengths, and achieve a high level of non-motorized travel and transit use. We also encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements.

After reviewing the Draft Environmental Impact Report for this project based on Level of Service (LOS), Caltrans has the following comments:

1. From the Traffic Impact Analysis (TIA) prepared in May 2018 by LSA, it was stated that the project would generate net 1,938 daily trips and 143/194 AM/PM peak hour trips per Table B Trip Generation Summary. There are 9 related projects in the project vicinity generating 8,689 average daily trips and 727/711 AM/PM peak hour trips. Many of the project and related trips would be traveling on the State facilities once the projects are built. Cumulative project trips assigning to the State facilities would contribute potential cumulative traffic impacts on the State facilities. As a reminder, the decision makers should be aware of this issue and be prepared to mitigate potential cumulative traffic impacts. L2.1

2. For Location #8 Myrtle Avenue/Central Avenue I-210 WB Ramps, existing LOS is C/D during AM/PM peak hours; cumulative plus project LOS is D/E during AM/PM peak hours. For Location #9 Myrtle Avenue/Evergreen Avenue I-210 EB Ramps, existing LOS is B/D for AM/PM peak hours; cumulative plus project LOS is C/E during AM/PM peak hours. Significant cumulative traffic impact should only be compared to the existing condition for the traffic that would affect on the State facilities. We concluded both Location #8 and #9 would contribute significant cumulative traffic impact. We recommend the City to propose mitigations on both locations. L2.2

3. On page 32 of the TIA, the report indicated that project will result in a significant impact to Location #8, however there is no mitigation proposed. Please clarify! Last sentence of this page, "If this program is adopted prior to the final entitlement of the proposed project, the project may be asked to participate in the program rather than implement the improvement at Myrtle Avenue/Central Avenue and the I-210 westbound ramps." Again, there is no mitigation proposed at this location. L2.3

4. For off-ramp analysis on page 31 of TIA, a factor of safety should be used for vehicle storage capacity. Otherwise, potential rear-end accident would occur before any improvement can be implemented. Caltrans typically recommends 15% factor of safety for the off-ramp analysis in which the vehicle storage capacity should not exceed 990X85%= 842 feet for Myrtle Avenue/Central Avenue I-210 WB off-ramp and 1,630X85%=1,386 feet for Myrtle Avenue/Evergreen Avenue I-210 EB off-ramp. For these reasons, we concluded that both off-ramps would need to be improved. L2.4

5. We acknowledge that the City is in the process to study an area-wide Transportation Impact Fee that would allow new development to pay a trip fee to assist in project mitigation. We recommend the City to include improvements on the State facilities, and we would like to have the opportunity to assist the City in preparing such study. L2.5

6. If feasible mitigations are proposed, the City can collect the fee and implement the mitigation or mitigation agreement can be signed between Caltrans and the developer. L2.6

7. Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan. L2.7

8. Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods. L2.8

9. As a reminder, in the event that the project proponent finds a significant impact to an intersection including safety traffic issue, an Intersection Control Evaluation (ICE) should be prepared as an initial step of an intersection improvement project. L2.9

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to GTS # 07-LA-2018-02847AL-DEIR.

Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

2.2.2 State of California Department of Transportation (Caltrans) (L2) (4 pages)

L2.1

Comment: From the Traffic Impact Analysis (TIA) prepared in May 2018 by LSA, it was stated that the project would generate net 1,938 daily trips and 143/194 AM/PM peak hour trips per Table B Trip Generation Summary. There are 9 related projects in the project vicinity generating 8,689 average daily trips and 727/711 AM/PM peak hour trips. Many of the project and related trips would be traveling on the State facilities once the projects are built. Cumulative project trips assigning to the State facilities would contribute potential cumulative traffic impacts on the State facilities. As a reminder, the decision makers should be aware of this issue and be prepared to mitigate potential cumulative traffic impacts.

***Response*:** Cumulative traffic impacts on State facilities were evaluated in a Traffic Impact Study (TIS) for the Project contained in Appendix J of the DEIR and have been properly mitigated. A summary of the TIS and required mitigation are provided in Chapter 19, Transportation and Circulation, of the DEIR. Caltrans' required HCM analysis was used in the TIS's evaluation of the Project's cumulative impacts. The TIA concluded that with cumulative traffic, Caltrans' thresholds of significance would be exceeded at one ramp intersections. Mitigation Measure T-1 is required. MM T-1 requires the applicant to pay its fair share of improvements to area roadways to reduce cumulative impacts. With mitigation, the Project's cumulative impacts would be less than significant. Pursuant to the commenter's request, Caltrans' comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

L2.2

Comment: For Location #8 Myrtle Avenue/Central Avenue I-210 WB Ramps, existing LOS is C/D during AM/PM peak hours; cumulative plus project LOS is D/E during AM/PM peak hours. For Location #9 Myrtle Avenue/Evergreen Avenue I-210 EB Ramps, existing LOS is B/D for AM/PM peak hours. Significant cumulative traffic impact should only be compared to the existing condition for the traffic that would affect on the State facilities. We concluded both Location #8 and #9 would contribute significant cumulative traffic impact. We recommend the City to propose mitigations on both locations.

***Response*:** The commenter is correct that Intersections #8 (Myrtle Avenue/Central Avenue-I-210 WB Ramps) and #9 (Myrtle Avenue/Evergreen Avenue I-210 EB Ramps) would result in a significant cumulative impact without mitigation, as shown in DEIR Table 19-6. The Project will participate and contribute to the City's Transportation Impact Fee (TIF) Program as a project mitigation measure, to mitigate impacts to Intersection #8 and Intersection #9. The TIF Program includes proposed future improvements to the intersections of Myrtle Avenue/Central Avenue-I-210 WB off-ramp and Myrtle Avenue/Evergreen Avenue-I-210 EB off-ramp. The identified TIF improvements (a dedicated southbound right turn lane and reassigning the eastbound through movement to an eastbound through-left movement) would address and mitigate, to a level that is less than significant, the cumulative impacts identified at Intersections #8 and #9, respectively.

L2.3

Comment: On page 32 of the TIA, the report indicated that project will result in a significant impact to Location #8, however there is no mitigation proposed. Please clarify! Last sentence of this page, "If this program is adopted prior to the final entitlement of the proposed project, the

project may be asked to participate in the program rather than implement the improvement at Myrtle Avenue/Central Avenue and the I-210 westbound ramps." Again, there is no mitigation proposed at this location.

***Response*:** Refer to Response L2.2.

L2.4

Comment: For off-ramp analysis on page 31 of TIA, a factor of safety should be used for vehicle storage capacity. Otherwise, potential rear-end accident would occur before any improvement can be implemented. Caltrans typically recommends 15% factor of safety for the off-ramp analysis in which the vehicle storage capacity should not exceed 990 X 85% = 842 for Myrtle Avenue/Central Avenue I-210 WB off-ramp and 1,630 X 85% = 1,386 feet for Myrtle Avenue/Evergreen Avenue I-210 EB off-ramp. For these reasons, we concluded that both off-ramps would need to be improved.

***Response*:** Upon review of the Caltrans *Guide of the Preparation of Traffic Impact Studies* and any other publicly accessible Caltrans design guidelines, LSA did not find any requirements that discussed the application of a safety factor of 15% for Caltrans off-ramp analysis. The Caltrans manual relies on language from the U.S. Department of Transportation design documents, and similarly there was not language that suggested the use of such a 15% factor. Due to the lack of published requirements from Caltrans, LSA used the approach recommended by the City of Monrovia as the Lead Agency responsible for the preparation of this environmental document. This approach did include use of the published Caltrans documentation for ramp analyses. Other safety considerations include a 25-foot accommodation for vehicle length (to allow for adequate separation between vehicles in the queue) and the use of the 95 percent confidence interval for the potential for vehicle queue spillback as opposed to the average occurrence. Use of the 95 percent confidence interval means that the analysis reflects the potential of an occurrence 95 times out of 100. In other words, a queue formation involving vehicle queue spillback would be likely to occur very infrequently, if at all.

In reviewing the off-ramp configurations at the two intersections, both off-ramps are connected to auxiliary lanes along I-210 and thus are not connected directly to the mainline facilities. As a result, based on the prescribed analysis methodology and the existing geometrics and lane assignments, the potential for vehicle queue spillback to the mainline facilities is not anticipated. Taking into consideration all the previously mentioned factors, additional ramp improvements are not warranted. Nonetheless, the comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

L2.5

Comment: We acknowledge that the City is in the process to study an area-wide Transportation Impact Fee that would allow new development to pay a trip fee to assist in project mitigation. We recommend the City to include improvements on the State facilities, and we would like to have the opportunity to assist the City in preparing such study.

***Response*:** Contrary to the commenter's understanding, the City has already prepared an area-wide TIF and has prepared a study in support of the TIF. The TIF includes proposed future improvements to the intersections of Myrtle Avenue/Central Avenue-I-210 WB off-ramp and Myrtle Avenue/Evergreen Avenue-I-210 EB off-ramp. The Alexan Foothills Specific Plan will participate and contribute to the City's TIF Program as a project mitigation measure. Future proposed development in Zoning Code Amendment (ZCA) Areas A and C would also be required to contribute to the TIF Program. The City will collect TIF fees from project applicants and implement the improvements to the intersections of Myrtle Avenue/Central Avenue-I-210

WB off-ramp and Myrtle Avenue/Evergreen Avenue-I-210 EB off-ramp. The identified TIF improvements would address and mitigate the cumulative impacts identified at these intersections.

According to *the Traffic Impact Fee Study for the City of Monrovia* prepared by Gibson Transportation Consulting, Inc. at the intersection of Central Avenue & Myrtle Avenue-I-210 WB off-ramp, the City is proposing to convert the westbound left-run lane into a shared through/left-turn lane. Additionally, a southbound right-run lane will be added to this intersection as mitigation measure for a project currently under construction (removing the center median).

Through the TIF program, the City will also install traffic equipment to facilitate a coordinated signal system to improve operations at major corridors and congested arterials (including both intersections at Myrtle Avenue). Both intersections would be interconnected into a central control system resulting in enhanced traffic signal operations. In combination with the other proposed physical improvements, the signal coordination would also reduce the expected congestion and queuing at both intersections.

Therefore, the City is already in the process of improving the two intersections in question as Caltrans requested, and the Project is participating in the improvement of those locations through the Transportation Impact Fee Program. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

L2.6

Comment: If feasible mitigations are proposed, the City can collect the fee and implement the mitigation or mitigation agreement can be signed between Caltrans and the developer.

Response: Refer to Response L2.5.

L2.7

Comment: Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan.

***Response*:** The project developer and operator are required by law to comply with all storm water runoff regulations and will be designed to discharge clean runoff water. As discussed in Section 13, Hydrology and Water Quality, of the DEIR, Project impacts related to storm water run-off are expected to be less than significant. The Project's run-off would not flow onto State highway facilities and a stormwater management plan is not required. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

L2.8

Comment: Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highway, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods.

***Response*:** The project developer will be required to comply with Caltrans' regulations pertaining to oversized-transport vehicles and/or delays on State highways. The City acknowledges that it is preferred for large size trucks to utilize State highways during off-peak commute periods to the maximum extent. Caltrans' transportation permit process will ensure

that use of large size trucks on State highways during peak commute periods will be minimized to the maximum extent feasible in accordance with Caltrans' regulations.

L2.9

Comment: As a reminder, in the event that the project proponent finds a significant impact to an intersection including safety traffic issue, an Intersection Control Evaluation (ICE) should be prepared as an initial step of an intersection improvement project.

***Response*:** The intersections of Myrtle Avenue/Central Avenue-I-210 WB off-ramp and the Myrtle Avenue/Evergreen Avenue-I-210 EB off-ramp have been identified as having impacts in a long-range cumulative condition. The Project will contribute to the City's TIF, which will fund future improvements to the intersections of Myrtle Avenue/Central Avenue-I-210 WB off-ramp to mitigate the Project's impacts. As the comment notes, an initial step of the subsequent intersection improvements at the Myrtle Avenue/Central Avenue-I-210 WB off-ramp and Myrtle Avenue/Evergreen Avenue-I-210 EB off-ramp that will be funded by the TIF program could include an ICE evaluation. As the recommended mitigation is being planned, engineered and programmed, the City may coordinate with Caltrans and determine whether an ICE evaluation is necessary to support the intersection improvements. However, such coordination is outside the scope of the Project's EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager
1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

November 13, 2019

Ref. DOC 5320350

Ms. Sheri Bermejo
Planning Division Manager
Community Development Department
City of Monrovia
415 South Ivy Avenue
Monrovia, CA 91016

Dear Ms. Bermejo:

DEIR Response for Planned Development, General Plan Amendment, Zoning Code Amendment, and Alexan Foothills Specific Plan and Development Project

The Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report (DEIR) for the subject project on September 30, 2019. The proposed project is located within the jurisdictional boundaries of District No. 15. Previous comments submitted by the Districts in correspondence dated April 24, 2019 (copy enclosed), to Mr. Steve Sizemore of the City of Monrovia, still apply to the subject project with the following updated comments: L3.1

1. Draft EIR Summary, *Page2-2*, second paragraph – The zoning redesignation of PD-27 ZCA to Areas A and C could allow for an additional 82 dwelling units within Area A. Based on the Districts' average wastewater generation factors, an additional 82 dwelling unit would increase the expected average wastewater flow by 12,792 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Services, select Will Serve Program under Wastewater Program and Permits, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link.

2. Appendix K4 Wastewater Capacity Study, *Page 155*, last paragraph in the Memorandum – The information notes the proposed developments tributary sewer flows were determined using the Districts' estimated daily average sewage flows for various occupancies with a minimum flow demand of 250 gpd/unit. As listed in the Districts' Table 1, Loadings for Each Class of Land Use, the flow rate for a single-family home is 260 gpd/unit, townhome or condominium is 195 gpd/unit and multifamily apartment type units is 156 gpd. Adjust calculations accordingly. L3.2

Printed on Recycled Paper

All other information concerning Districts' facilities and sewerage service contained in the document is current. If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

for:

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Enclosure

cc: A. Schmidt
A. Howard

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

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www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

April 24, 2019

Ref. DOC 5049844

Mr. Steve Sizemore
Planning Division Manager
Department of Community Development
City of Monrovia
415 South Ivy Avenue
Monrovia, CA 91016

Dear Mr. Sizemore:

Comment Letter for Tentative Parcel Map No. 82326

The Sanitation Districts of Los Angeles County (Districts) received the letter and plans for the subject project forwarded by your office on April 18, 2019. The proposed project is located within the jurisdictional boundaries of District No. 15. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Monrovia Outfall Trunk Sewer, located in Peck Road at Duarte Road. The Districts' 24-inch diameter trunk sewer has a capacity of 6.1 million gallons per day (mgd) and conveyed a peak flow of 3.3 mgd when last measured in 2013.

2. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP) located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average flow of 58.5 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to and treated at the Joint Water Pollution Control Plant in the City of Carson.

3. The expected increase in average wastewater flow from the project, described in the plan as a 436-unit residential apartments, is 61,117 gallons per day, after all structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before this project is permitted to discharge to the Districts'

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2.2.3 Sanitation Districts of LA County (L3) (3 pages)

L3.1

Comment: The Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report (DEIR) for the subject project on September 30, 2019. The proposed project is located within the jurisdictional boundaries of District No. 15. Previous comments submitted by the Districts in correspondence dated April 24, 2019 (copy enclosed), to Mr. Steve Sizemore of the City of Monrovia, still apply to the subject project with the following updated comments:

1. Draft EIR Summary, *Page 2-2*, second paragraph – The zoning redesignation of PD-27 ZCA to Areas A and C could allow for an additional 82 dwelling units within Area A. Based on the Districts' average wastewater generation factors, an additional 82 dwelling unit would increase the expected average wastewater flow by 12,792 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Services, select Will Serve Program under Wastewater Program and Permits, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link.

***Response*:** The City agrees with the reported projected discharge associated with the 82 dwelling units. Table 20-1 in Chapter 20, Utilities and Service Systems, of the DEIR states that estimated wastewater for 82 units is 12,792 gallons per day. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L3.2

Comment: 2. Appendix K4 Wastewater Capacity Study, *Page 155*, last paragraph in the Memorandum – The information notes the proposed developments tributary sewer flows were determined using the Districts' estimated daily average sewage flows for various occupancies with a minimum flow demand of 250 gpd/unit. As listed in the Districts' Table 1, Loadings for Each Class of Land Use, the flow rate for a single-family home is 260 gpd/unit, townhome or condominium is 195 gpd/unit and multifamily apartment type units is 156 gpd. Adjust calculations accordingly.

***Response*:** The City's Wastewater Capacity Study utilized a conservative estimated flow demand of 250 gpd/unit. The Alexan Foothills Specific Plan involves the construction of multifamily apartments. Therefore, it is conservative to estimate a flow demand of 250, which is higher than the rate provided by the commenter for multifamily apartments.

It is speculative to quantify how many of each dwelling unit types would be constructed in Zoning Code Amendment (ZCA) Areas A and C (i.e., single family homes vs. condominiums vs. multifamily apartments). However, future development in ZCA Areas A and C are expected to primarily comprise condominiums or multifamily apartment type units. The City's Wastewater Capacity Study, therefore, is adequately conservative to ensure that infrastructure would be adequately sized for future anticipated development under the Project. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

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From: Mike Antos
To: John Mayer
Subject: Alexan Foothills comment
Date: Sunday, October 13, 2019 9:43:13 PM

I live on Fano just east of Mayflower. I've reviewed the traffic analysis of the EIR for the Alexan project, and have two concerns.

First, I'm concerned that Evergreen / Mayflower was not analyzed. Given the congestion already present at Evergreen / Myrtle during commute times, and the presence of major retail on Mayflower at Huntington, I have to believe 518 new units will add congestion on Mayflower at Evergreen. Evergreen, in general, is already pretty narrow and confusing with two-way becoming one-way. I'd like Monrovia to consider removing the two-way travel on Evergreen, making Mayflower to Magnolia East-bound travel only. L4.1 L4.2

My second concern is that CEQA is allowing each new project to consider its own impact in isolation, when in-fact there will be cumulative impacts of the many new developments going in around the Gold Line Station. L4.3

I am entirely supportive of density around the station, and welcome Monrovia playing a role in solving the housing shortage in LA County. L4.4

My comments are instead asking Monrovia to be more proactive, demanding developers to make significant improvements to alleviate traffic impacts. That this EIR proposes two "restriping" projects, and a hoped-for contribution to a city-wide development fee for circulation, seems woefully inadequate given the profits that will undoubtedly accrue to the developer, and the cost of traffic that will be felt by Monrovians for years to come. L4.5

Thank you for considering these comments,

Mike Antos

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2.2.4 Mike Antos (L4) (1 page)

L4.1

Comment: First, I'm concerned that Evergreen / Mayflower was not analyzed. Given the congestion already present at Evergreen / Myrtle during commute times, and the presence of major retail on Mayflower at Huntington, I have to believe 518 new units will add congestion on Mayflower at Evergreen.

***Response*:** The intersection of Evergreen/Mayflower was analyzed in the Traffic Impact Study (TIS) prepared for the Project and contained in Appendix J of the DEIR. It is specifically identified as Intersection No. 1 in all graphics and tables. As summarized in Chapter 19, Transportation and Circulation, of the DEIR, impacts to the Level of Service at this intersection were determined to be less than significant according to the City's thresholds of significance. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L4.2

Comment: Evergreen, in general, is already pretty narrow and confusing with two-way becoming one-way. I'd like Monrovia to consider removing the two-way travel on Evergreen, making Mayflower to Magnolia East-bound travel only.

***Response*:** The City acknowledges the comment. This is a request for a capital project and is unrelated to impacts of the Project on traffic. The Project does not warrant the improvement suggested by the commenter. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L4.3

Comment: My second concern is that CEQA is allowing each new project to consider its own impact in isolation, when in-fact there will be cumulative impacts of the many new developments going in around the Gold Line Station.

***Response*:** Cumulative impacts associated with all reasonably foreseeable development proposals at the time the Notice of Preparation was filed were analyzed in the EIR for each issue area. This approach complies with CEQA by disclosing the potential impacts of the proposed project combined with all reasonably foreseeable projects that would generate cumulative impacts. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L4.4

Comment: I am entirely supportive of density around the station, and welcome Monrovia playing a role in solving the housing shortage in LA County.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. However, as the comment is an opinion and does not raise any environmental issues related to the Project, o further response is required.

L4.5

Comment: My comments are instead asking Monrovia to be more proactive, demanding developers to make significant improvements to alleviate traffic impacts. That this EIR proposes two "restriping" projects, and a hoped-for contribution to a city-wide development fee for circulation, seems woefully inadequate given the profits that will undoubtedly accrue to the developer, and the cost of traffic that will be felt by Monrovians for years to come.

***Response*:** The Traffic Impact Study prepared for the Project (Appendix J of the DEIR) concluded that with mitigation, impacts would be less than significant. Therefore, the commenter's opinion that the Project's mitigation is inadequate is incorrect, although it is acknowledged and will be forwarded to City decision makers.

A *Traffic Impact Fee Study for the City of Monrovia* was recently prepared by Gibson Transportation Consulting, Inc. and a Transportation Impact Fee (TIF) Program was developed for the City as a result. The Alexan Foothills Specific Plan will participate and contribute to the City's Transportation Impact Fee (TIF) Program as a project mitigation measure, which includes proposed future improvements to the intersections of Myrtle Avenue/Central Avenue-I-210 WB off-ramp and Myrtle Avenue/Evergreen Avenue-I-210 EB off-ramp. Future proposed development in Zoning Code Amendment (ZCA) Areas A and C would also be required to contribute to the TIF Program. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

3. RESPONSE TO COMMENTS ON THE RECIRCULATED DRAFT EIR

This Chapter lists comments received during recirculation of the Draft EIR (DEIR) between November 12, 2019 and December 26, 2019 and includes responses to those comments.

3.1 LIST OF COMMENTERS

Agencies and individuals and organizations who commented on the Recirculated DEIR are listed below in alphabetical order. Each comment letter is included below and assigned a code (e.g., starting with L6). Each comment within each letter is further assigned a code for tracking individual responses to comments (e.g., L6.1).

3.1.1 Responsible and Interested Agencies

County of Los Angeles Fire Department (L6)
Southern California Gas Company (L7)
Los Angeles County Metropolitan Transportation Authority (Metro) (L8)

3.2 RESPONSES TO COMMENTS

The following section includes comment letters received during the public comment period on the Recirculated DEIR, followed by a written response to each comment. The comments and responses are correlated by code numbers shown in the right margin of each comment letter.

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COUNTY OF LOS ANGELES
FIRE DEPARTMENT

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THIRD DISTRICT

JANICE HAHN
FOURTH DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

December 6, 2019

John Mayer, Senior Planner
City of Monrovia
Community Development Department
415 South Ivy Avenue
Monrovia, CA 91016

Dear Mr. Mayer:

NOTICE OF AVAILABILITY OF A RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT, "ALEXAN FOOTHILLS SPECIFIC PLAN," IS PROPOSING AMENDMENTS TO THE GENERAL PLAN AND ZONING CODE TO CHANGE THE LAND USE DESIGNATION FOR 9.6 ACRES OF LAND FROM "MANUFACTURING" TO "PLANNED DEVELOPMENT," SPECIFICALLY, THE GENERAL PLAN AMENDMENT WOULD ESTABLISH PLANNED DEVELOPMENT-AREA 27, "STATION SQUARE WEST" AS THE NEW LAND USE DESIGNATION FOR THAT LAND, MONROVIA, FFER 2019006661

The Notice of Availability of a Recirculated Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

The subject property is entirely within the City of Monrovia, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department. L6.1

For any questions regarding this response, please contact Loretta Bagwell, Planning Analyst, at (323) 881-2404 or Loretta.Baqwell@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

This project is located entirely in the City of Monrovia. Therefore, the City of Monrovia Fire Department has the jurisdiction concerning this project and will be setting conditions. L6.2

This project is located in close proximity to the jurisdictional area of Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department. L6.3

For any questions regarding the report, please contact FPEA Claudia Soiza at (323) 890-4243 or Claudia.soiza@fire.lacounty.gov.

FORESTRY DIVISION - OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed. L6.4

Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade.

If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.
The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project. L6.5

For any questions regarding this response, please contact Forestry Assistant, Joseph Brunet at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Site Mitigation Unit (SMU) is within the Health Hazardous Materials Division of the Los Angeles County Fire Department. SMU does not direct nor issue permits for environmental cleanups; SMU oversees environmental cleanups for the protection of the environment and manages associated potential human health risks and hazards. In order for SMU to oversee environmental site assessment, remediation, and mitigation measures at the project site, the applicant has to enter into a "Remedial Action Agreement" with SMU per California Health and Safety Code, Section 101480(c). SMU is currently understaffed and may not be able to oversee the project at this time due to previous commitments. Therefore, the Cal-EPA Department of Toxic Substances Control or the Los Angeles Regional Water Quality Control may have to be pursed for environmental oversight of the project site. L6.6

Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

If you have any additional questions, please contact this office at (323) 890-4330

L6.6 (cont.)

Very truly yours,

MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

MYT:ac

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3.2.1 County of Los Angeles Fire Department (L6) (3 pages)

L6.1

Comment: *Planning Division*: The subject property is entirely within the City of Monrovia, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department. For any questions regarding this response, please contact Loretta Bagwell, Planning Analyst, at (3223) 881-2404 or Loretta.Bagwell@fire.lacounty.gov.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. The comment provides background information but does not comment on or request information about any environmental issues associated with the Project. Therefore, no further response is required.

L6.2

Comment: *Land Development Unit*: This project is located entirely in the City of Monrovia. Therefore, the City of Monrovia Fire Department has the jurisdiction concerning this project and will be setting conditions.

***Response*:** As noted on Page 12-12 (Chapter 12, Hazards and Hazardous Materials, of the DEIR), Monrovia Fire and Rescue is the local lead agency for emergency response in the City, although mutual aid agreements exist for neighboring cities and LACFD. No further response is required.

L6.3

Comment: This project is located in close proximity to the jurisdictional area of Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department. For any questions regarding the report, please contact FPEA Claudia Soiza at (323) 890-4243 or Claudia.soiza@fire.lacounty.gov.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L6.4

Comment: *Forestry Division – Other Environmental Concerns*: The statuary responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

***Response*:** Potential impacts in all areas raised by the commenter were addressed in the DEIR, as discussed below.

Fuel Modification for Very High Fire Hazard Severity Zones: As discussed in Chapter 18, Public Services and Recreation, of the DEIR, the Project area is currently developed and not located adjacent to the San Gabriel Mountains or wildland areas. The project site is not located within, or adjacent to, an area mapped by CAL FIRE or the City as a High or Very High Fire Hazard Severity Zone (VHFHSZ), nor is it in, or adjacent to, an area of state or federal responsibility. The Project area is an infill site surrounded by development with ornamental landscaping; natural fuels are absent from the areas immediately surrounding the Specific Plan area. Therefore, the Project would not pose or exacerbate wildland fire risk to residents and employees in the area and would thus not require fuel modification.

County Oak Tree Ordinance: As discussed in Chapter 8, Biological Resources, of the DEIR, the Project area contains coast live oak trees that are protected under the City's Oak Tree Protection Ordinance (>10" in diameter at least 2 feet above the ground), including three along the Specific Plan area's western border. Disturbance to these oak trees would be avoided within the proposed Alexan Foothills Specific Plan area. Specifically, grading plans require protection of these trees. Thus, less than significant impacts would occur. Future development resulting in the alteration to any/all oaks within the proposed Zoning Code Amendment (ZCA) Areas A and C would be required to comply with the City of Monrovia's Oak Tree Preservation Ordinance (Section 8.1.2), which may require a permit through the City's Development Review Committee. With mandatory compliance with the City's Oak Tree Ordinance, impacts would be less than significant. The Project site is within the City and therefore would not be subject to the County's Oak Tree Protection Ordinance.

Archaeological and Cultural Resources: There are no known archaeological or other cultural resources as discussed in Chapter 9, Cultural Resources and Tribal Cultural Resources, of the DEIR. Mitigation measures MM CUL-1 through MM CUL-5 would be required in the event archaeological or cultural resources are encountered. With mitigation, impacts would be less than significant.

Rare and Endangered species and Vegetation: As discussed in Chapter 8, Biological Resources, of the DEIR, due to the disturbed, limited, and fragmented condition of habitats on-site, native vegetation and wildlife species would not be expected to be impacted by the Project. The Project area is almost entirely hardscaped and provides very little biological resource value, other than the presence of mature oak trees. However, due to the potential marginal habitat to some species, the DEIR requires mitigation measures BIO-1 and BIO-2a through BIO-2d to reduce any potential adverse impacts.

Erosion Control and Watershed Protection: Implementation of best management practices (BMPs) during construction would minimize erosion from the site and protect water quality of the watershed during construction, as discussed in Chapter 13, Hydrology of the DEIR. In addition, drainage improvements are proposed to ensure that the Project would not result in hydromodification to the site as also discussed in Chapter 13, Hydrology and Appendix H, Hydrology and LID Report.

The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L6.5

Comment: Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured

4 ½ feet above mean natural grade. If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site. The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project. For any questions regarding this response, please contact Forestry Assistant, Joseph Brunet at (818) 890-5719.

***Response*:** Refer to the County Oak Tree Ordinance discussion above in Response L.6.4

L6.6

Comment: *Health Hazardous Materials Division*: The Site Mitigation Unit (SMU) is within the Health Hazardous Materials Division of the Los Angeles County Fire Department. SMU does not direct nor issue permits for the environmental cleanups; SMU oversees environmental cleanups for the protection of the environment and manages associated potential human health risks and hazards. In order for SMU to oversee environmental site assessment, remediation, and mitigation measures at the project site, the applicant has to enter into a "Remedial Action Agreement" with SMU per California Health and Safety Code (HSC) Section 101480(c). SMU is currently understaffed and may not be able to oversee the project at this time due to previous commitments. Therefore, the Cal-EPA Department of Toxic Substances Control or the Los Angeles Regional Water Quality Control may have to be pursed for environmental oversight of the project site. Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

***Response*:** The DEIR acknowledges DTSC's role in environmental oversight on Page 12-11 in Chapter 12, Hazards and Hazardous Materials. The DEIR includes Mitigation Measure HAZ-1, which requires DTSC or another regulatory agency designated regulatory authority by DTSC to be notified of the results of the Environmental Site Assessments prepared for the Specific Plan. It further requires the applicant to meet all requirements of DTSC or its designee prior to issuance of grading and demolition permits. Likewise, MM HAZ-2 requires the applicant to comply with all requirements of DTSC or its designee for future development in ZCA Areas A and C. With implementation of mitigation, DTSC or its designee will provide appropriate environmental oversight for the Project.

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Karen Kwan
Principal Environmental Specialist

Southern California Gas Company
Sempra Energy utilities
MGT02A
555 Fifth Street
Los Angeles, Ca. 90013
Tel: 213.248.73355817

December 23, 2019

Mr. John Mayer, Senior Planner
City of Monrovia
415 S. Ivy Ave.
Monrovia, CA 91016
jmayer@ci.monrovia.us

RE: Notice of Availability of a Recirculated Draft Environmental Impact Report (EIR) for Alexan Foothills Specific Plan (Project)

Dear Mr. Mayer:

Southern California Gas Company (SoCalGas) appreciates the opportunity to review and respond to the Project's Notice of Availability of a Recirculated Draft EIR. We respectfully request that the following comments be incorporated into the document.

- SoCalGas has several distribution service lines that transverse several of the parcels identified as part of the Alexan Foothills development footprint.

- SoCalGas appreciates that a geophysical survey of areas of the site was completed to scan for underground utilities in 2011. SoCalGas recommends, as required by California law, that the project proponent call Underground Service Alert at 811 or (800) 422-4133 at least two business days prior to performing any excavation work for the proposed project. Underground Service Alert will coordinate with SoCalGas and other Utility owners in the area to mark the locations of buried utility-owned lines.

- SoCalGas understands that "no offsite improvements to utilities are proposed under the Specific Plan." However, should it be determined that the proposed project may require SoCalGas to abandon and/or relocate or otherwise modify any portion of its existing natural gas lines, SoCalGas respectfully requests that the City and/or the project proponent coordinate with SoCalGas by emailing: NorthwestDistributionUtilityRequest@semprautilities.com.

- Should it be determined that the proposed project may require SoCalGas to extend new natural gas service, SoCalGas respectfully requests that project proponent coordinate with us by calling (800) 427-2000 to follow-up on this matter or submit a "Non-Residential Request for New Gas Services" application.

Once again, we appreciate the opportunity to comment on the Project's Recirculated Draft EIR. If you have any questions, please feel free to contact SoCalGas Environmental Review at Envreview@semprautilities.com.

L7.1

Sincerely,

Karen Kwan
Principal Environmental Specialist
Southern California Gas Company

3.2.2 Southern California Gas Company (L7) (2 pages)

L7.1

Comment: Southern California Gas Company (SoCalGas) appreciates the opportunity to review and respond to the Project's Notice of Availability of a Recirculated Draft EIR. We respectfully request that the following comments be incorporated into the document.

- SoCalGas has several distribution service lines that transverse several of the parcels identified as part of the Alexan Foothills development footprint.
- SoCalGas appreciates that a geophysical survey of areas of the site was completed to scan for underground utilities in 2011. SoCalGas recommends, as required by California law, that the project proponent call Underground Service Alert at 811 or (800) 422-4133 at least two business days prior to performing any excavation work for the proposed project. Underground Service Alert will coordinate with SoCalGas and other Utility owners in the area to mark the locations of buried utility-owned lines.
- SoCalGas understands that "no offsite improvements to utilities are proposed under the Specific Plan." However, should it be determined that the proposed project may require SoCalGas to abandon and/or relocate or otherwise modify any portion of its existing natural gas lines, SoCalGas respectfully requests that the City and/or the project proponent coordinate with SoCalGas by emailing: NorthwestDistributionUtilityRequest@semprautilities.com.
- Should it be determined that the proposed project may require SoCalGas to extend new natural gas service, SoCalGas respectfully requests that project proponent coordinate with us by calling (800) 427-2000 to follow-up on this matter or submit a "Non-Residential Request for New Gas Services" application.

Once again, we appreciate the opportunity to comment on the Project's Recirculated Draft EIR. If you have any questions, please feel free to contact SoCalGas Environmental Review at Envreview@semprautilities.com.

***Response*:** The City acknowledges the comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the Project. The City's standard conditions require Applicants to coordinate with SoCalGas during the building permit process and during construction if the Applicant is required to abandon, relocate, or otherwise modify SoCalGas lines or to install new gas lines. Therefore, no further response is required.

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Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

December 24, 2019

John Mayer
Community Development Department
City of Monrovia
415 South Ivy Avenue
Monrovia, CA 91016
Sent by Email: jmayer@ci.monrovia.ca.us

RE: Alexan Foothills Specific Plan Project – Draft Environmental Impact Report (DEIR)

Dear Mr. Mayer:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed Alexan Foothills Specific Plan Project (Project) located at 1508, 1512, 1516, 1518, and 1602 South Mayflower Avenue; 1541 South Dale Drive; 302, 340, 410, 418, and 450 West Evergreen Avenue; 1607, 1625, and 1631 South Magnolia Avenue in the City of Monrovia (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods. Transit Oriented Communities (TOCs) are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. TOCs maximize equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development.

The purpose of this letter is to outline recommendations from Metro concerning issues that are germane to our agency's statutory responsibility in relation to the Metro Gold Line facilities and services, which may be affected by the proposed Project. In addition to the specific comments outlined below, Metro would like to provide the Applicant with two resources: 1) the Metro Adjacent Development Handbook (attached), which provides an overview of common concerns for development adjacent to Metro-owned right-of-way (ROW) and 2) the Adjacent Construction Design Manual with technical information (also attached). These documents and additional resources are available at www.metro.net/projects/devreview/.

Project Description

The Project is adjacent to Metro rail services and includes the development of a multi-family development project to include a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure containing 798 stalls.

Comments

Bus Service Adjacency

1. Service: Metro Bus Line 264 operates on Duarte Road, in proximity to the Project.
2. Bus Stop Enhancements: Metro encourages the installation of enhancements and other amenities that improve safety and comfort for transit riders. These include benches, bus shelters, wayfinding signage, enhanced crosswalks and ADA-compliant ramps, pedestrian lighting, and shade trees in paths of travel to bus stops. The City should consider requesting the installation of such amenities as part of the Project.

L8.1

Light Rail Adjacency

1. Rail Operations: The Metro Gold Line currently operates weekday peak service as often as every six minutes in both directions. Trains may operate in and out of revenue service, 24 hours a day, seven days a week, in the ROW adjacent to the proposed Project.
2. Impact Analysis: Due to the Project's proximity to the Gold Line ROW, the EIR must analyze potential effects on light rail operations and identify mitigation measures or project design features as appropriate. Impacts to be studied should include (without limitation): impacts of Project construction and operation on and potential damage to the structural and systems integrity of tracks and related infrastructure; disruption to light rail service; rail crossing safety for pedestrians and vehicles; temporary and/or permanent changes to customer access and circulation to the Station; and noise and vibration. Specific impacts that should be studied include:
    a. At-Grade Crossings: There is an at-grade rail crossing in close proximity to the Project at the intersection of South Magnolia Avenue between West Pomona Avenue and Genoa Street. The Project is likely to increase traffic volumes across this at-grade crossing, which could potentially impact the safety of the crossing. As such, these traffic and safety impacts should be analyzed. In particular, pedestrians exiting the Project site at its southeast corner may attempt to cross Magnolia Avenue to access the pedestrian pathway along the southern border of the Moda at Monrovia Station Project.

       We note that the DEIR states on p. 19-30 that "the applicant for the Alexan Foothills Specific Plan and the City propose an alternate route from the Specific Plan area to the METRO Gold Line via a pathway internal to the new apartment complex leading from the parking structure to a new striped crosswalk at the intersection of Magnolia Avenue and Evergreen Avenue, further north of the railroad tracks. The applicant also proposes to remove a formerly proposed pedestrian walkway on the southeast end of the property and to now gate pedestrian access to Magnolia Avenue at the southeast corner of the property to discourage pedestrians from attempting to cross Magnolia Avenue close to the railroad tracks." While we appreciate the effort to redirect pedestrians to the

L8.2

Magnolia/Evergreen intersection, it is unclear whether residents in the southern portion of the Project will walk the additional distance there and backtrack south to access Monrovia Station. The EIR should discuss and evaluate other options for locating safe crosswalks across Magnolia Avenue, e.g. at Pomona Avenue.

This rail crossing is regulated by the California Public Utilities Commission (CPUC) and maintained by Metro. CPUC may have additional comments and requirements regarding this Project and should be contacted in outreach efforts.

b. Structure Setback: Structures that are immediately adjacent to Metro ROW can pose safety hazards and may disrupt transit service and/or damage Metro infrastructure. Such conflicts can occur during Project construction and/or operation. For this reason, projects should include a setback from Metro property that allows the property owner to construct and maintain structures on private property without encroaching onto Metro ROW.

c. Excavation Support System: The Project includes underground excavation and construction of structures. Tiebacks supporting these structures have the potential to disturb adjoining soils and jeopardize support of the light rail tracks.

The following provisions should be used to develop mitigation measures and/or project design features that address these potential impacts:

d. Technical Review: The Applicant shall submit engineering drawings and calculations, as well as construction work plans and methods including any crane placement and radius, to evaluate any impacts to the Metro Gold Line infrastructure in relationship to the Project. The Applicant shall obtain Metro's approval of final construction drawings before issuance of any building permit for the Project.

e. At-Grade Crossings: The Applicant shall comply with all regulations and requirements of the California Public Utilities Commission (CPUC) with respect to the Project's potential impacts on the at-grade rail crossing at the intersection of South Magnolia Avenue between West Pomona Avenue and Genoa Street. The Applicant shall consult with Metro and CPUC on designs to mitigate such impacts, such as crosswalks to the north of the rail crossing and gates at the southeast corner of the Project site to redirect pedestrians away from the crossing.

f. Structure Setback: Where the Project site is immediately adjacent to Metro ROW, all building structures (above ground and below grade) and projections shall be set back at least five (5) feet from the property line shared by the Project property and Metro to allow adequate space for construction and property maintenance activities. Property owners will not be permitted to

L8.2 Cont.

access Metro property to construct or maintain private development and/or landscaping.

g. Construction Safety: The construction and operation of the Project shall not disrupt the operation and maintenance activities of the Metro Gold Line or the structural and systems integrity of Metro's light rail infrastructure. Not later than one month before Project construction, the Applicant shall schedule a pre-construction meeting with all Project construction personnel and Metro Real Estate, Construction Management, and Construction Safety staff. During Project construction, the Applicant shall work in close coordination with Metro to ensure that Station access, visibility, and structural integrity are not compromised by construction activities or permanent build conditions. The Applicant shall notify Metro of any changes to demolition and construction activities that may impact the use of the ROW. The Applicant shall permit Metro staff to monitor demolition and/or construction activities to ascertain any impact to the Gold Line ROW.

h. ROW Entry Permit: For temporary or ongoing access to Metro ROW for demolition, construction, and/or maintenance activities, the Applicant shall complete Metro's Track Allocation process with Metro Rail Operations and obtain a Right of Entry Permit from Metro Real Estate. Approval for single tracking or a power shutdown, while possible, is highly discouraged; if sought, the Applicant shall apply for and obtain such approval from Metro not later than two months before the start of Project construction. The Applicant shall apply for and obtain approval from Metro for special operations, including the use of a pile driver or any other equipment that could come into close proximity to the OCS or support structures, not later than one month before the start of Project construction.

i. Noise & Vibration: The Applicant shall record a Noise Easement Deed in favor of Metro is required before issuance of any Certificate of Occupancy for the Project. The easement recorded in the Deed shall extend to successors and tenants.

3. Advisories to Applicant: The Applicant is encouraged to contact Metro Development Review early in the design process to plan for potential impacts. The Applicant should also be advised of the following:
   a. OSHA Requirements: Demolition, construction and/or excavation work in proximity to Metro ROW with potential to damage light rail tracks and related infrastructure may be subject to additional OSHA safety requirements.
   b. Technical Review: Metro charges for staff time spent on engineering review and construction monitoring.
   c. Cost of Impacts: The Applicant will be responsible for costs incurred resulting from Project construction/operation issues that cause delay or harm to Metro

L8.2 Cont.

service delivery or infrastructure, including single-tracking or bus bridging around closures. The Applicant will also bear all costs for any noise mitigation required for the Project.

d. Maintenance: Metro will require prompt removal of graffiti and trash along the concrete block wall and landscaped area adjacent to Metro ROW. For these and other maintenance activities that will require access to Metro property, the Applicant must obtain a Temporary Right of Entry Permit before accessing property and coordinate activities through Rail Operations Track Allocation process, as discussed above.

L8.2 Cont.

Transit Orientation

Considering the Project's proximity to Monrovia Station, Metro would like to identify the potential synergies associated with transit-oriented development:

1. Transit-Supportive Planning: To achieve Metro's program objectives, Metro strongly recommends that the Applicant review the Transit-Supportive Planning Toolkit which identifies 10 elements of transit-supportive places and. applied collectively, has been shown to reduce vehicle miles traveled by establishing community-scaled density, diverse land use mix, combination of affordable housing, and infrastructure projects for pedestrians, bicyclists, and people of all ages and abilities. This resource is available at https://www.metro.net/projects/tod-toolkit.

L8.3

2. Land Use: Metro supports development of commercial and residential properties near transit stations and understands that increasing development near stations represents a mutually beneficial opportunity to increase ridership and enhance transportation options for the users of developments. Metro encourages the City and Applicant to be mindful of the Project's proximity to the Monrovia Station, including orienting pedestrian pathways towards the station.

L8.4

3. Transit Access: The Project should address first-last mile connections to transit, encouraging development that is transit-accessible with bicycle and pedestrian-oriented street design that connects transportation with housing and employment centers. The Applicant is also encouraged to support these connections with wayfinding signage inclusive of all modes of transportation. For reference, please review the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at: http://media.metro.net/docs/sustainability_path_design_guidelines.pdf

L8.5

4. Active Transportation: Metro strongly encourages the Applicant to install Project features that help facilitate safe and convenient connections for pedestrians, people riding bicycles, and transit users to/from the Project site and nearby destinations. The City should consider requiring the installation of such features as part of the conditions of approval for the Project. These features can include the following:
    a. Walkability: The installation of wide sidewalks, pedestrian lighting, a continuous canopy of shade trees, enhanced crosswalks with ADA-

L8.6

compliant curb ramps, and other amenities along all public street frontages of the development site to improve pedestrian safety and comfort to access the nearby rail station.

b. Bicycle Use: The provision of adequate short-term bicycle parking, such as ground level bicycle racks, and secure, access-controlled, enclosed long-term bicycle parking for residents, employees and guests. Bicycle parking facilities should be designed with best practices in mind, including highly visible siting, effective surveillance, easy to locate, and equipment installed with preferred spacing dimensions, so they can be safely and conveniently accessed.

L8.6 Cont.

5. Parking: Metro encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the reduction or removal of minimum parking requirements for specific areas and the exploration of shared parking opportunities. These strategies could be pursued to reduce automobile-orientation in design and travel demand.

L8.7

6. Transit Pass: Metro would like to inform the Applicant of Metro's employer transit pass programs, including the Annual Transit Access Pass (A-TAP), the Employer Pass Program (E-Pass), and Small Employer Pass (SEP) Program. These programs offer efficiencies and group rates that businesses can offer employees as an incentive to utilize public transit. The A-TAP can also be used for residential projects. For more information on these programs, contact Vanessa Adlawan at AdlawanV@metro.net.

L8.8

If you have any questions regarding this response, please contact me by phone at 213-922-2671, by email at DevReview@metro.net, or by mail at the following address:

Metro Development Review
One Gateway Plaza MS 99-22-1
Los Angeles, CA 90012-2952

Sincerely,

Shine Ling, AICP
Manager, Transit Oriented Communities

Attachments and links:

- Adjacent Construction Design Manual
- Adjacent Development Handbook: https://www.metro.net/projects/devreview/
- Noise Easement Deed

3.2.3 Los Angeles County Metropolitan Transportation Authority (Metro) (L8) (6 pages)

L8.1

Comment: *Bus Service Adjacency*.

Service: Metro Bus Line 264 operates on Duarte Road, in proximity to the Project.
Bus Stop Enhancements: Metro encourages the installation of enhancements and other amenities that improve safety and comfort for transit riders. These include benches, bus shelters, wayfinding signage, enhanced crosswalks and ADA-compliant ramps, pedestrian lighting, and shade trees in paths of travel to bus stops. The City should consider requesting the installation of such amenities as part of the Project.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. Some of the recommended features have already been incorporated into the proposed Project design. For example, future development within ZCA Area C would include ADA accessible paths. However, the enhancements and amenities recommended by the commenter are not required by CEQA and therefore, while they will be made available to decision makers, they will not be required by the EIR.

L8.2

Comment: *Light Rail Adjacency.*

1. Rail Operations: The Metro Gold Line currently operates weekday peak service as often as every six minutes in both directions. Trains may operate in and out of revenue service, 24 hours a day, seven days a week, in the ROW adjacent to the proposed Project.

2. Impact Analysis: Due to the Project's proximity to the Gold Line ROW, the EIR must analyze potential effects on light rail operations and identify mitigation measures or project design features as appropriate. Impacts to be studied should include (without limitation): impacts of Project construction and operation on and potential damage to the structural and systems integrity of tracks and related infrastructure; disruption to light rail service; rail crossing safety for pedestrians and vehicles; temporary and/or permanent changes to customer access and circulation to the Station; and noise and vibration. Specific impacts that should be studied include:

a. At-Grade Crossings: There is an at-grade rail crossing in close proximity to the Project at the intersection of South Magnolia Avenue between West Pomona Avenue and Genoa Street. The Project is likely to increase traffic volumes across this at-grade crossing, which could potentially impact the safety of the crossing. As such, these traffic and safety impacts should be analyzed. In particular, pedestrians exiting the Project site at its southeast corner may attempt to cross Magnolia Avenue to access the pedestrian pathway along the southern border of the Moda at Monrovia Station Project.

We note that the DEIR states on p. 19-30 that "the applicant for the Alexan Foothills Specific Plan and the City propose an alternate route from the Specific Plan area to the METRO Gold Line via a pathway internal to the new apartment complex leading from the parking structure to a new striped crosswalk at the intersection of Magnolia Avenue and Evergreen Avenue, further north of the railroad tracks. The applicant also proposes to remove a formerly proposed pedestrian walkway on the southeast end of the property and to now gate pedestrian access to

Magnolia Avenue at the southeast corner of the property to discourage pedestrians from attempting to cross Magnolia Avenue close to the railroad tracks." While we appreciate the effort to redirect pedestrians to the Magnolia/Evergreen intersection, it is unclear whether residents in the southern portion of the Project will walk the additional distance there and backtrack south to access Monrovia Station. The EIR should discuss and evaluate other options for locating safe crosswalks across Magnolia Avenue, e.g. at Pomona Avenue.

This rail crossing is regulated by the California Public Utilities Commission (CPUC) and maintained by Metro. CPUC may have additional comments and requirements regarding this Project and should be contacted in outreach efforts.

b. Structure Setback: Structures that are immediately adjacent to Metro ROW can pose safety hazards and may disrupt transit service and/or damage Metro infrastructure. Such conflicts can occur during Project construction and/or operation. For this reason, projects should include a setback from Metro property that allows the property owner to construct and maintain structures on private property without encroaching onto Metro ROW.

c. Excavation Support System: The Project includes underground excavation and construction of structures. Tiebacks supporting these structures have the potential to disturb adjoining soils and jeopardize support of the light rail tracks.

The following provisions should be used to develop mitigation measures and/or project design features that address these potential impacts:

d. Technical Review: The Applicant shall submit engineering drawings and calculations, as well as construction work plans and methods including any crane placement and radius, to evaluate any impacts to the Metro Gold Line infrastructure in relationship to the Project. The Applicant shall obtain Metro's approval of final construction drawings before issuance of any building permit for the Project.

e. At-Grade Crossings: The Applicant shall comply with all regulations and requirements of the California Public Utilities Commission (CPUC) with respect to the Project's potential impacts on the at-grade rail crossing at the intersection of South Magnolia Avenue between West Pomona Avenue and Genoa Street. The Applicant shall consult with Metro and CPUC on designs to mitigate such impacts, such as crosswalks to the north of the rail crossing and gates at the southeast corner of the Project site to redirect pedestrians away from the crossing.

f. Structure Setback: Where the Project site is immediately adjacent to Metro ROW, all building structures (above ground and below grade) and projections shall be set back at least five (5) feet from the property line shared by the Project property and Metro to allow adequate space for construction and property maintenance activities. Property owners will not be permitted to access Metro property to construct or maintain private development and/or landscaping.

g. Construction Safety: The construction and operation of the Project shall not disrupt the operation and maintenance activities of the Metro Gold Line or the structural and systems integrity of Metro's light rail infrastructure. Not later than one month before Project construction, the Applicant shall schedule a preconstruction meeting with all Project construction personnel and Metro Real Estate, Construction Management, and Construction Safety staff. During Project construction, the Applicant shall work in close coordination with Metro to ensure that Station access, visibility, and structural integrity are not compromised by construction activities or permanent build conditions. The Applicant shall notify Metro of any changes to demolition and construction activities that may impact the use of the ROW. The Applicant shall permit

Metro staff to monitor demolition and/or construction activities to ascertain any impact to the Gold Line ROW.

h. ROW Entry Permit: For temporary or ongoing access to Metro ROW for demolition, construction, and/or maintenance activities, the Applicant shall complete Metro's Track Allocation process with Metro Rail Operations and obtain a Right of Entry Permit from Metro Real Estate. Approval for single tracking or a power shutdown, while possible, is highly discouraged; if sought, the Applicant shall apply for and obtain such approval from Metro not later than two months before the start of Project construction. The Applicant shall apply for and obtain approval from Metro for special operations, including the use of a pile driver or any other equipment that could come into close proximity to the OCS or support structures, not later than one month before the start of Project construction.

i. Noise & Vibration: The Applicant shall record a Noise Easement Deed in favor of Metro is required before issuance of any Certificate of Occupancy for the Project. The easement recorded in the Deed shall extend to successors and tenants.

3. Advisories to Applicant: The Applicant is encouraged to contact Metro Development Review early in the design process to plan for potential impacts. The Applicant should also be advised of the following:

a. OSHA Requirements: Demolition, construction and/or excavation work in proximity to Metro ROW with potential to damage light rail tracks and related infrastructure may be subject to additional OSHA safety requirements.

b. Technical Review: Metro charges for staff time spent on engineering review and construction monitoring.

c. Cost of Impacts: The Applicant will be responsible for costs incurred resulting from Project construction/operation issues that cause delay or harm to Metro service delivery or infrastructure, including single-tracking or bus bridging around closures. The Applicant will also bear all costs for any noise mitigation required for the Project.

d. Maintenance: Metro will require prompt removal of graffiti and trash along the concrete block wall and landscaped area adjacent to Metro ROW. For these and other maintenance activities that will require access to Metro property, the Applicant must obtain a Temporary Right of Entry Permit before accessing property and coordinate activities through Rail Operations Track Allocation process, as discussed above.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

To provide background context to Metro's comment letter, consultation with Metro for the Alexan Foothills Specific Plan was initiated on May 7, 2018 with Eddi Zepeda, Transportation Planner of Metro's Countywide Planning & Development department and Georgia Sheridan, Senior Manager with Metro's Transit Oriented Communities department; an intake form for development review of the Alexan Foothills Specific Plan by Metro was initiated on May 15, 2018.

On May 31, 2018, Metro submitted comments on the Alexan Foothills Specific Plan as part of its development review process expressing concerns regarding traffic and safety impacts of the at-grade crossing of Metro's Gold Line tracks with Magnolia Avenue. In this letter, Metro

acknowledged that the California Public Utilities Commission (CPUC) regulates at-grade crossings and should be consulted with regarding the Specific Plan.

Consultation with Jose Pereyra, Utilities Engineer with the Rail Crossings Engineering Branch of the Safety and Enforcement Division of the CPUC was initiated on June 4, 2018 by the Applicant of the Alexan Foothills Specific Plan at the request of Metro. A copy of the plans and Traffic Impact Study were provided to the CPUC at this time.

On June 7, 2018, Jose Pereyra commented that "We have no safety concerns related to vehicular traffic generated by the project." However, Mr. Pereyra expressed concerns regarding pedestrians traveling across Magnolia Avenue near the Gold Line tracks, and potentially affecting vehicular travel across the tracks. As a result, discussions ensued between the City, Metro, and CPUC to determine how internal walkways and signage could be revised and an alternative pedestrian crosswalk could be provided on Magnolia Avenue to discourage pedestrians from crossing Magnolia Avenue near the tracks. A joint meeting with Eddi Zepeda (Metro), Georgia Sheridan (Metro), Jose Pereyra (CPUC), and the City was held on June 12, 2018 to discuss. During this call and follow-on discussions it was decided that a gate would be installed at the southeast corner of the proposed Specific Plan to discourage pedestrians from crossing Magnolia Avenue near the tracks and internal walkways and signage would be revised to route pedestrians to Magnolia Avenue near its intersection with Pomona Avenue. A new crosswalk at the intersection of Magnolia Avenue and Pomona Avenue was also discussed. On July 25, 2018, the CPUC responded that they approved of the proposed new pedestrian crossing and revised project plans. After July 25, 2018, the City engineer required that the proposed new crosswalk at Magnolia Avenue and Pomona Avenue be relocated to the intersection of Magnolia Avenue and Evergreen Avenue due to safety concerns by the City. With the gate at the southeast corner of the Specific Plan, revised internal walkways and signage in the proposed new development, as well as a new crosswalk, the City feels that Metro's safety concerns have been adequately addressed. Based on the City's analysis in the EIR regarding safety, impacts will be less than significant and Metro's recommendations are not warranted to be incorporated in the EIR. Finally, the CPUC is responsible for regulating at-grade crossings and did not submit a comment letter on the Draft EIR.

Communications with Metro and the CPUC are shown at the end of this Chapter.

As discussed above, the Applicant for the Alexan Foothills Specific Plan has conducted extensive consultation and development review with both Metro and the CPUC between May and July 2018 where both agencies were provided with copies of the site plans, including engineering drawings, and the Traffic Impact Study (TIS) for the Specific Plan. The Applicant worked closely with Metro and CPUC to address concerns regarding pedestrians crossing Magnolia Avenue near the Metro Gold Line tracks and developed an acceptable solution to Metro and CPUC as well as the City. With the gate at the southeast corner of the Specific Plan, revised internal walkways and signage in the proposed new development, as well as a new crosswalk, evaluation of other options for locating crosswalks across Magnolia Avenue, including at Pomona Avenue, is not warranted. The CPUC does not have any concerns regarding traffic impacts on the at-grade crossing of the tracks at Magnolia Avenue. Metro's December 24, 2019 comment letter does not raise any new safety concerns that have not already been addressed by the City in the EIR. As requested in the comment letter, the Applicant will continue to coordinate closely with Metro and CPUC during final design of the Alexan Foothills Specific Plan development as well as during construction. The Applicant will schedule a pre-construction meeting with Metro and will notify Metro of any changes to demolition and construction activities that may impact the use of the ROW, as requested by Metro. CEQA does not require any of the additional measures recommended by Metro to be

incorporated into the Specific Plan. All potential impacts raised by Metro have been addressed in the EIR. Therefore, no further response is required.

L8.3

Comment: Considering the Project's proximity to the Monrovia Station, Metro would like to identify the potential synergies associated with transit-oriented development:

Transit-Supportive Planning: To achieve Metro's program objectives, Metro strongly recommends that the Applicant review the Transit-Supportive Planning Toolkit which identifies 10 elements of transit-supportive places and. applied collectively, has been shown to reduce vehicle miles traveled by establishing community-scaled density, diverse land use mix, combination of affordable housing, and infrastructure projects for pedestrians, bicyclists, and people of all ages and abilities. This resource is available at https://www.metro.net/projects/tod-toolkit.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. The comment provides background information but does not comment on or request information about any environmental issues associated with the Project. Metro's recommendation to review the Transit-Supportive Planning Toolkit is noted, but is not required by CEQA. No further response is required.

L8.4

Comment: Land Use: Metro supports development of commercial and residential properties near transit stations and understands that increasing development near stations represents a mutually beneficial opportunity to increase ridership and enhance transportation options for the users of developments. Metro encourages the City and Applicant to be mindful of the Project's proximity to the Monrovia Station, including orienting pedestrian pathways towards the station.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. The Project has been designed to take advantage of and to facilitate access to the Monrovia Station and its transit options. No further response is required.

L8.5

Comment: Transit Access: The Project should address first-last miles connections to transit, encouraging development that is transit-accessible with bicycle and pedestrian-oriented street design that connects transportation with housing and employment centers. The Applicant is also encouraged to support these connections with wayfinding signage inclusive of all modes of transportation. For reference, please view the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at: http://media.metro.net/docs/sustainability_path_design_guidelines.pdf

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. The Project site is located one block from the Monrovia Gold Line station. In addition, the Project includes both short-term and long-term bicycle parking amenities. The Project developer and operator are required to comply with all applicable signage requirements. No further response is required.

L8.6

Comment: Active Transportation: Metro strongly encourages the Applicant to install Project features that help facilitate safe and convenient connections for pedestrians, people, riding bicycles, and transit users to/from the Project site and nearby destinations. The City should consider requiring the installation of such features as part of the conditions of approval for the Project. These features can include the following:

Walkability: The installation of wide sidewalks, pedestrian lighting, a continuous canopy of shade trees, enhanced crosswalks with ADA compliant curb ramps, and other amenities along all public street frontages of the development site to improve pedestrian safety and comfort to access the nearby rail station.

Bicycle Use: The provision of adequate short-term bicycle parking, such as ground level bicycle racks, and secure, access-controlled, enclosed long term bicycle parking for residents, employees and guests. Bicycle parking facilities should be designed with best practices in mind, including highly visible siting, effective surveillance, easy to locate, and equipment installed with preferred spacing dimensions, so they can be safely and conveniently accessed.

***Response*:** The City acknowledges the comment. Some of the recommended features have already been incorporated into the proposed Project design, and the remaining features are not warranted by CEQA to be incorporated into the Project design. Bicycle parking and pedestrian-friendly features are incorporated into the design of the Project. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L8.7

Comment: Parking: Metro encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the reduction or removal of minimum parking requirements for specific areas and the exploration of shared parking opportunities. These strategies could be pursued to reduce automobile-orientation in design and travel demand.

***Response*:** The City acknowledges the comment. The Project is designed to facilitate enhanced access to transit, pedestrian and bicycle facilities and will provide on-site long-term and short-term bike parking amenities. The Project will also comply with all applicable City parking requirements. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

L8.8

Comment: Transit Pass: Metro would like to inform the Applicant of Metro's employer transit pass programs, including the Annual Transit Access Pass (A-TAP), the Employer Pass Program (E-Pass), and Small Employer Pass (SEP) Program. These programs offer efficiencies and group rates that businesses can offer employees as an incentive to utilize public transit. The A-TAP can also be used for residential projects. For more information on these programs, contact Vanessa Adlawan at AdlawanV@metro.net.

***Response*:** The City acknowledges the comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project. No further response is required.

Communications with Metro and CPUC

Page left intentionally blank.

Michelle Gibbs <mgibbs@migcom.com>

Fwd: FW: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

4 messages

Lisa Brownfield <lisab@migcom.com> Mon, May 14, 2018 at 9:03 AM
To: Michelle Gibbs <mgibbs@migcom.com>

FYI

The handbook provides some helpful information.

---------- Forwarded message ----------
From: **Schiffer, Alec** <aschiffer@tcr.com>
Date: Mon, May 14, 2018 at 4:54 AM
Subject: FW: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow
To: Lisa Brownfield <lisab@migcom.com>, "Swarts, Ashley" <aswarts@tcr.com>

FYI Lisa.

Ashley, can you take a look at these forms and direct the appropriate consultants to get them filled out?

From: Sheridan, Georgia [mailto:SheridanG@metro.net]
Sent: Friday, May 11, 2018 4:01 PM
To: Schiffer, Alec <aschiffer@tcr.com>
Cc: Saponara, Nicholas <SaponaraN@metro.net>; Zepeda, Eddi <ZepedaEd@metro.net>
Subject: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Hello Alec –

Thank you for getting in touch regarding Moda at Monrovia Station. Nice chatting with you. As I mentioned on our call, we've found that it's best to coordinate early with developers who are interested in constructing near our ROW to discuss any concerns Metro may have regarding access, safety, etc to avoid headaches later on.

Attached are a couple of items to get your started:

1) Development review in-take form

2) Metro Adjacent Development Review Handbook (provides an overview of general considerations when constructing near Metro).

When ready, please route your information and drawings through our devreview@metro.net email address, which allows us to log, assign, and track your project through our development review team.

Thanks and have a good weekend,

Georgia

Georgia Sheridan, AICP

LA Metro
Senior Manager

Transit Oriented Communities
213.922.1259
metro.net | facebook.com/losangelesmetro | @metrolosangeles
Metro provides excellence in service and support.

From: Schiffer, Alec <aschiffer@tcr.com>
Sent: Monday, May 7, 2018 9:36:47 AM
To: Saponara, Nicholas
Cc: Erdossy, Garth
Subject: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Mr. Saponara,

I work with Garth Erdossy from your ULI council. We are currently entitling a 436 unit project adjacent to the Metro Gold Line station in Monrovia. Our project is across the street (to the west) from the Moda at Monrovia Station project.

City staff would like us to review the site plan and landscaping plans with Metro. Our questions:

1- Does Metro want to review the plans with us?

2- What staff person do you recommend we speak with?

Thank you in advance.

TRAMMELL CROW RESIDENTIAL

Alec Schiffer

Managing Director

5790 Fleet St. Suite 140 Carlsbad, CA 92008

aschiffer@tcr.com
P: 858.210.9737

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--

Lisa A. Brownfield

MIG
Director of Planning Services, Pasadena
537 S. Raymond Avenue Pasadena CA 91105
626.744.9872 ext. 306 626.240.9596 c
lisab@migcom.com
http://www.migcom.com/

Planning Ahead: I will be out of the office Thursday, June 14th through Tuesday, June 18th.

2 attachments

ADR_InTakeForm.pdf
220K

2018-05-09 MAD_Handbook.pdf
7855K

Michelle Gibbs <mgibbs@migcom.com> Mon, May 14, 2018 at 11:26 AM
To: Lisa Brownfield <lisab@migcom.com>

Ok, thanks Lisa.

Has TCR asked you to fill out the Intake Form?

Michelle Gibbs
Senior Planner/Biologist
MIG, Inc.
800 Hearst Avenue
Berkeley, California 94710
(805) 746-1680-cell
www.migcom.com | mgibbs@migcom.com
[Quoted text hidden]

Lisa Brownfield <lisab@migcom.com> Mon, May 14, 2018 at 12:47 PM
To: Michelle Gibbs <mgibbs@migcom.com>

no Charles at ao is doing it.
[Quoted text hidden]

Michelle Gibbs <mgibbs@migcom.com> Mon, May 14, 2018 at 1:57 PM

To: Lisa Brownfield <lisab@migcom.com>

Ok

[Quoted text hidden]

Michelle Wilson <mwilson@migcom.com>

Fwd: FW: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Lisa Brownfield <lisab@migcom.com> Mon, Jun 4, 2018 at 10:51 AM
To: Michelle Gibbs <mgibbs@migcom.com>

metro comments way down the chain
---------- Forwarded message ----------
From: **Schiffer, Alec** <aschiffer@tcr.com>
Date: Sat, Jun 2, 2018 at 7:07 AM
Subject: FW: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow
To: Charles Addington <charlesa@architectsorange.com>, David Martin <dmartin@psomas.com>, Lisa Brownfield <lisab@migcom.com>, Eric Haley <ehaley@eptdesign.com>
Cc: "Swarts, Ashley" <aswarts@tcr.com>

Do you all see anything negative in here?

From: Barrita, Michael [mailto:BarritaM@metro.net]
Sent: Friday, June 1, 2018 4:44 PM
To: Swarts, Ashley <aswarts@tcr.com>
Cc: Schiffer, Alec <aschiffer@tcr.com>; Zepeda, Eddi <ZepedaEd@metro.net>; Sheridan, Georgia <SheridanG@metro.net>
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Ms. Swarts,

Thank you for the opportunity to comment on the “Alexan Monrovia” Project located in the City of Monrovia. The Metro comment letter is attached along with the associated attachments.

Please contact Eddi Zepeda at 213.418.3484 if you have any questions.

Regards,

Michael Barrita

LA Metro
Transportation Associate, Countywide Planning & Development

Joint Development/Strategic Initiatives
213.922.3442
metro.net | facebook.com/losangelesmetro | @metrolosangeles
Metro provides excellence in service and support.

From: Zepeda, Eddi
Sent: Tuesday, May 29, 2018 12:17 PM
To: Swarts, Ashley
Cc: Sheridan, Georgia; Saponara, Nicholas; Schiffer, Alec; Barrita, Michael
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Hi Ashely,

Thank you for following up. We have an internal deadline of 5/30 for comments from our departments. We should have something to you before the end of the week. Thank you for your patience.

Best,

Eddi Zepeda
LA Metro

Transportation Planner
Countywide Planning & Development, Joint Development
213.418.3483
metro.net | facebook.com/losangelesmetro | @metrolosangeles
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From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Tuesday, May 29, 2018 12:08 PM
To: Zepeda, Eddi <ZepedaEd@metro.net>
Cc: Sheridan, Georgia <SheridanG@metro.net>; Saponara, Nicholas <SaponaraN@metro.net>; Schiffer, Alec <aschiffer@tcr.com>
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Hi Eddi,

I wanted to check in & see where we are in the process of Metro's development review. Could you provide an update & when we might expect a comment letter?

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Zepeda, Eddi [mailto:ZepedaEd@metro.net]
Sent: Wednesday, May 16, 2018 8:40 AM
To: Swarts, Ashley <aswarts@tcr.com>
Cc: Sheridan, Georgia <SheridanG@metro.net>; Saponara, Nicholas <SaponaraN@metro.net>; Schiffer, Alec <aschiffer@tcr.com>
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Ashley,

Very helpful, thank you. We'll begin the routing process.

Best,

Eddi Zepeda
LA Metro

Transportation Planner
Countywide Planning & Development, Joint Development
213.418.3483

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From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Tuesday, May 15, 2018 1:54 PM
To: Zepeda, Eddi <ZepedaEd@metro.net>
Cc: Sheridan, Georgia <SheridanG@metro.net>; Saponara, Nicholas <SaponaraN@metro.net>; Schiffer, Alec <aschiffer@tcr.com>
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Hi Eddi,

Thank you for the quick response! Our elevations are still in process, so I've attached a few sections and the landscape plan for your review.

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Zepeda, Eddi [mailto:ZepedaEd@metro.net]
Sent: Tuesday, May 15, 2018 10:06 AM
To: Swarts, Ashley <aswarts@tcr.com>
Cc: Sheridan, Georgia <SheridanG@metro.net>; Saponara, Nicholas <SaponaraN@metro.net>; Schiffer, Alec <aschiffer@tcr.com>
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Ashley,

Thank you so much for sending this over. Per our Metro Adjacent Development Review process, we'll route the information you provided through our departments and prepare a comprehensive comment letter highlighting common Metro concerns and opportunities for collaboration.

To facilitate our review, do you have elevations or sections you can share with me?

Best,

Eddi Zepeda
LA Metro

Transportation Planner
Countywide Planning & Development, Joint Development
213.418.3483
metro.net | facebook.com/losangelesmetro | @metrolosangeles
Metro provides excellence in service and support.

From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Tuesday, May 15, 2018 9:51 AM
To: DevReview <DevReview@metro.net>
Cc: Sheridan, Georgia <SheridanG@metro.net>; Saponara, Nicholas <SaponaraN@metro.net>; Zepeda, Eddi <ZepedaEd@metro.net>; Schiffer, Alec <aschiffer@tcr.com>
Subject: RE: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Good Morning,

Please find attached the completed Development Review Take-In form and Site Plan for our Alexan Monrovia project per the discussion below. Let me know if anything further is needed in order to get the review kicked off with Metro.

Thank you!

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Sheridan, Georgia [mailto:SheridanG@metro.net]
Sent: Friday, May 11, 2018 4:01 PM
To: Schiffer, Alec <aschiffer@tcr.com>
Cc: Saponara, Nicholas <SaponaraN@metro.net>; Zepeda, Eddi <ZepedaEd@metro.net>
Subject: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Hello Alec –

Thank you for getting in touch regarding Moda at Monrovia Station. Nice chatting with you. As I mentioned on our call, we've found that it's best to coordinate early with developers who are interested in constructing near our ROW to discuss any concerns Metro may have regarding access, safety, etc to avoid headaches later on.

Attached are a couple of items to get your started:

1. Development review in-take form
2. Metro Adjacent Development Review Handbook (provides an overview of general considerations when constructing near Metro).

When ready, please route your information and drawings through our devreview@metro.net email address, which allows us to log, assign, and track your project through our development review team.

Thanks and have a good weekend,

Georgia

Georgia Sheridan, AICP

LA Metro
Senior Manager

Transit Oriented Communities
213.922.1259

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Metro provides excellence in service and support.

From: Schiffer, Alec <aschiffer@tcr.com>
Sent: Monday, May 7, 2018 9:36:47 AM
To: Saponara, Nicholas
Cc: Erdossy, Garth
Subject: Garth Erdossy - Monrovia Gold Line Project - Trammell Crow

Mr. Saponara,

I work with Garth Erdossy from your ULI council. We are currently entitling a 436 unit project adjacent to the Metro Gold Line station in Monrovia. Our project is across the street (to the west) from the Moda at Monrovia Station project.

City staff would like us to review the site plan and landscaping plans with Metro. Our questions:

1- Does Metro want to review the plans with us?

2- What staff person do you recommend we speak with?

Thank you in advance.

TRAMMELL CROW RESIDENTIAL

Alec Schiffer

Managing Director

5790 Fleet St. Suite 140 Carlsbad, CA 92008

aschiffer@tcr.com
P: 858.210.9737

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--

Lisa A. Brownfield

MIG
Director of Planning Services, Pasadena
537 S. Raymond Avenue   Pasadena CA 91105
626.744.9872 ext. 306   626.240.9596 c
lisab@migcom.com
http://www.migcom.com/

Planning Ahead: I will be out of the office Thursday, June 14th through Tuesday, June 18th.

---

2 attachments

Metro Development Review Comments - Alexan Monrovia.pdf
186K

Noise Easement Deed.pdf
3370K

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

May 31, 2018

Alec Schiffer
Trammell Crow Residential
5790 Fleet Street Suite #140
Monrovia, CA 92008

RE: The Alexan Monrovia – 1625 S. Magnolia Avenue – Metro Comments

Dear Mr. Schiffer:

Thank you for the opportunity to comment on The Alexan Monrovia development located at 1625 S. Magnolia Avenue in the City of Monrovia (Project). This letter conveys recommendations from the Los Angeles County Metropolitan Transportation Authority (Metro) concerning issues that are germane to our agency's statutory responsibility in relation to our facilities and services that may be affected by the proposed Project.

Metro is committed to working with stakeholders across the County to support the development of transit oriented communities (TOCs). TOCs are built by considering transit within a broader community and creating vibrant, compact, walkable, and bikeable places centered around transit stations and hubs with the goal of encouraging the use of transit and other alternatives to driving. Metro looks forward to collaborating with local municipalities, developers, and other stakeholders in their land use planning and development efforts, and to find partnerships that support TOCs across Los Angeles County.

Project Description

The proposed Project includes the construction of a five-story building with 436-units on a 6.77 acre site surrounded by a seven-story parking structure with 796 parking spaces, which includes 34 leased stalls for Metrolink parking. The parking structure will not include any subterranean levels.

Metro Comments

The Metro Adjacent Development Handbook, accessible at www.metro.net/projects/devreview/, provides an overview of considerations for development adjacent to Metro right-of-way (ROW). Below is a list of adjacency-related comments, specific to the proposed Project.

Metro Light Rail Adjacency

The southern boundary of the Project site is adjacent to the Metro Gold Line railroad ROW, on which the light rail trains operate. Additionally, the proposed Project is in close proximity to the Monrovia

Station (Station). The following concerns related to the Project's proximity to the Gold Line and structures should be addressed:

1. Rail Operations: The Metro Gold Line currently operates weekday peak service as often as every seven minutes in both directions. Trains may operate in and out of revenue service, 24 hours a day, seven days a week, in the ROW proximate to the proposed Project.

2. Noise & Vibration: Considering the proximity of the proposed Project to the ROW, it is expected that rail operations may produce noise, vibration, and visual impacts. A recorded Noise Easement Deed in favor of Metro is required prior to the completion and/or occupancy of the Project (see attached). Any noise mitigation required for the Project must be borne by the Project Sponsor and not Metro. The easement recorded in the Deed will extend to successors and tenants as well.

3. Building Setback: Where the property is immediately adjacent to Metro ROW, all structures, walls, landscaping, and fences as part of the development should be set back five (5) feet from the Metro property line to allow adequate space for property maintenance. Property owners will not be permitted to access Metro property to maintain private development and/or landscaping.

4. ROW Access: There shall be no encroachment onto the railroad ROW. Should construction or maintenance of the Project necessitate temporary or ongoing access to the ROW, Metro Track Allocation requirements must be adhered to (see point five below) and a Right of Entry Permit must be requested and obtained. Contact John Potts, Deputy Executive Officer of Real Estate, at 213-922-2435 for right-of-entry permits. The Project Sponsor must work in close coordination with Metro to ensure that Metro ROW access, visibility, and structural integrity are not compromised by construction activities or permanent build conditions.

5. Track Allocation & Special Permits: Any future work affecting the Project, including but not limited to signage/advertisement installation, or any other maintenance work within ten feet of the Overhead Catenary System (OCS) will require a Track Allocation Permit and ROW Safety Training. Permits allowing for single tracking or a power shutdown, while possible, are highly discouraged and must be obtained at least two months prior to the start of construction. Permits for special operations including the use of a pile driver or any other equipment that could come into close proximity to the OCS or support structure must be obtained at least one month prior to the start of construction. The Project Sponsor should contact the following people regarding track allocation and/or special operation permits: Fernando Andres Di Zitti, Rail Operations Manager at 213-418-3004, or the On-Duty Rail Operations Control Center Floor Manager at 323-563-5022.

6. ROW Protection: The Project Sponsor should notify Metro of any changes to the construction/building plans that may impact the use of the ROW. During construction, a protection barrier of acceptable material shall be constructed to cover the full height of the building to prevent objects, material, or debris from falling onto the Metro ROW, pedestrian pathways, or OCS and support structures. Construction and/or excavation work in proximity to Metro ROW with potential to damage the tracks and related infrastructure may be subject to additional Occupational Safety and Health Act (OSHA) safety requirements.

7. OCS Protection: Wires and support structures in the ROW adjacent to the proposed Project power Metro light rail trains. It is imperative that the OCS is protected during and after construction. The Project should be designed to ensure trees and other landscaping, as well as building protrusions facing the ROW (e.g. balconies, awnings and other appurtenances) maintain a minimum distance of ten (10) feet from the OCS and support structures. OCS wires should be treated like any high voltage electrical utility wires. Proper signage should be posted for equipment working around the OCS wires.

8. Construction Monitoring: Metro staff shall be permitted to monitor construction activity to ascertain any impact to the ROW. The Project Sponsor should be advised that Metro may request reimbursement for costs incurred as a result of Project construction/operation issues that cause delay or harm to Metro service delivery or infrastructure.

At-grade Crossing

There is an at-grade crossing located along S. Magnolia Avenue between W. Pomona Avenue and Genoa Street. The development of the Project is likely to increase traffic volumes across this at-grade crossing that could potentially impact the safety of the crossing. These traffic and safety impacts should be analyzed. This crossing is regulated by the California Public Utilities Commission (CPUC) and maintained by Metro. CPUC may have additional comments and requirements regarding this Project and should be contacted in outreach efforts. All structures and walls of the development shall be set back from the crossing so that the Metro operator has a clear view of the crossing to assure safety at sidewalk and vehicle crossings.

Transit Orientation

Considering the Project's proximity to the Monrovia Station, Metro would like to identify the potential synergies associated with transit-oriented development:

1. Land Use: Metro supports development of commercial and residential properties near transit stations and understands that increasing development near stations represents a mutually beneficial opportunity to increase ridership and enhance transportation options for the users of developments. Metro encourages the City and Project Sponsor to be mindful of the Project's proximity to the Station, including orienting pedestrian pathways toward the Station.

2. Walkability: Metro strongly encourages the installation of wide sidewalks, pedestrian lighting, a continuous canopy of shade trees, enhanced crosswalks with ADA-compliant curb ramps, and other amenities along all public street frontages of the development site to improve pedestrian safety and comfort to access the nearby bus stop and the Station. The City should consider requiring the installation of such amenities as part of the conditions of approval for the Project.

3. Access: The Project should address first-last mile connections to transit, encouraging development that is transit accessible with bicycle and pedestrian-oriented street design connecting transportation to housing and employment centers. For reference, please view the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at:
http://media.metro.net/docs/sustainability_path_design_guidelines.pdf

4. Active Transportation: Metro encourages the City to work with the Project Sponsor to promote bicycle use through adequate short-term bicycle parking, such as ground-level bicycle racks, as well as secure and enclosed long-term bicycle parking, such as bike lockers or a secured bike room, for guests, employees, and residents. Bicycle parking facilities should be designed with best practices in mind, including highly visible siting, effective surveillance, easy to locate, and equipment installed with preferred spacing dimensions, so they can be conveniently accessed. Additionally, the Project Sponsor should help facilitate safe and convenient connections for pedestrians, people riding bikes, and transit users to/from the Project site and nearby destinations, such as bus services on W. Duarte Road. The Project is also encouraged to support these connections with wayfinding signage inclusive of all modes of transportation.

5. Wayfinding: Any planned wayfinding that includes Metro content, information, and/or branding must conform to Metro's Signage Standards. For a copy of the latest standards, please contact Lance Glover at 213.922.2360 or GloverL@metro.net. Metro reserves the right to review and approve any use of its information on such signage.

6. Multi-modal Connections: With an anticipated increase in traffic, Metro encourages an analysis of impacts on non-motorized transportation modes and consideration of improved non-motorized access to the Project and nearby transit services, including pedestrian connections and bike lanes/paths. Appropriate analyses could include multi-modal LOS calculations, pedestrian audits, etc.

7. Parking: Metro encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the reduction or removal of minimum parking requirements for specific areas and the exploration of shared parking opportunities. These strategies could be pursued to reduce automobile-orientation in design and travel demand.

8. Transit Pass: Metro would like to inform the Project Sponsor of Metro's employer transit pass programs including the Annual Transit Access Pass (A-TAP) and Business Transit Access Pass (B-TAP) programs which offer efficiencies and group rates that businesses can offer employees as an incentive to utilize public transit. For more information on these programs, contact Devon Deming at 213-922-7957 or DemingD@metro.net.

If you have any questions regarding this response, please contact Eddi Zepeda by phone at 213-418-3484, by email at DevReview@metro.net, or by mail at the following address:

Metro Development Review
One Gateway Plaza MS 99-23-4
Los Angeles, CA 90012-2952

Sincerely,

Georgia Sheridan

Georgia Sheridan, AICP
Senior Manager, Transit Oriented Communities

Attachments and links:

- Noise Easement Deed
- Adjacent Development Handbook: https://www.metro.net/projects/devreview/

Michelle Wilson <mwilson@migcom.com>

Re: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Lisa Brownfield <lisab@migcom.com> Thu, Jun 7, 2018 at 4:06 PM
To: Michelle Gibbs <mgibbs@migcom.com>
Cc: "Schiffer, Alec" <aschiffer@tcr.com>, "Swarts, Ashley" <aswarts@tcr.com>

Alec, Ashley, and Michelle,
I think this is a pretty good response.
I am available Tuesday and Wednesday for a call next week.

Lisa

On Thu, Jun 7, 2018 at 3:47 PM, Pereyra, Jose <jose.pereyra@cpuc.ca.gov> wrote:

> Alec, Lisa, Ashley:
>
> We've reviewed the Alexan Monrovia Project site plan and Traffic Impact Analysis report. We note that primary driveway access to the development will be on Magnolia Ave. between Pomona Ave. and Evergreen Ave. In addition, there will be a maintenance road/Fire Dept. access on Evergreen Ave. We have no safety concerns related to vehicular traffic generated by the project. With regard to pedestrian activity, your traffic impact report indicates pedestrian access to the Metro Gold Line station will be available by use of existing crosswalks. It appears that the only marked crosswalk on Magnolia Ave. is located at the intersection with Evergreen Ave., well north of the Gold Line station entrance on Magnolia Ave. adjacent to the vehicular crossing.
>
> We are concerned with pedestrians from the Alexan project site jaywalking across Magnolia Ave in the immediate vicinity of the vehicular crossing in order to access the Gold Line station. Pedestrians engaging in this behavior may interfere with vehicles attempting to clear the crossing before arrival of a train. Do you have any information with regard to pedestrian volumes and potential routes from the project site leading towards the Gold Line station? Do you propose any pedestrian treatments with regard to your project such as stripping a crosswalk on Magnolia Ave. at the intersection with Pomona Ave.? We would like to discuss our pedestrian related safety concerns and potential mitigations.
>
> Please let me know of your availability to meet next week. We will also have to invite the City of Monrovia and Metro to the discussion. Can you please provide me with the contact persons you are dealing with? We can organize a teleconference to accommodate as many participants as is necessary.
>
> I will be out of the office tomorrow, Friday. I will be available on Monday, June 11th if you would like to discuss scheduling a meeting.

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Schiffer, Alec [mailto:aschiffer@tcr.com]
Sent: Tuesday, June 05, 2018 11:28 AM
To: Swarts, Ashley; Pereyra, Jose; 'Lisa Brownfield'
Cc: Bond, Matthew
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Jose, PLEASE CALL ME WITH QUESTIONS. Thanks.

TRAMMELL CROW RESIDENTIAL

Alec Schiffer

Managing Director

5790 Fleet St. Suite 140 Carlsbad, CA 92008

aschiffer@tcr.com
P: 858.210.9737

From: Swarts, Ashley
Sent: Tuesday, June 5, 2018 10:46 AM
To: Pereyra, Jose <jose.pereyra@cpuc.ca.gov>; 'Lisa Brownfield' <lisab@migcom.com>; Schiffer, Alec <aschiffer@tcr.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

Sounds good! I would recommend calling Lisa if you have questions.

Lisa A. Brownfield

MIG

Director of Planning Services, Pasadena

537 S. Raymond Avenue Pasadena CA 91105

626.744.9872 ext. 306 626.240.9596 c

lisab@migcom.com

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Tuesday, June 05, 2018 10:27 AM
To: Swarts, Ashley <aswarts@tcr.com>; 'Lisa Brownfield' <lisab@migcom.com>; Schiffer, Alec <aschiffer@tcr.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Ashley,

Thank you for providing the information. We'll review it and get back to you by tomorrow. Can I call if I have questions?

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Tuesday, June 05, 2018 8:37 AM

To: Pereyra, Jose; 'Lisa Brownfield'; Schiffer, Alec
Cc: Bond, Matthew
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

I am working with Lisa on this project & wanted to pass along our most current site plan and our TIA for CPUC review and comment.

Please find both files here: https://tcr1.box.com/s/d5xjmzvqmt5rrieer1tglmhzshkd2hwf

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Monday, June 04, 2018 2:30 PM
To: 'Lisa Brownfield' <lisab@migcom.com>; Swarts, Ashley <aswarts@tcr.com>; Schiffer, Alec <aschiffer@tcr.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Lisa,

Thank you for reaching out to me. Yes, the CPUC would like to review your project plans. Specifically, we would like to review your development plans that show primary and secondary access to the 436 unit project, and proposed modifications (if any) to Magnolia Ave. We need to evaluate any significant safety impacts that your project would cause to the overall safe operation of Metro's Magnolia Ave at-grade crossing.

Questions we have are: Was an environmental study performed? If so, were impacts to traffic and safety identified? Is your project strictly residential? Do you plan any type of pedestrian connection to Metro's Magnolia Light Rail Station? Will pedestrians cross Magnolia Ave at/near the Magnolia Ave crossing? Where are the parking access driveways to the development located relative to the Magnolia Ave crossing?

Your project may necessitate the modification of the Magnolia Ave crossing, and any modifications must be reviewed and approved by the CPUC.

Please provide me a copy of your plans and of any environmental study performed that identifies impacts to traffic and safety. You may also call me at the telephone number listed below if you want to discuss further.

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Lisa Brownfield [mailto:lisab@migcom.com]
Sent: Monday, June 04, 2018 11:23 AM
To: Pereyra, Jose
Cc: Swarts, Ashley; Schiffer, Alec
Subject: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Mr. Pereyra,

Trammell Crow Residential is currently entitling a 436 unit project located at 1625 S. Magnolia Av, Monrovia, CA. The site is near the Metro Gold Line station; the site is adjacent to the S. Magnolia Avenue (between W. Pomona Avenue and Genoa Street) at-grade rail crossing. The crossing is regulated by the CPUC and maintained by Metro.

Eddi Zepeda and Georgia Sheridan, Metro, suggested CPUC review the plan. Our questions:

- Does CPUC want to review the project plans?
- What plans/materials would you like to review?
- If not you, which staff person do you recommend we contact?

Thank you in advance.

Lisa A. Brownfield

MIG

Director of Planning Services, Pasadena

537 S. Raymond Avenue Pasadena CA 91105

626.744.9872 ext. 306 626.240.9596 c

lisab@migcom.com

http://www.migcom.com/

Planning Ahead: I will be out of the office Thursday, June 14th through Tuesday, June 18th.

This message and any attached documents contain information that may be confidential and/or privileged. If you are not the intended recipient, you may not read, copy, distribute, or use this information. If you have received this transmission in error, please notify the sender immediately by reply e-mail and then delete this message.

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--

Lisa A. Brownfield

MIG
Director of Planning Services, Pasadena
537 S. Raymond Avenue Pasadena CA 91105
626.744.9872 ext. 306 626.240.9596 c
lisab@migcom.com
http://www.migcom.com/

Planning Ahead: I will be out of the office Thursday, June 14th through Tuesday, June 18th.

Michelle Gibbs <mgibbs@migcom.com>

FW: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Swarts, Ashley <aswarts@tcr.com> Wed, Jul 25, 2018 at 2:04 PM
To: Alan Darpini <AlanD@architectsorange.com>, "Daniel.Chuong@lsa.net" <Daniel.Chuong@lsa.net>, David Martin <dmartin@psomas.com>, Delia Arriaga <darriaga@migcom.com>, Dinh Le <dinhl@architectsorange.com>, Eric Haley <ehaley@eptdesign.com>, "Erdossy, Garth" <gerdossy@tcr.com>, Kara Tobin <kara.tobin@psomas.com>, Lisa Brownfield <lisab@migcom.com>, Michael Heinrich <michaelh@architectsorange.com>, Michelle Gibbs <mgibbs@migcom.com>, Paul Garry <paul.garry@psomas.com>, RC Alley <rca@architectsorange.com>, Rose Fistrovic <rose.fistrovic@psomas.com>, "Schiffer, Alec" <aschiffer@tcr.com>, Stephen Carroll <scarroll@eptdesign.com>, "Swarts, Ashley" <aswarts@tcr.com>, "Tony Petros (Tony.Petros@lsa.net)" <Tony.Petros@lsa.net>

Hi Team,

We have received full approval for our proposed pedestrian crossing scenario. Please make sure to update all plans to reflect the crossing.

Thank you!

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Wednesday, July 25, 2018 10:55 AM
To: Swarts, Ashley <aswarts@tcr.com>; Pereyra, Jose <jose.pereyra@cpuc.ca.gov>; Zepeda, Eddi <ZepedaEd@metro.net>
Cc: Schiffer, Alec <aschiffer@tcr.com>; Lisa Brownfield <lisab@migcom.com>; Sheri Bermejo <sbermejo@ci.monrovia.ca.us>; Craig Jimenez <cjimenez@ci.monrovia.ca.us>; Teresa Santilena <tsantilena@ci.monrovia.ca.us>; Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Ashley,

Thank you for providing the referenced documents for our review. We have reviewed the modifications to your plans that call for rerouting pedestrian access from the onsite parking structure to the Metro Gold Line station, and the addition of a striped crosswalk at the intersection of Magnolia Ave. and Pomona Ave. We also note that you plan to modify the southeast end of the property by gating it and removing the pedestrian walkway. Your revised proposal adequately addresses our pedestrian safety concerns.

Please keep us informed if there are any future changes to your plans that may impact implementation of these pedestrian treatments, or if we can be of any assistance.

Thank you very much,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Tuesday, July 17, 2018 2:57 PM
To: Pereyra, Jose; Zepeda, Eddi
Cc: Schiffer, Alec; Lisa Brownfield; Sheri Bermejo; Craig Jimenez; Teresa Santilena
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Good Afternoon,

As discussed on our call on 7/10, attached is the proposed mitigation for the CPUC / Metro pedestrian related safety concerns to the Gold Line station access.

Attached you will find the proposed mitigation which we believe has been previously reviewed by CPUC / Metro and has now been reviewed by the City of Monrovia. Our City contacts have been CC'ed here.

Our pedestrian treatment would include striping a crosswalk on Magnolia Ave. at the intersection with Pomona Ave. This would allow easy pedestrian access to Metro Station Square from our project and the project's parking structure. The south end of the property will be gated for security and no longer be a pedestrian walkway.

Please reply with CPUC and Metro approval for this previously discussed pedestrian safety mitigation.

Thank you!

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Swarts, Ashley
Sent: Monday, June 18, 2018 4:15 PM
To: 'Pereyra, Jose' <jose.pereyra@cpuc.ca.gov>; 'Lisa Brownfield' <lisab@migcom.com>
Cc: Schiffer, Alec <aschiffer@tcr.com>; Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

Per our discussion last Tuesday, attached is a potential scenario regarding pedestrian access options. Please review & let us know if CPUC approves.

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Tuesday, June 12, 2018 9:48 AM
To: 'Lisa Brownfield' <lisab@migcom.com>
Cc: Swarts, Ashley <aswarts@tcr.com>; Schiffer, Alec <aschiffer@tcr.com>; Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Good morning,

We are available for a call today after 10:30. Will Metro participate?

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Lisa Brownfield [mailto:lisab@migcom.com]
Sent: Monday, June 11, 2018 4:04 PM
To: Pereyra, Jose
Cc: Swarts, Ashley; Schiffer, Alec; Bond, Matthew
Subject: Re: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Mr. Pereyra,

The City planning and engineering staff are solidly booked for a couple of weeks.

Trammell Crow Residential and its consultant team would like to move forward with you and Metro while informing the City of our discussion and the key points.

As such, are you available for a call on Tuesday, tomorrow, after 10:30 am?

On Mon, Jun 11, 2018 at 10:07 AM, Pereyra, Jose <jose.pereyra@cpuc.ca.gov> wrote:

Hi Ashley,

Unfortunately I'm not available Thursday afternoon. I'm open that morning after 9am, or we can also try on anytime on Friday after 9am. Please let me know what works best.

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Friday, June 08, 2018 8:42 AM
To: Pereyra, Jose; Schiffer, Alec; 'Lisa Brownfield'
Cc: Bond, Matthew
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

Our contacts at the City will not be able to meet until Thursday afternoon at the earliest. Would you be available for a call Thursday at 4:00 PM?

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Swarts, Ashley
Sent: Thursday, June 07, 2018 4:08 PM
To: 'Pereyra, Jose' <jose.pereyra@cpuc.ca.gov>; Schiffer, Alec <aschiffer@tcr.com>; 'Lisa Brownfield' <lisab@migcom.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

We are available Tuesday or in the afternoon Wednesday for a call next week. We have been in contact with Sheri Bermejo at the City and Eddi Zepeda at Metro.

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Thursday, June 07, 2018 3:48 PM
To: Schiffer, Alec <aschiffer@tcr.com>; Swarts, Ashley <aswarts@tcr.com>; 'Lisa Brownfield' <lisab@migcom.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Alec, Lisa, Ashley:

We've reviewed the Alexan Monrovia Project site plan and Traffic Impact Analysis report. We note that primary driveway access to the development will be on Magnolia Ave. between Pomona Ave. and Evergreen Ave. In addition, there will be a maintenance road/Fire Dept. access on Evergreen Ave. We have no safety concerns related to vehicular traffic generated by the project. With regard to pedestrian activity, your traffic impact report indicates pedestrian access to the Metro Gold Line station will be available by use of existing crosswalks. It appears that the only marked crosswalk on Magnolia Ave. is located at the intersection with Evergreen Ave., well north of the Gold Line station entrance on Magnolia Ave. adjacent to the vehicular crossing.

We are concerned with pedestrians from the Alexan project site jaywalking across Magnolia Ave in the immediate vicinity of the vehicular crossing in order to access the Gold Line station. Pedestrians engaging in this behavior may interfere with vehicles attempting to clear the crossing before arrival of a train. Do you have any information with regard to pedestrian volumes and potential routes from the project site leading towards the Gold Line station? Do you propose any pedestrian treatments with regard to your project such as stripping a crosswalk on Magnolia Ave. at the intersection with Pomona Ave.? We would like to discuss our pedestrian related safety concerns and potential mitigations.

Please let me know of your availability to meet next week. We will also have to invite the City of Monrovia and Metro to the discussion. Can you please provide me with the contact persons you are dealing with? We can organize a teleconference to accommodate as many participants as is necessary.

I will be out of the office tomorrow, Friday. I will be available on Monday, June 11th if you would like to discuss scheduling a meeting.

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Schiffer, Alec [mailto:aschiffer@tcr.com]
Sent: Tuesday, June 05, 2018 11:28 AM
To: Swarts, Ashley; Pereyra, Jose; 'Lisa Brownfield'
Cc: Bond, Matthew
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Jose, PLEASE CALL ME WITH QUESTIONS. Thanks.

TRAMMELL CROW RESIDENTIAL

Alec Schiffer

Managing Director

5790 Fleet St. Suite 140 Carlsbad, CA 92008

aschiffer@tcr.com
P: 858.210.9737

From: Swarts, Ashley
Sent: Tuesday, June 5, 2018 10:46 AM
To: Pereyra, Jose <jose.pereyra@cpuc.ca.gov>; 'Lisa Brownfield' <lisab@migcom.com>; Schiffer, Alec <aschiffer@tcr.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

Sounds good! I would recommend calling Lisa if you have questions.

Lisa A. Brownfield

MIG

Director of Planning Services, Pasadena

537 S. Raymond Avenue Pasadena CA 91105

626.744.9872 ext. 306 626.240.9596 c

lisab@migcom.com

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Tuesday, June 05, 2018 10:27 AM
To: Swarts, Ashley <aswarts@tcr.com>; 'Lisa Brownfield' <lisab@migcom.com>; Schiffer, Alec <aschiffer@tcr.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Ashley,

Thank you for providing the information. We'll review it and get back to you by tomorrow. Can I call if I have questions?

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Swarts, Ashley [mailto:aswarts@tcr.com]
Sent: Tuesday, June 05, 2018 8:37 AM
To: Pereyra, Jose; 'Lisa Brownfield'; Schiffer, Alec
Cc: Bond, Matthew
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Hi Jose,

I am working with Lisa on this project & wanted to pass along our most current site plan and our TIA for CPUC review and comment.

Please find both files here: https://tcr1.box.com/s/d5xjmzvqmt5rrieer1tglmhzshkd2hwf

Best,

TRAMMELL CROW RESIDENTIAL

Ashley Swarts

Development Coordinator

5790 Fleet St. Suite 140, Carlsbad, CA 92008

aswarts@tcr.com

P: 760.444.5218

From: Pereyra, Jose [mailto:jose.pereyra@cpuc.ca.gov]
Sent: Monday, June 04, 2018 2:30 PM
To: 'Lisa Brownfield' <lisab@migcom.com>; Swarts, Ashley <aswarts@tcr.com>; Schiffer, Alec <aschiffer@tcr.com>
Cc: Bond, Matthew <Matthew.Bond@cpuc.ca.gov>
Subject: RE: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Lisa,

Thank you for reaching out to me. Yes, the CPUC would like to review your project plans. Specifically, we would like to review your development plans that show primary and secondary access to the 436 unit project, and proposed modifications (if any) to Magnolia Ave. We need to evaluate any significant safety impacts that your project would cause to the overall safe operation of Metro's Magnolia Ave at-grade crossing.

Questions we have are: Was an environmental study performed? If so, were impacts to traffic and safety identified? Is your project strictly residential? Do you plan any type of pedestrian connection to Metro's Magnolia Light Rail Station? Will pedestrians cross Magnolia Ave at/near the Magnolia Ave crossing? Where are the parking access driveways to the development located relative to the Magnolia Ave crossing?

Your project may necessitate the modification of the Magnolia Ave crossing, and any modifications must be reviewed and approved by the CPUC.

Please provide me a copy of your plans and of any environmental study performed that identifies impacts to traffic and safety. You may also call me at the telephone number listed below if you want to discuss further.

Thank you,

Jose Pereyra, Utilities Engineer

Rail Crossings Engineering Branch

Safety and Enforcement Division (SED)

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

Jose.pereyra@cpuc.ca.gov

(213) 576-7083

CPUC Rail Crossings Engineering Branch

http://www.cpuc.ca.gov/crossings/

From: Lisa Brownfield [mailto:lisab@migcom.com]
Sent: Monday, June 04, 2018 11:23 AM
To: Pereyra, Jose

Cc: Swarts, Ashley; Schiffer, Alec
Subject: Alexan Monrovia Project Proposal, 1625 S. Magnolia Av Monrovia CA

Mr. Pereyra,

Trammell Crow Residential is currently entitling a 436 unit project located at 1625 S. Magnolia Av, Monrovia, CA. The site is near the Metro Gold Line station; the site is adjacent to the S. Magnolia Avenue (between W. Pomona Avenue and Genoa Street) at-grade rail crossing. The crossing is regulated by the CPUC and maintained by Metro.

Eddi Zepeda and Georgia Sheridan, Metro, suggested CPUC review the plan. Our questions:

- Does CPUC want to review the project plans?
- What plans/materials would you like to review?
- If not you, which staff person do you recommend we contact?

Thank you in advance.

Lisa A. Brownfield

MIG

Director of Planning Services, Pasadena

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lisab@migcom.com

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Planning Ahead: I will be out of the office Thursday, June 14th through Tuesday, June 18th.

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2 attachments

16-252-SITE PLAN-Metro path.pdf
759K

C3.00 GRAD-Overall Grading.180716.pdf
1153K

4. DRAFT EIR REVISIONS

The following section includes minor revisions to the Draft EIR (DEIR) made to be consistent with new proposed projects located adjacent to the Project as well as in response to all comments received during the Draft EIR comment period. All text revisions are indicated by strike-through (deleted text) and underlining (added text) as errata to the Draft EIR. All of the revisions supersede the corresponding text in the Draft EIR. None of the criteria listed in CEQA Guidelines Section 15088.5 (Recirculation of an EIR Prior to Certification) indicating the need for recirculation of the Draft EIR has been met as a result of the revisions. In particular:

- No new significant environmental impacts due to the project or due to a new mitigation measure have been identified;
- No substantial increase in the severity of an environmental impact has been identified; and
- No additional feasible project alternative or mitigation measure considerably different from others analyzed in the Draft EIR has been identified that would clearly lessen the significant environmental impacts of the project.

Text revisions to the Draft EIR are identified below and will be incorporated in the Final EIR.

CHAPTER 7, AIR QUALITY

On pages 7-8 to 7-9 of the Draft EIR, the discussion of Emission Sources from Existing Land Uses is revised as follows:

Emissions Sources from Existing Land Uses

The approximately 9.63-acre Project area consists of the approximately 6.77-acre Alexan Foothills Specific Plan and the 2.86-acre ZCA Areas A and C. As described in Chapter 3.0, Project Description, the existing land uses in the Project area consist of a mix of single-family residential (5 total dwelling units), institutional place of worship (approximately 6,630 square feet), and light industrial (approximately 70,750 square feet), one office building, and a warehouse (approximately 10,120 square feet). These existing land uses generate emissions from the following sources:

- **Small "area" sources.** Existing land uses in the Project area generate emissions from small area sources including landscaping equipment and the use of consumer products such as paints, cleaners, and fertilizers that result in the evaporation of chemicals into the atmosphere during product use.
- **Energy use and consumption**. Existing land uses in the Project area generate emissions from the combustion of natural gas in water and space heating equipment, as well as industrial processes.
- **Mobile sources.** Existing land uses in the Project area generate emissions from vehicles travelling to and from the Project.

Emissions from existing land uses in the Project area were estimated using the California Emissions Estimator Model, or CalEEMod, Version 2016.3.2 using default data assumptions provided by CalEEMod, with the following project-specific modifications:

- **Land Use Inputs:** The default lot acreage and building square footage assumptions for modeled land uses were adjusted to reflect actual existing conditions and development acreages, building sizes, etc.

- ~~The default acreage and square footage for each of the Project area's land use types were adjusted to reflect the actual Project area as currently developed.~~

- **Trip Generation:** The default weekday trip generation rates for the existing land use types were replaced with trip generation rates contained in the Traffic Impact Analysis (TIA) prepared for the proposed Alexan Foothills Specific Plan and the maximum potential development scenario under ZCA Areas A and C (see Draft EIR Chapter 19.0, Transportation and Circulation, and the TIA in Draft EIR Appendix J). Default weekend trip generation rates were not modified.

- ~~The default trip generation rates for the existing land use types were replaced with trip generation rates contained in the Traffic Impact Analysis (TIA) prepared for the proposed Alexan Foothills Specific Plan and the maximum potential development scenario under ZCA Areas A and C (see Chapter 19, Transportation and Circulation, and the TIA in Appendix J). The Project TIA provided trip generation rates for peak weekday activities. Accordingly, the average daily traffic rate contained in the TIA was adjusted by a factor of 0.96 to be consistent with State emission inventory methods and to account for reduced weekend trip rates (this provides a more accurate estimate of total annual emissions).~~

- **Energy Use and Consumption:** The residential default electrical energy intensity and natural gas energy intensity values were adjusted upwards by a factor of 1.78 and a factor of 1.35, respectively, to reflect lower energy efficiency requirements of the 2008 energy code for which existing buildings were assumed to be subject to (Trinity Consultants, 2017). Similarly, the non-residential default electrical energy intensity, light energy intensity, and natural gas energy intensity values were adjusted upwards by a factor of 1.195, 1.10, and 1.05, respectively. This is appropriate as most buildings in the planning area were constructed prior to the adoption of 2008 (modeled energy efficiency assumption) and 2016 (CalEEMod default assumption) Title 24 building energy efficiency standards.

- ~~The default electrical and natural gas energy efficiency intensity values for residential and non-residential land uses were adjusted upwards to reflect the older nature of the existing buildings and structures in the area.~~

- **Water**: The default outdoor water use for non-residential land uses was set to zero to reflect the paved nature of the Project area.

Emissions of criteria air pollutants for existing land uses in the Project area are summarized in Table 7-3 below.

As shown in Table 7-3, the existing land uses in the Alexan Foothills Specific Plan area account for between ~~59%~~61% and 76% of the total ROG, NO_x, CO, SO_2, PM_{10} dust and $PM_{2.5}$ dust generated in the Project area, whereas they only account for approximately ~~32% and~~ 33% of combined existing PM_{10} and $PM_{2.5}$ emissions~~, respectively~~.

On page 7-12 of the Draft EIR, Table 7-3 is revised as follows:

Table 7-3 Existing Emissions in the Project Area

Emissions Source	Maximum Daily Pollutant Emissions (Pounds Per Day) [A]							
	ROG	NO_x	CO	SO_2	PM_{10}		$PM_{2.5}$	
					Dust	Exhaust	Dust	Exhaust
Alexan Foothills Specific Plan Area								
Area	1.82	0.02	0.62	0.00[C]	--	0.08	--	0.08
Energy	~~0.05~~ 0.04	~~0.41~~ 0.33	~~0.34~~ 0.27	0.00	--	0.03	--	0.03
Mobile	~~1.06~~ 1.52	~~4.92~~ 7.05	~~15.78~~ 21.20	~~0.05~~ 0.06	~~3.36~~ 4.41	~~0.05~~ 0.07	~~0.90~~ 1.18	~~0.95~~ 0.07
Subtotal[B]	**~~2.92~~ 3.38**	**~~5.35~~ 7.40**	**~~16.74~~ 22.09**	**~~0.05~~ 0.06**	**~~3.36~~ 4.41**	**~~0.16~~ 0.17**	**~~0.90~~ 1.18**	**~~0.16~~ 0.17**
ZCA Areas A and C								
Area	~~1.71~~ 1.72	0.09	2.37	0.01	--	0.31	--	0.31
Energy	~~0.02~~ 0.01	~~0.14~~ 0.11	~~0.10~~ 0.08	0.00	--	0.01	--	0.01
Mobile	~~0.34~~ 0.44	~~1.59~~ 2.13	~~5.13~~ 6.57	~~0.01~~ 0.02	~~1.10~~ 1.40	0.02	~~0.29~~ 0.37	0.02
Subtotal[B]	**~~2.07~~ 2.17**	**~~1.82~~ 2.32**	**~~7.61~~ 9.03**	**~~0.02~~ 0.03**	**~~1.10~~ 1.40**	**0.34**	**~~0.29~~ 0.37**	**~~0.33~~ 0.34**
Total Project Area								
Area	~~3.53~~ 3.54	0.11	2.99	0.01	--	0.39	--	0.39
Energy	~~0.07~~ 0.05	~~0.55~~ 0.44	~~0.44~~ 0.35	<0.00[C]	--	0.04	--	0.04
Mobile	~~1.40~~ 1.96	~~6.51~~ 9.18	~~20.91~~ 27.77	~~0.06~~ 0.08	~~4.46~~ 5.81	~~0.07~~ 0.09	~~1.19~~ 1.55	~~0.97~~ 0.09
Combined Total[B]	**~~4.99~~ 5.55**	**~~7.17~~ 9.72**	**~~24.35~~ 31.12**	**~~0.07~~ 0.09**	**~~4.46~~ 5.81**	**~~0.50~~ 0.51**	**~~1.19~~ 1.55**	**~~0.49~~ 0.51**

Source: MIG 2019, see Appendix C.

Notes:

(A) Emissions estimated using CalEEMod, V 2016.3.2. Estimates are based on default model assumptions unless otherwise noted. Maximum daily ROG, CO, and SO_2 emissions occur during the summer. Maximum daily NO_X, PM_{10}, and $PM_{2.5}$ emissions occur during the winter.

(B) Totals may not equal due to rounding.

(C) "<0.00" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than ~~0.01~~0.005 but larger than 0~~.000~~.

On pages 7-25 to 7-26 of the Draft EIR, Tables 7-7 and 7-8 are revised as follows:

Table 7-7: Unmitigated Regional Construction Emissions Estimates for the Alexan Foothills Specific Plan

Season	Total Unmitigated Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2020	4.90	53.16	~~51.35~~ 40.16	0.11	~~21.29~~ 7.60	~~12.34~~ 4.98
Summer 2021	~~4.34~~ 4.22	~~29.94~~ 29.09	~~39.08~~ 38.00	0.11	~~7.20~~ 6.90	~~2.62~~ 2.53
Summer 2022	~~86.30~~ 82.55	~~27.44~~ 26.64	~~37.20~~ 36.19	0.11	~~7.04~~ 6.74	~~2.47~~ 2.39
Winter 2020	~~5.03~~ 4.91	53.17	~~39.88~~ 38.75	0.11	~~21.29~~ 7.60	~~12.34~~ 4.98
Winter 2021	~~4.59~~ 4.46	~~30.07~~ 29.22	~~37.71~~ 36.68	0.11	~~7.20~~ 6.90	~~2.62~~ 2.53
Winter 2022	~~86.35~~ 82.60	~~27.55~~ 26.75	~~35.91~~ 34.95	0.11	~~7.05~~ 6.75	~~2.47~~ 2.39
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	**Yes**	No	No	No	No	No
Source: MIG 2019 (see Appendix C).						

Table 7-8: Mitigated Regional Construction Emissions Estimates for the Alexan Foothills Specific Plan

Season	Total Mitigated Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2020	4.90	53.16	~~51.35~~ 40.16	0.11	~~21.29~~ 7.60	~~12.34~~ 4.98
Summer 2021	~~4.34~~ 4.22	~~29.94~~ 29.09	~~39.08~~ 38.00	0.11	~~7.20~~ 6.90	~~2.62~~ 2.53
Summer 2022	~~17.46~~ 18.07	~~27.44~~ 26.64	~~37.20~~ 36.19	0.11	~~7.20~~ 6.90	~~2.47~~ 2.39
Winter 2020	~~5.03~~ 4.91	53.17	~~39.88~~ 38.75	0.11	~~7.04~~ 6.74	~~12.34~~ 4.98
Winter 2021	~~4.59~~ 4.46	~~30.07~~ 29.22	~~37.71~~ 36.68	0.11	~~21.29~~ 7.60	~~2.62~~ 2.53
Winter 2022	~~17.50~~ 18.12	~~27.55~~ 26.75	~~35.91~~ 34.95	0.11	~~7.20~~ 6.90	~~2.47~~ 2.39
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Source: MIG 2019 (see Appendix C)						

On page 7-27 of the Draft EIR, the 2nd paragraph in the Local Construction Emissions discussion is revised as follows:

The emissions presented in Table 7-9 incorporate certain best available control measures the Project would be subject to pursuant to SCAQMD Rule 403, Fugitive Dust. Specifically, the CalEEMod project file applies a 60% to ~~67%~~69% total reduction in PM_{10} and $PM_{2.5}$ fugitive dust emissions through site watering (three times daily) and replacement of ground cover.

On page 7-28 of the Draft EIR, Table 7-9 is revised as follows:

Table 7-9: LST Construction Analysis for the Alexan Foothills Specific Plan

Construction Phase	Maximum Daily Emissions (Pounds per Day)(A)			
	NO_X	**CO**	**PM_{10}(E)**	**$PM_{2.5}$(E)**
Demolition				
Maximum Daily Onsite Emissions	33.2	21.8	~~3.2~~ 2.1	~~1.8~~ 1.6
SCAQMD LST Threshold (1.5-Acre)(B)	**108.5**	**784.0**	**6.0**	**3.9**
Threshold Exceeded?	No	No	No	No
Site Preparation				
Maximum Daily Onsite Emissions	53.1	22.0	7.4	4.9
SCAQMD LST Threshold (2.5-Acre)(C)	**147.5**	**1,057.4**	**8.3**	**5.1**
Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Onsite Emissions	26.4	16.1	3.0	2.1
SCAQMD LST Threshold (1.0-Acre)(D)	89.0	**623.0**	**5.0**	**3.0**
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix C)

(A) Emissions presented are worst-case total emissions and may reflect summer or winter emissions levels.

(B) Demolition would involve the use of three rubber-tired dozers, which equals a 1.5-acre project site for LST purposes (3*0.5=1.5). Accordingly, a 1.5-acre SLT threshold was developed using linear regression.

(C) Site Preparation would involve the use of two crawler-tractors and three rubber-tired dozers, which equals a 2.5-acre project site for LST purpose (5*0.5=2.5). Accordingly, a 2.5-acre LST thresholds was developed using linear regression.

(D) Grading would involve the use of one grader and one rubber-tired dozer, which equals a 1.0-acre project site for LST purposes (1*0.5)+(1*0.5)=1.5. Accordingly, a 1-acre LST threshold was used in this evaluation.

(E) PM emissions assume compliance with SCAQMD Rule 403 best available control measures for site watering and replacing ground cover.

On page 7-29 of the Draft EIR, the discussion of Regional Operational Emissions is revised as follows:

Regional Operational Emissions. Once operational, the Alexan Foothills Specific Plan would result in long-term emissions from area, energy, and mobile sources. The net change in emissions of regulated air pollutants that would occur with implementation of the Alexan Foothills Specific Plan was modeled using CalEEMod, Version 2016.3.2. The operation emissions for the Alexan Foothills Specific Plan were modeled based on the Project's first ~~full~~ year of operation (2022)~~(2023)~~, using default data assumptions provided by CalEEMod, with the following Project-specific modifications:

- **Land Use Inputs:** The default lot acreage and building square footage assumptions for modeled land uses were adjusted to reflect actual proposed conditions and development acreages, building sizes, etc.

- **Trip Generation:** The default weekday trip generation rates for the existing land use types were replaced with trip generation rates contained in the Traffic Impact Analysis (TIA) prepared for the proposed Alexan Foothills Specific Plan and the maximum potential development scenario under ZCA Areas A and C (see Chapter 19, Transportation and Circulation, and the TIA in Appendix J). In addition, default weekend trip generation rates were adjusted to maintain the same percent reduction for Saturday and Sunday trip rates shown in CalEEMod User's Guide Appendix D, Table 4.3. Finally, large trucks and buses were excluded from the fleet mix because the proposed residential project would not generate these types of trips. Owners and occupants of the project's residential units are expected to park in the on-site parking garage, which would have deck heights that preclude large truck and bus trips and the Project would provide no other parking amenities that would accommodate such vehicles. Accordingly, it is not reasonably foreseeable that operation of the Project would generate trips from heavy-heavy duty trucks, buses, or motor homes.

- ~~The default trip generation rates for the existing land use types were replaced with trip generation rates contained in the Traffic Impact Analysis (TIA) prepared for the Project (see Chapter 19 and Appendix J). The Project TIA provided trip generation rates for peak weekday activities. Accordingly, the average daily traffic rate contained in the TIA was adjusted by a factor of 0.96 to be consistent with State emission inventory methods and to account for reduced weekend trip rates (this provides a more accurate estimate of total annual emissions).~~

- **Wood stoves and fireplaces:** The use of wood stoves and fireplaces was prohibited according to SCAQMD Rule 445 (see standard condition SC AIR 3).

- **Energy Use and Consumption:** CalEEMod contains default energy efficiency values that are based on the 2016 energy code. To account for more efficient energy use that is anticipated to occur under the 2019 and subsequent energy codes, CalEEMod default assumptions regarding energy efficiency were adjusted as follows:
  - CalEEMod default energy efficiency values for residential land uses were adjusted downwards by a factor of 0.47 to reflect increased energy efficiency and solar photovoltaic requirements of the 2019 energy code (CEC 2018).

- ~~The default electrical and natural gas energy efficiency intensity values for residential and non-residential land uses were adjusted downwards to reflect the recent adoption of the 2019 energy efficiency standards.~~

- ~~Woodstoves and hearths were excluded pursuant to City General Plan requirements and SCAQMD Rule 445 (see standard condition SC AIR-3).~~

- **Stationary Sources:** One 50-horsepower diesel-fueled back-up generator and one 50-horsepower, diesel-fueled fire pump are presumed to be present onsite and operate a total of 18 hours per year.

- **Water**: The default indoor and outdoor water use assumptions were replaced with project-specific water use estimates from the Water Supply Assessment prepared for the Project (see Appendix K).

On page 7-29 of the Draft EIR, Table 7-10 is revised as follows:

Table 7-10: Operational Emissions Estimates for the Alexan Foothills Specific Plan

Emission Scenario	Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Alexan Foothills Specific Plan Buildout Emissions[A]						
Area Sources	~~12.20~~ 13.26	~~0.43~~ 6.93	~~36.31~~ 38.86	~~0.00~~ 0.04	~~0.20~~ 0.73	~~0.20~~ 0.73
Energy Sources	0.17	1.48	0.63	0.01	0.12	0.12
Mobile Sources	~~2.88~~ 3.84	~~4.86~~ 7.33	~~40.78~~ 54.65	~~0.14~~ 0.18	~~13.58~~ 16.90	~~3.68~~ 4.59
Total Buildout Emissions[B]	~~15.25~~ 17.27	~~6.78~~ 15.73	~~77.73~~ 94.14	~~0.15~~ 0.23	~~13.90~~ 17.75	~~4.01~~ 5.43
Existing Alexan Foothills Specific Plan Area Emissions						
Total Existing Emissions[C]	~~2.92~~ 3.38	~~5.35~~ 7.40	~~16.74~~ 22.09	~~0.05~~ 0.06	~~3.52~~ 4.58	~~1.06~~ 1.35
Net Change in Emissions Levels						
Total Net Change	~~+12.33~~ 13.89	~~+1.43~~ 8.33	~~+60.99~~ 72.05	~~+0.10~~ 0.17	~~+10.38~~ 13.17	~~+2.95~~ 4.08
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix C)

(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. Maximum daily ROG, CO, SOX emissions occur during the summer. Maximum daily NOX emissions occur during the winter. In general, due to rounding, there is no difference between summer and winter PM10 and PM2.5 emissions levels for the purposes of this table.

(B) Totals may not equal due to rounding. Stationary sources would add less than 0.000 pounds per day of emissions to the project's area, energy, and mobile source total. Buildout emissions are based upon construction of 439 units assumed in the TIA, versus the proposed 436 units. Therefore, emissions are overestimates.

(C) See Table 7-3.

On page 7-31 of the Draft EIR, Table 7-11 is revised as follows:

Table 7-11: LST Operational Analysis for the Alexan Foothills Specific Plan

Emissions	Maximum On-Site Pollutant Emissions (Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources	~~0.43~~ 6.9	~~36.31~~ 38.9	~~0.20~~ 0.7	~~0.20~~ 0.7
Energy Sources	~~1.48~~ 1.5	~~0.63~~ 0.6	~~0.12~~ 0.1	~~0.12~~ 0.1
Mobile Sources[A]	0.1~~0~~	~~0.82~~ 1.1	~~0.27~~ 0.3	~~0.07~~ 0.1
Stationary Sources	<0.0~~0~~[B]	<0.0~~0~~[B]	<0.0~~0~~[B]	<0.0~~0~~[B]

Emissions	Maximum On-Site Pollutant Emissions (Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Subtotal Emissions(C)	~~2.01~~ 8.6	~~37.76~~ 40.6	~~0.59~~ 1.2	~~0.39~~ 0.9
SCAQMD LST Threshold(D)	203	1,733	4	2
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix C)

(A) Mobile source emissions estimates reflect potential on-site vehicle emissions only and were derived by assuming 2% of operational mobile source emissions in Table 7-10 will occur on site.

(B) "<0.0~~0~~" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than ~~0.01~~0.05 but larger than 0.00~~0~~.

(C) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.

(D) LST threshold is conservatively based on a 5.0-acre project size and 25-meter (82-foot) receptor distance.

On page 7-32 of the Draft EIR, Table 7-12 is revised as follows:

Table 7-12: Regional Construction Emissions Estimates for ZCA Areas A and C

Season	Total Unmitigated Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2021	~~2.36~~ 2.40	~~20.77~~ 21.47	~~17.53~~ 17.82	0.04	3.98	2.39
Summer 2022	~~52.0~~ 52.42	~~15.89~~ 16.09	~~17.09~~ 17.37	0.04	~~1.52~~ 1.61	~~0.90~~ 0.92
Winter 2021	~~2.40~~ 2.43	~~20.78~~ 21.49	~~17.33~~ 17.61	0.04	3.98	2.39
Winter 2022	~~52.0~~ 52.42	~~15.90~~ 16.11	~~16.91~~ 17.17	0.03	~~1.52~~ 1.61	~~0.90~~ 0.92
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019, See Appendix C.

On page 7-33 of the Draft EIR, Table 7-13 is revised as follows:

Table 7-13: LST Construction Analysis for ZCA Areas A and C

Construction Phase	Maximum Daily Emissions (Pounds per Day)(A)			
	NO_X	CO	PM_{10}(E)	$PM_{2.5}$(E)
Demolition				
Maximum Daily Onsite Emissions	19.7	14.5	~~1.4~~ 1.7	~~1.0~~ 1.1
SCAQMD LST Threshold (1.0-Acre)(B)	89.0	623.0	5.0	3.0
Threshold Exceeded?	No	No	No	No
Site Preparation				
Maximum Daily Onsite Emissions	~~18.29~~ 18.3	~~10.75~~ 10.8	~~1.42~~ 1.4	~~0.72~~ 0.7

Construction Phase	Maximum Daily Emissions (Pounds per Day)[A]			
	NO_X	CO	PM_{10}[E]	$PM_{2.5}$[E]
SCAQMD LST Threshold (1.5-Acre)[C]	108.5	784.0	6.0	3.9
Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Onsite Emissions	~~20.21~~ 20.2	~~9.76~~ 9.8	~~3.86~~ 3.9	~~2.36~~ 2.4
SCAQMD LST Threshold (1.0-Acre)[D]	89.0	**623.0**	**5.0**	**3.0**
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix C)

(A) Emissions presented are worst-case total emissions and may reflect summer or winter emissions levels.

(B) Demolition would involve the use of one rubber-tired dozers, which equals a 1.0-acre for LST purposes (the minimum size recommended by the SCAQMD).

(C) Site Preparation would involve the use of one scraper and one grader, which equals a 1.5-acre project site for LST purposes (1*1)+(1*0.5)=1.5. Accordingly, a 1.5-acre LST threshold was developed using linear regression.

(D) Grading would involve the use of one grader and one rubber-tired dozer, which equals a 1.0-acre project site for LST purposes (1*0.5)+(1*0.5)=1.0. Accordingly, a 1.0-acre LST threshold was used in the grading LST analysis.

(E) PM emissions assume compliance with SCAQMD Rule 403 best available control measures for site watering and replacing ground cover.

On page 7-34 of the Draft EIR, the discussion of Regional Operational Emissions for the GP/CZA is revised as follows:

Regional Operational Emissions. The potential redevelopment of ZCA Areas A and C would result in long-term emissions from area, energy, and mobile sources. The net change in emissions of regulated air pollutants that would occur with implementation of potential redevelopment was modeled using CalEEMod, Version 2016.3.2. The operational emissions for ZCA Areas A and C were modeled based on the anticipated earliest first ~~full~~ year of operation (2022)~~(2023)~~, using default data assumptions provided by CalEEMod, with the Project-specific modifications discussed above for the Alexan Foothills Specific Plan, have been substituted as follows ~~following modifications~~:

- **Trip Generation:** The default weekday and weekend trip generation rates were used for the proposed land uses.
- ~~The default electrical and natural gas energy efficiency intensity values for residential and non-residential land uses were adjusted downwards to reflect the recent adoption of the 2019 energy efficiency standards.~~
- ~~Woodstoves and hearths were excluded pursuant to City General Plan requirements and SCAQMD Rule 445 (see standard condition SC AIR-3).~~
- ~~One 50-horsepower diesel-fueled back-up generator and one 50-horsepower, diesel-fueled fire pump are presumed to be present onsite and operate a total of 18 hours per year.~~

On page 7-34 of the Draft EIR, Table 7-14 is revised as follows:

Table 7-14: Operational Emissions Estimates for ZCA Areas A and C

Emission Scenario	Maximum Daily Emissions (Pounds Per Day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Alexan Foothills Specific Plan Buildout Emissions[A]						
Area Sources	~~2.01~~ 2.13	1.30	7.29	0.01	0.14	0.14
Energy Sources	~~0.02~~ 0.03	~~0.20~~ 0.28	~~0.09~~ 0.12	~~0.00~~ 0.01	0.02	0.02
Mobile Sources	~~0.84~~ 0.90	~~1.41~~ 1.71	~~11.86~~ 12.78	0.04	3.95	1.07
Total Buildout Emissions[B]	**~~2.87~~ 3.05**	**~~2.92~~ 3.29**	**~~19.24~~ 20.19**	**0.05**	**4.10**	**~~1.22~~ 1.23**
Existing Alexan Foothills Specific Plan Area Emissions						
Total Existing Emissions[C]	**~~2.07~~ 2.17**	**~~1.82~~ 2.32**	**~~7.61~~ 9.03**	**~~0.02~~ 0.03**	**~~1.44~~ 1.74**	**~~0.62~~ 0.71**
Net Change in Emissions Levels						
Total Net Change	~~+0.80~~ 0.88	~~+1.10~~ 0.97	~~+11.63~~ 11.16	~~+0.03~~ 0.02	~~+2.66~~ 2.36	~~+0.60~~ 0.52
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix C)

(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. Maximum daily ROG, CO, SOX emissions occur during the summer. Maximum daily NOX emissions occur during the winter. In general, due to rounding, there is no difference between summer and winter PM10 and PM2.5 emissions levels for the purposes of this table.

(B) Totals may not equal due to rounding. Stationary sources would add less than 0.000 pounds per day of emissions to the project's area, energy, and mobile source total. ~~Buildout emissions are based upon construction of 439 units assumed in the TIA, versus the proposed 436 units. Therefore, emissions are overestimates.~~

(C) See Table 7-3.

On page 7-35 of the Draft EIR, Table 7-15 is revised as follows:

Table 7-15: LST Operational Analysis for ZCA Areas A and C

Emissions	Maximum On-Site Pollutant Emissions (Pounds Per Day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	1.3~~0~~	~~7.29~~ 7.3	~~0.14~~ 0.1	~~0.14~~ 0.1
Energy Sources	~~0.20~~ 0.3	~~0.09~~ 0.1	~~0.02~~ 0.0	~~0.02~~ 0.0
Mobile Sources[A]	~~0.03~~ 0.0	~~0.24~~ 0.3	~~0.08~~ 0.1	~~0.02~~ 0.0
Stationary Sources	<0.00[B]	<0.00[B]	<0.00[B]	<0.00[B]
Subtotal Emissions[C]	~~1.53~~ 1.6	~~7.62~~ 7.7	~~0.24~~ 0.2	~~0.18~~ 0.2

Emissions	Maximum On-Site Pollutant Emissions (Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
SCAQMD LST Threshold(D)	203	1,733	4	2
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix C)

(A) Mobile source emissions estimates reflect potential on-site vehicle emissions only and were derived by assuming 2% of operational mobile source emissions in Table 7-14 will occur onsite.

(B) "<0.00" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.01 but larger than 0.000.

(C) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.

(D) LST threshold is conservatively based on a ~~2~~5.0-acre project size and 25-meter (82-foot) receptor distance.

On page 7-36 of the Draft EIR, Table 7-16 is revised as follows:

Table 7-16: Total Combined Regional Construction Emissions for the Alexan Foothills Specific Plan and ZCA Areas A and C

Season	Total Unmitigated Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Alexan Foothills Specific Plan Emissions(A)						
Summer 2020	4.90	53.16	40.16	0.11	7.60	4.98
Summer 2021	~~4.34~~ 4.22	~~29.94~~ 29.09	~~39.08~~ 38.00	0.11	~~7.20~~ 6.90	~~2.62~~ 2.53
Summer 2022	~~17.46~~ 18.07	~~27.44~~ 26.64	~~37.20~~ 36.19	0.11	~~7.20~~ 6.90	~~2.47~~ 2.39
Winter 2020	4.91	53.17	38.75	0.11	6.74	4.98
Winter 2021	~~4.59~~ 4.46	~~30.07~~ 29.22	~~37.71~~ 36.68	0.11	~~21.29~~ 7.60	~~2.62~~ 2.53
Winter 2022	~~17.50~~ 18.12	~~27.55~~ 26.75	~~35.91~~ 34.95	0.11	~~7.20~~ 6.90	~~2.47~~ 2.39
ZCA Areas A and C Emissions(B)						
Summer 2021	~~2.36~~ 2.40	~~20.77~~ 21.47	~~17.53~~ 17.82	0.04	3.98	2.39
Summer 2022	~~52.0~~ 52.42	~~15.89~~ 16.09	~~17.09~~ 17.37	0.04	~~1.52~~ 1.61	~~0.90~~ 0.92
Winter 2021	~~2.40~~ 2.43	~~20.78~~ 21.49	~~17.33~~ 17.61	0.04	3.98	2.39
Winter 2022	~~52.0~~ 52.42	~~15.90~~ 16.11	~~16.91~~ 17.17	0.03	~~1.52~~ 1.61	~~0.90~~ 0.92
Total Combined Emissions						
Summer 2020	4.90	53.16	40.16	0.11	7.60	4.98
Summer 2021	~~6.70~~ 6.62	~~50.71~~ 50.56	~~56.61~~ 55.82	0.15	~~11.18~~ 10.88	~~5.01~~ 4.92
Summer 2022	~~69.46~~ 26.68	~~43.33~~ 42.73	~~54.29~~ 53.56	0.15	~~8.56~~ 8.35	~~3.37~~ 3.31

Winter 2020	4.91	53.17	38.75	0.11	6.74	4.98
Winter 2021	~~6.99~~ 6.89	~~50.85~~ 50.71	~~55.04~~ 54.29	0.15	~~11.18~~ 10.88	~~5.01~~ 4.92
Winter 2022	~~69.50~~ 28.73	~~43.45~~ 42.86	~~52.82~~ 52.12	0.14	~~8.57~~ 8.36	~~3.37~~ 3.31
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019, See Appendix C.

Notes:

(A) Alexan Foothills Specific Plan emissions represent mitigated emissions values as shown in Table 7-8.
(B) ZCA Areas A and C emissions from Table 7-12. ROG emissions reflect use of super compliant coatings (see Appendix C)

On page 7-37 of the Draft EIR, the discussion of combined local construction emissions is revised as follows:

Combined Local Construction Emissions. The Alexan Foothills Specific Plan would be constructed over a 30-month period beginning in 2020. The Specific Plan's building construction phase in 2021 and 2022 could overlap with the potential demolition, site preparation, and grading phases associated with potential redevelopment of ZCA Areas A and C. It is not anticipated that overlapping construction would occur prior to 2021 because there is no current specific project proposed for ZCA Areas A and C. The Specific Plan's building construction phase would add 1.0 and 0.9~~0.8~~ pounds per day of total PM_{10} and $PM_{2.5}$, respectively, to onsite emission estimates for ZCA Areas A and C presented in Table 7-13. The combined emissions from buildout of the Alexan Foothills Specific Plan and ZCA Areas A and C would not exceed the 1.5-acre LST threshold listed in Table 7-13 (a conservative comparison since actual construction activities would be spread out over the approximately 9.63-acre Project area during this combined construction activity period). Therefore, combined construction emissions during the Alexan Foothills Specific Plan building construction and the grading phases in ZCA Areas A and C are considered less than significant. The combined emissions during all other potential combined construction phase in 2021 and 2022 would not exceed an applicable LST threshold. This impact is considered less than significant.

On pages 7-7 to 7-38 of the Draft EIR, the discussion of combined regional operational emissions and Table 7-17 are revised as follows:

Combined Regional Operational Emissions. The net change in long-term operational emissions that would be generated by the concurrent buildout of the Alexan Foothills Specific Plan and ZCA Areas A and C in the earliest full year of operation for both projects (2022)~~(2023)~~ is shown in Table 7-17.

Table 7-17: Long-Term Operational Emissions of Combined Buildout of Alexan Foothills Specific Plan & ZCA Areas A and C

Emission Scenario	Maximum Daily Emissions (Pounds Per Day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Total Emissions from Combined Buildout of Alexan Foothills Specific Plan and ZCA Areas A and C[A]						
Area Sources	~~14.21~~ 15.39	~~1.73~~ 8.23	~~43.6~~ 46.15	~~0.01~~ 0.05	~~0.34~~ 0.87	~~0.34~~ 0.87
Energy Sources	~~0.19~~ 0.2	~~1.68~~ 1.76	~~0.72~~ 0.75	~~0.01~~ 0.02	0.14	0.14
Mobile Sources	~~3.72~~ 4.74	~~6.27~~ 9.04	~~52.64~~ 67.43	~~0.18~~ 0.22	~~17.53~~ 20.85	~~4.75~~ 5.66
Total Buildout Emissions[B]	**~~18.12~~ 20.32**	**~~9.70~~ 19.02**	**~~96.97~~ 114.33**	**~~0.20~~ 0.28**	**~~18.00~~ 21.85**	**~~5.23~~ 6.66**
Total Existing Project Area (Alexan Foothills Specific Plan and ZCA Areas A and C) Emissions[C]						
Total Existing Emissions	**~~4.99~~ 5.55**	**~~7.17~~ 9.72**	**~~24.35~~ 31.12**	**~~0.07~~ 0.09**	**~~4.96~~ 6.32**	**~~1.68~~ 2.06**
Net Change in Emissions Levels						
Total Net Change	~~+13.13~~ 14.77	~~+2.53~~ 9.3	~~+72.62~~ 83.21	~~+0.13~~ 0.19	~~+13.04~~ 15.53	~~+3.55~~ 4.6
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix C)
(A) Buildout emissions are from Table 7-10 (Alexan Foothills Specific Plan) and Table 7-17 (ZCA Areas A and C).
(B) Totals may not equal due to rounding.
(C) See Table 7-3.

On page 7-39 of the Draft EIR, Table 7-18 is revised as follows:

Table 7-18: Combined LST Operational Analysis for the Alexan Foothills Specific Plan and ZCA Areas A and C

Total Combined Emissions[A]	Maximum On-Site Pollutant Emissions (Pounds Per Day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	~~1.73~~ 8.2	~~43.6~~ 46.2	~~0.34~~ 0.9	~~0.34~~ 0.9
Energy Sources	~~1.68~~ 1.8	~~0.72~~ 0.8	~~0.14~~ 0.1	~~0.14~~ 0.1
Mobile Sources	~~0.13~~ 0.2	~~1.05~~ 1.3	~~0.35~~ 0.4	0.1~~0~~
Stationary Sources	<0.00[B]	<0.00[B]	<0.00[B]	<0.00[B]
Subtotal Emissions[C]	~~3.54~~ 10.2	~~45.37~~ 48.2	~~0.83~~ 1.4	~~0.58~~ 1.1
SCAQMD LST Threshold[D]	203	1,733	4	2
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix C)
Notes:

Total Combined Emissions[(A)]	Maximum On-Site Pollutant Emissions (Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
(A) Onsite emissions are from Table 7-11 (Alexan Foothills Specific Plan) and 7-15 (ZCA Areas A and C).				
(B) "<0.00" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.01 but larger than 0.000.				
(C) Totals by not equal due to rounding.				
(D) LST threshold is conservatively based on a 5.0-acre project size and 25-meter (82-foot) receptor distance.				

On page 7-50 of the Draft EIR, the following discussion is added under the last paragraph:

Formaldehyde emissions from off gassing wood products in the building's interior. Formaldehyde is a colorless, volatile, flammable gas at room temperature and pressure. It has a pungent, highly irritating, suffocating odor and may cause a burning sensation to the eyes, nose, and lungs at high concentrations. In 1988, the State listed formaldehyde as a human carcinogen pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986 (i.e., Proposition 65). In 1992, the California Air Resources Board (CARB) designated formaldehyde as a toxic air contaminant (TAC). Composite wood products used in building construction, such as hardwood plywood, particle board, and medium density fiberboard, often contain formaldehyde resins or glues used to bond wood materials together (CARB 2007b p. 15). Over time, the resins in composite wood products may off-gas (i.e., emit) or degrade, releasing formaldehyde into the indoor environments until air circulation occurs and emissions are vented to outside, ambient air (CARB, 2007b, pp. 16-17).

A paper by Chan et al. (2019) evaluating formaldehyde in homes built between 2011 and 2017 found formaldehyde concentrations in newer homes are approximately 38% lower than homes built from a 2002 to 2004 period (Chan et al., 2019, pp. 69-70). Mean concentrations were even less – 45% lower (Chan et al., 2019 pp. 69 – 70). The basis for the reduction in formaldehyde concentrations in newer homes is most likely due to CARB's Airborne Toxic Control Measure (ATCM) to Reduce Formaldehyde Emissions from Composite Wood Products (17 CCR Section 93120 *et seq.*). This Composite Woods Products regulation reduces public exposure to formaldehyde through the establishment of strict emission performance standards on particleboard, medium density fiberboard and hardwood plywood (collectively known as composite wood products). The regulation, adopted in 2009, established two phases of emissions standards: and initial Phase 1 and, later, a more stringent Phase 2 that requires all finished good, such as flooring, destined for sale or use in California to made using complying composite wood products. As of January 2014, only Phase 2 products are legal for sale in California. Furthermore, the U.S. EPA also now requires all composite wood products to meet emissions standards that are nearly identical to California's Phase 2 standards. This EPA requirement became effective in March 2019 (CARB 2019d).

The proposed Project would be constructed beginning in 2020 at the earliest, meaning all building construction materials would be fully compliant with Phase 2 regulations, which further reduce formaldehyde emission below Phase 1 requirements by approximately 37% to 50%, depending on the material. The Proposed project would also be subject to 2019 building code requirements for indoor air ventilation, which improve ventilation, indoor air quality, and air filtration systems. Finally, the 2019 Cal Green Building Standards Code imposes stringent volatile organic compound (VOC) restrictions on paints, coatings, etc. and strict emissions standards for carpets and composite wood products. The Project must comply with all of these requirements, which are specifically intended to promote healthy places to live and work. For these

reasons, formaldehyde off-gassing from consumer products would not result in a significant impact to sensitive receptors.

On page 7-53 to 7-56 of the Draft EIR, the references are revised as follows:

CARB
2007b Proposed Airborne Toxic Control Measure to Reduce Formaldehyde from Composite Wood Products Staff Report: Initial Statement of Reasons for Proposed Rulemaking. Sacramento, CA. March 2007.

Chan et al.
2019 Lawrence Berkeley National Laboratory. Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation. Energy Technologies Area. Livermore, CA. February 2019 < https://escholarship.org/uc/item/44g399sb>

MIG, Inc.
~~2019 Air Quality Impact Analysis Report for the Trammell Crow Monrovia Project. February 4.~~
2019 Air Quality and Greenhouse Gas Analysis for the Planned Development General Plan Amendment, Zoning Code Amendment & Alexan Foothills Specific Plan. December 2019.

Trinity Consultants
2017. CalEEMod User Manual Appendix E Technical Source Documentation. Prepared for the California Air Pollution Control Officers Association. Prepared by Trinity Consultants, Dallas TX. October 2017.

CHAPTER 11, GLOBAL CLIMATE CHANGE, GREENHOUSE GASES, AND ENERGY

On page 11-5 of the Draft EIR, the discussion of Existing Project Area GHG Emissions is revised as follows:

Existing Project Area GHG Emissions

The existing land uses within the Project area contribute to existing City, Regional, and Statewide GHG emissions. The Project area's existing GHG emissions, presented below in Table 11-3, were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. GHG emissions generated within the Project area primarily come from the area, energy, and mobile sources described in Section 7.1.1, Air Quality, as well as the following additional sources specific to GHG emissions:

- **Energy use and consumption:** Emissions generated from purchased electricity and natural gas. CalEEMod estimates the existing land uses in the Project area use and consume approximately 1,003,206 kilowatt hours (kWh) of electricity per year and 1,640,190 thousand British Thermal Units (kBtus) of natural gas per year.~~CalEEMod estimates motorized vehicle usage associated with the existing land uses within the Project area result in approximately 2,097,010 total vehicle miles traveled (VMT) for the year 2017.~~

- **Solid waste disposal:** Emissions generated from the transport and disposal of waste generated by land uses. CalEEMod estimates approximately 140.8 tons of solid waste are generated per year by the people working and living within the Project area.

- **Water/wastewater:** Emissions from electricity used to supply water to land uses, and treat the resulting wastewater generated. As estimated in CalEEMod, existing land uses within the Project area use approximately 6.52~~19.4~~ million gallons of water per year.

The Project area's existing GHG emissions were estimated using default emissions assumptions provided by CalEEMod, with the Project-specific modifications described in Section 7.1 of this EIR and below:~~except as noted in Section 7.1 of this EIR.~~

- **Mobile Sources.** CalEEMod does not estimate N_2O emissions from on-road vehicle travel or off-road construction sources. To account for this, CalEEMod emissions estimates were adjusted as follows:
  - N_2O emissions were estimated by comparing the ratio of CO_2 and N_2O emissions from the on-road vehicle sector contained in the State's most recent GHG inventory (CARB 2019c). In 2017, statewide CO_2 and N_2O emissions estimates for the on-road transportation sector were 152.4 and 0.011 million metric tons, respectively (N_2O emissions are therefore equal to 0.007% of CO_2 emissions for this sector).
  - Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in transportation fuels in 2017. Therefore, the CalEEMod estimate of CO_2 emissions was reduced by 3.7% (CARB 2018a).
- **Energy use and consumption:** Southern California Edison (SCE) provides electricity service in the City of Monrovia. The CalEEMod default GHG intensity values for this electric service provider are from 2012 and do not represent existing and future reductions in GHG intensity that have been achieved under the State's Renewable Portfolio Standard (RPS, see Section 3.4.2). To account for this, CalEEMod default assumptions regarding energy use were adjusted as follows:
  - The SCE GHG intensity value was reduced based on an increase in renewable energy mix from 20% under estimated Year 2012 conditions (the CalEEMod default data year) to 32% under existing conditions (based on 2017 available data from SCE). This adjustment reduced the estimated amount of CO_2 produced by the SCE energy mix from approximately 702 pounds/megawatt-hour (lbs/MWh) to 539 lbs/MWh (SCE 2018).
  - Electricity generation emission factors for CH_4 (0.033 lbs/MWh) and N_20 (0.004 lbs/MWh) were obtained from the U.S. EPA's EGRID database for year 2016, the last year for which data was available at the time this EIR was prepared (U.S. EPA 2016e).

On page 11-6 of the Draft EIR, Table 11-3 is revised as follows:

Table 11-3 Existing GHG Emissions in the Project Area

Source	GHG Emissions (Metric Tons / Year)			
	CO_2	CH_4	N_2O	Total $MTCO_2e$
Alexan Foothills Specific Plan Area				
Area	~~0.33~~ 0.3	~~<0.00~~(A) <0.0(A)	~~<0.00~~(A) <0.0	~~0.35~~ 0.3
Energy(B)	~~236.17~~ 249.2	~~0.17~~ <0.0	~~0.59~~ <0.0	~~416.38~~ 250.2
Mobile(C)	~~696.7~~ 600.3	~~0.04~~ <0.0	~~0.00~~ <0.0	~~697.7~~ 613.7
Waste	~~22.07~~ 22.1	~~1.30~~ 1.3	~~0.00~~ -	~~54.67~~ 54.7
Water	~~42.18~~ 1.4	~~0.47~~ <0.0	~~0.15~~ <0.0	~~100.13~~ 1.8
Subtotal(D)	**~~997.45~~** **873.2**	**~~1.77~~** **1.4**	**~~0.75~~** **<0.0**	**~~1,269.2~~** **920.7**
Remaining GP/ZCA Area				
Area	~~1.31~~ 1.3	~~<0.00~~(A) <0.0	~~<0.00~~(A) <0.0	~~1.35~~ 1.4
Energy(B)	~~108.91~~ 83.6	~~0.09~~ <0.0	~~0.31~~ <0.0	~~202.16~~ 83.9
Mobile(C)	~~227.335~~ 242.1	~~0.013775~~ <0.0	~~0.00~~ <0.0	~~227.7~~ 247.5
Waste	~~6.51~~ 6.5	~~0.38~~ 0.4	~~0.0~~ -	~~16.13~~ 16.1
Water	~~19.33~~ 21.3	~~0.21~~ 0.2	~~0.07~~ <0.0	~~45.81~~ 27.6
Subtotal(D)	**~~375.36~~** **354.8**	**~~0.070~~** **0.6**	**~~0.38~~** **<0.0**	**~~493.2~~** **376.6**
Combined Total	**1,228.0**	**2.0**	**0.1**	**~~1,762.4~~** **1,297.3**

Source: MIG 2019 (see Appendix C).

(A) ~~"<0.0" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.01, but larger than 0.000.~~ "<0.0" does not indicate the emissions are les than or equal to 0; rather, it indicates the emission is larger than 0 but smaller than 0.05.

(B) The emissions estimated in CalEEMod account for the carbon intensity metrics provided in Southern California Edison's 2016 Corporate Responsibility and Sustainability Report (SCE 2017~~6~~) and U.S. Environmental Protection Agency's eGrid2014v2 emission rates (USEPA 2017).

(C) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's Low Carbon Fuel Standards (LCFS). Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this EIR analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 2.5% reduction in average carbon intensity content in 2016 and should result in a ~~5~~3.7% reduction in average carbon intensity in 2018. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of ~~.95~~ .963 to account for the LCFS regulation (CARB 2018~~a, 2018b~~).

(D) Totals may not equal due to rounding.

On page 11-15 of the Draft EIR, Table 11-4 is revised as follows:

Table 11-1 Estimated Construction GHG Emissions for the Alexan Foothills Specific Plan

Construction Year	GHG Emissions (Metric Tons / Year)			
	CO_2	CH_4	N_2O	Total MTCO2e
2020	~~1,061.7~~ 972.5	~~0.13~~ 0.1	0.00	~~1,064.9~~ 975.6
2021	~~1,297.5~~ 1,243.4	~~0.11~~ 0.1	0.00	~~1,300.3~~ 1,246.2
2022	~~292.4~~ 293.6	~~0.03~~ **<0.0**(B)	0.00	~~293.3~~ 294.5
Total	~~**2,651.60**~~ **2,509.5**	~~**0.27**~~ **0.3**	**0.00**	~~**2,658.5**~~ **2,516.2**
Total Amortized Emissions(A)	~~**88.4**~~	~~**<0.00**(B)~~	**<0.00**(B)	~~**88.5**~~ **83.9**

Source: MIG 2019 (see Appendix C).

(A) Emissions amortized over 30 year-period for inclusion in total GHG emissions.

(B) "<0.0" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.051~~, but larger than 0.000~~.

On pages 11-16 to 11-17 of the Draft EIR, the discussion of the Alexan Foothills Specific Plan Operational GHG Emissions is revised as follows:

Operational Emissions. Once operational, the Alexan Foothills Specific Plan would result in continuous GHG emissions from mobile, energy, and area sources. Mobile sources would result primarily in emissions of CO_2, with emissions of CH_4 and NO_2 also occurring in minor amounts. In addition to mobile sources, GHG emissions would also be generated from natural gas usage, electricity use, water conveyance and use, wastewater treatment, and solid waste disposal. Natural gas use would result in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use associated with both the physical usage of the development, as well as the energy needed to transport water/wastewater, would result in the production of GHGs if the electricity is generated through non-renewable sources (i.e., combustion of fossil fuels). Solid waste generated by the Project, would contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy when transporting and managing the waste. In addition, landfilling, the most common waste management practice, results in the release of CH_4 from the decomposition of organic materials.

~~Default energy assumptions were reduced to account for the recent adoption of the 2019 energy efficiency code, and solid waste was assumed to be diverted at a rate of 75% pursuant to AB 341.~~ Potential operational GHG emissions resulting from the Alexan Foothills Specific Plan were modeled using CalEEMod, Version 2016.3.2. Operational GHG emissions were estimated using default data assumptions contained within CalEEMod, with the Project-specific modifications described in Section 7.2.3 (Impact AIR-2) and below:

- **Mobile Sources.** CalEEMod does not estimate N_2O emissions from on-road vehicle travel or off-road construction sources. To account for this, CalEEMod emissions estimates were adjusted as follows:
    - N_2O emissions were estimated by comparing the ratio of CO_2 and N_2O emissions from the on-road vehicle sector contained in the State's most recent GHG inventory (CARB 2019c). In 2017, statewide CO_2 and N_2O emissions estimates for the on-road transportation sector were 152.4 and 0.011 million metric tons, respectively (N_2O emissions are therefore equal to 0.007% of CO_2 emissions for this sector).
    - Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in transportation fuels in 2017 and is anticipated to result in a 10% reduction by 2022. Therefore, the CalEEMod estimate of CO_2 emissions was reduced by 10% (CARB 2018a).
- **Energy use and consumption:** Southern California Edison (SCE) provides electricity service in the City of Monrovia. The CalEEMod default GHG intensity values for this electric service provider are from 2012 and do not represent existing and future reductions in GHG intensity that have been achieved under the State's Renewable Portfolio Standard (RPS, see Section 11.1.2). To account for this, CalEEMod default assumptions regarding energy use were adjusted as follows:
    - The SCE GHG intensity value was reduced based on an increase in renewable energy mix from 20% under estimated Year 2012 conditions (the CalEEMod default data year) to 38.5% under Year 2022 conditions (based on 2017 available data from SCE). This adjustment reduced the estimated amount of CO_2 produced by the SCE energy mix from approximately 702 pounds/megawatt-hour (lbs/MWh) to 427 lbs/MWh (SCE 2018).
    - Electricity generation emission factors for CH_4 (0.033 lbs/MWh) and N_20 (0.004 lbs/MWh) were obtained from the U.S. EPA's EGRID database for year 2016, the last year for which data was available at the time this EIR was prepared (U.S. EPA 2016e).

    In addition, CalEEMod contains default energy efficiency values that are based on the 2016 energy code. To account for more efficient energy use that is anticipated to occur under the 2019 and subsequent energy codes, CalEEMod default assumptions regarding energy efficiency were adjusted as follows:
    - CalEEMod default energy efficiency values for residential land uses were adjusted downwards by a factor of 0.47 to reflect increased energy efficiency and solar photovoltaic requirements of the 2019 energy code (CEC 2018).

The total GHG emissions associated with the Alexan Foothills Specific Plan are presented below in Table 11-5, based on an operational year of 20222023. To account for all potential GHG emissions generated through construction and operational activities, the amortized construction emissions calculated in Table 11-4 have been added to Alexan Foothills Specific Plan operational GHG emissions estimate.

As shown in Table 11-5, construction and operation of the Alexan Foothills Specific Plan would result in a net increase in GHG emissions equal to 2,438.32,774.2 $MTCO_2e$ per year. This net emissions increase is below the SCAQMD Tier 3 "bright-line" threshold of 3,000 $MTCO_2e$ and would thus represent a less than significant impact.

In addition, as shown in Table 11-5, the Alexan Foothills Specific Plan would result in a GHG efficiency of ~~3.8~~3.9 $MTCO_2e$/yr/service population. This value is below the SCAQMD's 2020 project-level efficiency target of 4.8 $MTCO_2e$/yr/service population; however, the Alexan Foothills Specific Plan would be operational after 2020, in Year 2022~~2023~~. Therefore, it is not necessarily appropriate to compare the 2023 Alexan Foothills Specific Plan GHG efficiency to the SCAQMD 2020 efficiency threshold, although this threshold does provide useful context for the City in determining the significance of a project's GHG emissions. For example, presuming a 40% reduction in the SCAQMD's existing CEQA thresholds is necessary to achieve the State's 2030 GHG reduction goal (which is a 40% reduction below 1990 GHG emissions levels), a threshold of 2,760 $MTCO_2e$ or an efficiency threshold of 4.4 $MTCO_2e$/yr/service population may be more appropriate for use in evaluating the project's long-term emissions in Year 2022.[1] As shown in Table 6-2, the Alexan Foothills Specific Plan would result in a net increase in GHG emissions that is slightly above 2,760 $MTCO_2e$; however, emissions would not exceed 4.4 $MTCO_2e$/yr/service population.

Conversely, it is not appropriate to directly compare the 2022~~2023~~ Alexan Foothills Specific Plan GHG efficiency to a 2035 efficiency target since the current modeling does not account for any energy or mobile source improvements embedded in a future efficiency target. Therefore, to compare the Alexan Foothills Specific Plan to the SCAQMD 2035 efficiency target of 3.0 $MTCO_2e$/yr/service population, operational emissions were modeled using CalEEMod Version 2016.3.2 with the operational year set to 2035, to reflect the expected reduction in energy and mobile source emissions that will occur with implementation of the State RPS and advances in vehicle emission and other standards adopted by the State (see Section 11.1.2). The 2035 modeling only accounted for changes to energy and mobile source emissions as a result of increased renewable energy generation under the RPS standard and fleet turnover and improved vehicle emission standards associated with a 2035 operational year. The 2035 amortized construction and operational emissions for the Alexan Foothills Specific Plan, as estimated using CalEEMod (see Appendix C), are estimated to be ~~2,961.4~~2,727.4 $MTCO_2e$/yr. Dividing through by the service population for the Alexan Foothills Specific Plan (942~~980~~ residents), the resulting Year 2035 GHG efficiency is ~~3.0~~2.9 $MTCO_2e$/yr/service population, which does not exceed the SCAQMD 2035 efficiency target of 3.0. Thus, the proposed Alexan Foothills Specific Plan would result in less than significant levels of GHG emissions and not impede progress towards the State's GHG reduction goals.

[1] This estimate represents the equivalent reduction from the SCAQMD's existing 3,000 $MTCO_2e$ and 4.8 MTCO2e/yr/service population necessary to maintain progress towards a 40% reduction in GHG emissions below 1990 levels by 2030. Calculated as: 1) 3,000-(2*((3,000-(3,000*.6))/10)) and 2) 4.8-(2*((4.8-(4.8*.6))/10)).

On page 11-17 of the Draft EIR, Table 11-5 and paragraph below Table 11-5 are revised as follows:

Table 11-5 Estimated Operational GHG Emissions for the Alexan Foothills Specific Plan

Emission Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing[(A)]	Proposed	Net Change
Area	~~0.4~~ 0.3	~~7.8~~ 102.3	~~+7.5~~ +102.0
Energy	~~416.4~~ 250.2	~~1,298.2~~ 757.4	~~+881.8~~ +507.2
Mobile[(B)]	~~697.7~~ 613.7	~~2,002.4~~ 2,574.6	~~+1,304.7~~ +1,960.9
Stationary	0.0	0.3	+0.3
Waste	54.7	~~25.4~~ 100.9	~~-29.3~~ +46.2
Water	~~100.1~~ 1.8	~~285.12~~ 75.6	~~+185.0~~ +73.8
Amortized Construction	–	~~88.5~~ 83.9	~~+88.3~~ +83.9
Total[(C)]	**~~1,269.2~~ 920.7**	**~~3,707.5~~ 3,694.6**	**~~+2,438.3~~ +2,774.2**
SCAQMD Tier 3 Screening Threshold	–	–	3,000
SCAQMD Tier 3 Threshold Exceeded?	–	–	No
Estimated Service Population[(D)]	133[(E)]	~~980~~ 942[(F)]	~~+847~~ +809
Estimated GHG Efficiency ($MTCO_2e$/yr/service population)	~~9.5~~ 6.9	~~3.8~~ 3.9	~~-5.7~~ -3.0
SCAQMD Tier 4 Project-Level Efficiency Threshold	–	4.8	–
SCAQMD Tier 4 Threshold Exceeded?	–	No	–

Source: MIG, 2019 (see Appendix C).

Notes:

(A) See Table 11-3 for existing GHG emissions in Alexan Foothills Specific Plan area.

(B) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's LCFS. Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this EIR analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 2.5% reduction in average carbon intensity content in 2016 and should result in a ~~5~~3.7% reduction in average carbon intensity in ~~2018~~2017. ~~The current LCFS regulation also requires~~ and should result in a 10% reduction in average carbon intensity ~~by 2020~~ in 2022. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of ~~.95~~ .963 (existing conditions) and 0.90 (proposed Project) to account for the LCFS regulation (CARB 2018a, 2018b).

(C) Totals may not equal due to rounding.

(D) Service population defined as the number of employees and residents living and working within the area. The existing land uses include a mix of employees and residents; however, the Alexan Foothills Specific Plan service population used is based on residents only.

(E) Based upon the U.S. Green Building Council's (2008) average SF/employee: Place of Worship is 6,630 square feet (SF)/1,250 SF/employee = 5.3 employees, for General Light Industrial is 56,190 SF/463 SF/employee = 121.4 employees, and Office Building (100,000 SF or less) is 706 SF/221 SF/employee = 3.19 employees. According to the U.S. Census Bureau the average household size in Monrovia is 2.77 persons (1 unit X 2.77 persons/unit =2.77 persons). This yields a total service population of 133.

(F) ~~According to the U.S. Census Bureau, the average persons per bedroom in Monrovia is 1.536. Given this, under the scenario of 439 units, the Alexan Foothills Specific Plan would accommodate 980 residents (Studio: 24 x 1 x 1.536 = 37; 1 Bedroom: 232 x 1 x 1.536 = 356; 2 Bedrooms: 167 x 2 x 1.536 = 513; and 3 Bedroom: 16 X 3 X 1.536 = 74). A total of 436 units is proposed under the Alexan Foothills Specific Plan, however, 439 units were analyzed~~Residential population provided by EIR population and housing analysis.

On pages 11-17 to 11-18 of the Draft EIR, the ZCA Areas A and C emissions modeling description is revised as follows:

ZCA Areas A and C

The short-term construction and long-term operational emissions associated with buildout of ZCA Areas A and C were estimated using the same methodology (CalEEMod) as described above for the Alexan Foothills Specific Plan. As was done for the Alexan Foothills Specific Plan modeling, default energy assumptions were reduced to account for the recent adoption of the 2019 energy efficiency code~~, and solid waste was assumed to be diverted at a rate of 75% pursuant to AB 341~~. Although traffic buildout of ZCA Areas A and C was calculated in the TIA (see Appendix J), default trip generation rates for t~~he~~ these areas were used for emissions calculations. The use of default trip generation rates is likely to overestimate mobile source emissions since the proximity of ZCA Areas A and C to the Monrovia Metro Station is likely to reduce vehicle trips compared to default values. The construction and operational emissions associated buildout of ZCA Areas A and C are summarized in Tables 11.6 and 11.7 below.

On page 11-18 of the Draft EIR, Tables 11-6 and 11-7 are revised as follows:

Table 11-6 Estimated Construction GHG Emissions for Buildout of the ZCA Areas A and C

Source	GHG Emissions (Metric Tons / Year)			
	CO_2	CH_4	N_2O	Total MTCO2e
Annual Average Construction GHG Emissions				
2021	~~209.82~~ 218.1	~~0.03~~ 0.0	0.00	~~210.67~~ 219.0
2022	~~166.35~~ 171.9	~~0.03~~ 0.0	0.00	~~166.98~~ 172.6
Total	**~~376.2~~ 390.0**	**~~0.06~~ 0.1**	**0.00**	**~~377.65~~ 391.5**
Total Amortized Emissions(A)	~~12.54~~	~~0.002~~	0	~~12.59~~ 13.1

Source: MIG 2019 (see Appendix C).
(A) Emissions amortized over 30 year-period for inclusion in total GHG emissions.

Table 11-7 Total GHG Emissions for Buildout of ZCA Areas A and C

Emission Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing[(A)]	Proposed	Net Change
Area	1.4	~~1.4~~ 19.2	~~+0.06~~ +17.9
Energy	~~202.2~~ 83.9	~~193.34~~ 127.5	~~-8.8~~ 354.5
Mobile[(B)]	~~227.7~~ 247.5	~~569.3~~ 602.0	~~+341.6~~ +354.5
Stationary	0.0	0.3	+0.3
Waste	16.1	~~4.7~~ 19.0	~~-11.4~~ +2.8
Water	~~45.8~~ 27.6	~~53.23~~ 18.2	~~+7.5~~ -9.4
Amortized Construction	–	~~12.6~~ 13.1	~~+12.6~~ +13.1
Total[(C)]	~~**493.2**~~ **376.6**	~~**834.7**~~ **799.2**	~~**+341.5**~~ **+422.7**
SCAQMD Tier 3 Screening Threshold	–	–	3,000
SCAQMD Tier 3 Threshold Exceeded?	–	–	No
Estimated Service Population[(D)]	55[(E)]	227[(F)]	+172
Estimated GHG Efficiency ($MTCO_2e$/yr/service population)	~~9.6~~ 6.8	~~3.7~~ 3.5	~~-5.9~~ -3.3
SCAQMD Tier 4 Plan-Level Efficiency Threshold	–	6.6	–
SCAQMD Tier 4 Threshold Exceeded?	–	No	–

Source: MIG, 2019 (see Appendix C).

Notes:

(A) See Table 11-3 for existing GHG emissions in the ~~Alexan Foothills Specific Plan area~~ZCA Areas A and C Planning Area.

(B) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's LCFS. Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this EIR analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 2.5% reduction in average carbon intensity content in 2016 and should result in a ~~5~~3.7% reduction in average carbon intensity in ~~2018~~2017~~. The current LCFS regulation also requires~~ and should result in a 10% reduction in average carbon intensity ~~by 2020~~ in 2022. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of ~~.95~~ .963 (existing conditions) and 0.90 (proposed Project) to account for the LCFS regulation (CARB 2018a, 2018b).

(C) Totals may not equal due to rounding.

(D) Service population defined as the number of employees and residents living and working within the area. The existing land uses include a mix of employees and residents; however, the Alexan Foothills Specific Plan service population used is based on residents only.

(E) Based upon the U.S. Green Building Council's (2008) average SF/employee for: General Light Industrial is 14,560 SF/463 SF/employee = 31.4 employees, and for Warehouse is 10,120 SF/781 SF/employee = 13 employees. According to the U.S. Census Bureau the average household size in Monrovia is 2.77 persons (4 units x 2.77 persons/unit =11.08). This yields a total service population of 55.

(F) According to the U.S. Census Bureau, the average household size in Monrovia is 2.77 persons (2.77 persons/unit X 82 units = 227.1) = 227 residents at full buildout.

On page 11-19 of the Draft EIR, the first paragraph is revised as follows:

As shown in Table 11-7, construction and operation of ZCA Areas A and C would result in a net increase in GHG emissions equal to ~~341.5~~422.7 $MTCO_2e$ per year. This net emissions increase is below the SCAQMD Tier 3 threshold of 3,000 $MTCO_2e$ and would thus represent a less than significant impact; however, it would be inappropriate to use this threshold since buildout of ZCA Areas A and C is being analyzed at a programmatic level. Instead, the total GHG emissions associated with buildout of ZCA Areas A and C are evaluated on a per capita basis to determine if GHG emissions would be consistent with the SCAQMD's Tier 4 analysis. As shown in Table 11-7, the proposed buildout of ZCA Areas A and C in Year 2022~~2023~~ falls below the SCAQMD's 2020 GHG efficiency target of 6.6 $MTCO_2e$/yr/service population, as well as the SCAQMD's 2035 GHG efficiency target of ~~4.8~~4.1 $MTCO_2e$/yr/service population. Therefore, anticipated development within ZCA Areas A and C would result in less than significant impacts to GHG emissions.

On page 11-19 of the Draft EIR, Table 11-8 is revised as follows:

Table 11-8 Total Combined GHG Emissions for the Alexan Foothills Specific Plan and ZCA Areas A and C (~~2023~~2022)

Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing[(A)]	Proposed	Net Change
Area	1.7	~~9.3~~ 121.6	~~+7.6~~ +119.9
Energy	~~618.5~~ 334.2	~~1,491.6~~ 884.9	~~+873.1~~ +550.7
Mobile[(B)]	~~925.4~~ 861.2	~~2,571.7~~ 3,176.5	~~+1,664.3~~ +2,315.3
Stationary	0.0	0.7	+0.7
Waste	70.8	~~30.1~~ 119.8	~~-40.7~~ +49.0
Water	~~145.9~~ 29.4	~~338.5~~ 93.8	~~+192.5~~ +96.9
Amortized Construction	–	~~101.1~~ 96.9	~~+101.1~~ +96.9
Total[(C)]	**~~1,762.4~~ 1,297.3**	**~~4,542.2~~ 4,494.2**	**~~+2,779.8~~ +3,196.9**
SCAQMD Tier 3 Screening Threshold	–	–	3,000
SCAQMD Tier 3 Threshold Exceeded?	–	–	~~No~~ Yes
Estimated Service Population[(D)]	~~184~~ 188	~~1,207~~ 1,169	~~+1,096~~ +981
Estimated GHG Efficiency ($MTCO_2e$/yr/service population)	~~9.6~~ 6.9	3.8	– -3.1
SCAQMD Tier 4 Project-Level Efficiency Threshold	–	4.8	–
SCAQMD Tier 4 Threshold Exceeded?	–	No	–

Source: MIG, 2019 (see Appendix C).
Notes:

(A) See Table 11-3 for existing GHG emissions within the Project area.
(B) See Tables 11-5 and 11-7 for buildout emissions for the Alexan Foothills Specific Plan and ZCA Areas A and C, respectively.
(C) Totals may not equal due to rounding.

On page 11-20 of the Draft EIR, the first two paragraphs are revised as follows:

As shown in Table 11-8, buildout of the full Project would result in a ~~2,779.8~~3,196.9 $MTCO_2e$ increase in GHG emissions from existing conditions. This is above~~below~~ the SCAQMD Tier 3 threshold of 3,000 $MTCO_2e$.

As stated previously, the Alexan Foothills Specific Plan is being analyzed at a project level, while buildout of ZCA Areas A and C is being evaluated at a programmatic level. As a conservative (i.e., worst-case) evaluation of potential GHG emission impacts, the combined GHG efficiency of both the Alexan Foothills Specific Plan and ZCA Areas A and C was determined and compared to the SCAQMD's project level Tier 4 efficiency threshold. As shown in Table 11-8, the combined efficiency threshold for the Alexan Foothills Specific Plan and ZCA Areas A and C (~~3.7~~3.8 $MTCO_2e$/yr/service population) in Year 2022~~2023~~ would not exceed the SCAQMD 2020 project-level GHG efficiency target of 4.8 $MTCO_2e$/yr/service population but would be above the SCAQMD's 2035 project efficiency threshold of 3.0 $MTCO_2e$/yr/service population. As explained above, it is not necessarily appropriate to compare the 2022 Alexan Foothills Specific Plan GHG efficiency to the SCAQMD 2020 efficiency threshold, although this threshold does provide useful context for the City in determining the significance of a project's GHG emissions. Presuming a 40% reduction in the SCAQMD's existing CEQA thresholds is necessary to achieve the State's 2030 GHG reduction goal (which is a 40% reduction below 1990 GHG emissions levels), a threshold of 4.4 $MTCO_2e$/yr/service population may be more appropriate for use in evaluating the project's long-term emissions in Year 2022. As shown in Table 11-8, the Alexan Foothills Specific Plan and GP/CZA would not result in emissions that exceed 4.4 $MTCO_2e$/yr/service population.

Furthermore, the operational emissions for the Alexan Foothills Specific Plan as well as ZCA Areas A and C were modeled under year 2035 conditions to account for changes to energy and mobile source emissions as a result continued implementation of the RPS, fleet turnover, and improved vehicle emissions standards; all other inputs were held to 2022~~2023~~ values (e.g., energy efficiency, ~~carbon intensity of SCE electricity,~~ LCFS reductions, ~~solid waste diversion rates,~~ etc.). The 2035 operational emissions (including amortized construction emissions), as estimated using CalEEMod (see Appendix C), are estimated to be ~~3,630~~3,127.5 $MTCO_2e$ per year. Dividing through by the combined service population (~~1,207~~1,169) results in a combined efficiency of ~~3.0~~2.7 $MTCO_2e$/yr/service population, which does not exceed the SCAQMD 2035 project-level target of 3.0 $MTCO_2e$/yr/service population. Therefore, impacts are less than significant.

On page 11-20 of the Draft EIR, the 2nd paragraph under Impact GHG-3 (Energy Consumption) and the corresponding footnote are revised as follows:

As estimated by the TIA (refer to Appendix J) and the emissions modeling conducted using CalEEMod defaults, buildout of the Project is anticipated to result in an increase in vehicle miles traveled (VMT) by approximately 9,611,277 VMT per year~~19,813 VMT daily~~, natural gas consumption by 5,299,030 kBTU per year~~209,426.2 kBTU annually~~, and electricity consumption by 1,629,052 kWh per year~~626 kWh annually~~. Although VMT and energy consumption increases, consumption rates per capita would decrease. Buildout of the Project would result in a VMT decrease from ~~26.2~~27.4 VMT/service

population/day to ~~20.4~~22.5 VMT/service population/day. Natural gas consumption would also reduce from ~~3,175.6~~8,724.4 kBTU/service population/year to ~~657.6~~5,936.0 kBTU/service population/year, and annual electricity consumption would decrease from ~~4,984.6~~5,336.2 kWh/service population/year to ~~760.4~~2,251.7 kWh/service population/year.

On page 11-23 of the Draft EIR, the references are revised as follows:

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~~2017a *California Greenhouse Gas Emission by Scoping Plan Category (2017 Edition: 2000 to 2015).* Sacramento, CA. June 6, 2017.~~

2017a~~b~~ Clean Car Standards – Pavley, Assembly Bill 1493. Web. Accessed November 8. https://www.arb.ca.gov/cc/ccms/ccms.htm.

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2018~~b~~ *Staff Report: Initial Statement of Reasons for the Proposed Amendments to the Low Carbon Fuel Standard Regulation.* Sacramento, CA. March, 2018.

2018b~~c~~ *Draft Environmental Analysis Prepared for the Proposed Amendments to the Low Carbon Fuel Standard and the Alternative Diesel Fuels Regulation.* Sacramento, CA. March, 2018.

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2011 *Integrate Energy Policy Report*. Publication Number: CEC-100-2011-011-CMF. Accessed July 25, 2015. http://www.energy.ca.gov/2014publications/CEC-100-2011-001/CEC-100-2011-001-CMF.pdf.

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2017a *California Energy Commission – Tracking Progress*. "Renewable Energy – Overview." Updated August 2017.

2017b "Electricity Consumption by County". http://ecdms.energy.ca.gov/elecbycounty.aspx.

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2019 Air Quality and Greenhouse Gas Analysis for the Planned Development General Plan Amendment, Zoning Code Amendment & Alexan Foothills Specific Plan. December 2019.

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2017 "Air Quality Analysis Handbook." 1993 Air Quality Analysis Handbook (Updated). SCAQMD, Regulations, CEQA., n.d. Available online at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

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2018 Edison International 2017 Sustainability Report. June 2018.

Southern California Association of Governments (SCAG)
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APPENDIX C, AIR QUALITY AND GREENHOUSE GAS IMPACT ANALYSIS

The Air Quality and Greenhouse Gas Impact Analysis has been revised with the above changes as well. A new report is included below.

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Appendix C Revised Air Quality Impact Analysis Report

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PLANNED DEVELOPMENT GENERAL PLAN AMENDMENT, ZONING CODE AMENDMENT & Alexan Foothills Specific Plan

Air Quality and Greenhouse Gas Analysis

December 2019

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This document is formatted for double-sided printing to conserve natural resources.

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List of Acronyms, Abbreviations, and Symbols	
Acronym / Abbreviation	Full Phrase or Description
AADT	Annual average daily trips
AB	Assembly Bill
ADT	Average daily trips
AERMAP	terrain preprocessor for AERMOD
AERMET	AERMOD Meteorological Preprocessor
AERMOD	Atmospheric Dispersion Modeling System
AQ	air quality
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
CA	California
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CO	carbon monoxide
CPF	cancer potency factor
CRP	Coating Restriction Plan
DPM	diesel particulate matter
ED	exposure duration
EF	exposure frequency
EIR	Environmental Impact Report
EMFAC	Emission Factors Model
FAH	Fraction of Time at Home
GHG	greenhouse gas
GP/ZCA	General Plan/Zoning Code Amendment

List of Acronyms, Abbreviations, and Symbols	
Acronym / Abbreviation	Full Phrase or Description
GVWR	gross vehicle weight rating
H_2S	hydrogen sulfide
HAP	Hazardous Air Pollutants
HARP	Hot Spots Analysis and Reporting Program
HESIS	Hazard Evaluation System and Information Service
HHDT	heavy-heavy duty trucks
HI	Hazard Index
HRA	Health Risk Assessment
HVAC	Heating, ventilation, and air conditioning
I	Interstate
IARC	International Agency for Research on Cancer
kg	kilogram
LDA	passenger cars
LDT1	light-duty trucks, weight class 0 - 3,750 pounds
LDT2	light-duty trucks, weight class 3,751-5,750 pounds
LHDT1	light-heavy-duty trucks, weight class 8,501-10,000 pounds
LHDT2	light-heavy-duty trucks, weight class 10,001-14,000 pounds
LOS	Level of Service
LST	Localized Significance Threshold
m^3	cubic meter
MATES	Multiple Air Toxics Exposure Study
MDV	medium-duty truck
MEIR	Maximally Exposed Individual Resident
MERV	Minimum Efficiency Rating Value
mg	milligram
MH	motor home
MHDT	medium-heavy duty diesel truck

List of Acronyms, Abbreviations, and Symbols	
Acronym / Abbreviation	Full Phrase or Description
mph	miles per hour
MPO	METROpolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NO	nitrogen oxide
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NTP	U.S. National Toxicology Program
O_3	ozone
OBUS	motor coach bus
OEHHA	Office of Environmental Health Hazard Assessment
PM	particulate matter
PMI	Point of Maximum Impact
ppb	parts per billion
ppm	parts per million
$PM_{2.5}$	fine particulate matter
PM_{10}	coarse particulate matter
PMI	point of maximum impact
RAST	Risk Assessment Stand Alone Tool
REL	Reference Exposure Level
ROG	reactive organic gases
ROW	right-of-way
RTP	Regional Transportation Plan
SB	Senate Bill
SBUS	school bus
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy

List of Acronyms, Abbreviations, and Symbols	
Acronym / Abbreviation	Full Phrase or Description
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_4^{2-}	sulfates
SO_x	oxides of sulfur
SRA	Source Receptor Area
TAC	Toxic Air Contaminants
TIA	Traffic Impact Analysis
UBUS	urban bus
U.S.	United States
U.S. EPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
v.	versus
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
µg	micrograms

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1 INTRODUCTION

The City of Monrovia (City) is the Lead Agency pursuant to the California Environmental Quality Act (CEQA) for a proposed 9.63-acre Planned Development General Plan Amendment (GPA) and Planned Development Zoning Code Amendment (ZCA), as well as a proposed 6.77-acre Alexan Foothills Specific Plan (Specific Plan) within a portion of the area proposed for the GPA and ZCA. This Air Quality and Greenhouse Gas Analysis Report (Report) includes a program-level review of the proposed GPA and ZCA and a project-level analysis of the Alexan Foothills Specific Plan.

The current land uses within the proposed Project area include a mix of light industrial, warehouse/storage, office, single family residential, private surface parking, and two cellular towers. Project development would generate emissions of air quality and greenhouse gas (GHG) pollutants that could affect air quality and/or contribute to global climate change. MIG, Inc. (MIG) has prepared this Report at the request of Trammell Crow Residential. This Report evaluates the potential construction- and operational-related air quality and GHG impacts of the proposed Project using specific information provided by Trammel Crow Residential. Where necessary, MIG has supplemented available information with standardized sources of information, such as model assumptions pertaining to construction equipment activity levels. In general, this Report evaluates the potential "worst-case" conditions associated with the proposed Project's construction and operational emissions levels to ensure a conservative (i.e., likely to overestimate) assessment of potential air quality and GHG impacts is presented.

This Report is intended for use by the Lead Agency to assess the potential air quality and GHG impacts of the proposed Project in compliance with CEQA (PRC §21000 et seq.) and the State CEQA Guidelines (14 CCR §15000 et seq.), particularly in respect to the air quality and GHG issues identified in Appendix G of the State CEQA Guidelines.

1.1 REPORT ORGANIZATION

This Report is organized as follows:

- Chapter 1, Introduction, explains the contents of this Report and its intended use.
- Chapter 2, Air Quality Setting and Regulatory Framework, provides pertinent background information on the air quality, describes the existing air quality setting of the proposed Project, and provides information on the federal, state, and local regulations that govern the proposed Project's air quality setting and potential air quality impacts.
- Chapter 3, GHG Setting and Regulatory Framework, provides pertinent background information on GHG and climate change, describes the existing GHG setting of the proposed Project, and provides information on the federal, state, and local regulations that govern the proposed Project's GHG setting and potential GHG impacts.
- Chapter 4, Proposed Project Description, provides an overview of the construction and operational activities associated with the proposed Project.
- Chapter 5, Air Quality Impact Assessment, identifies the potential construction and operational air quality impacts of the proposed Project and evaluates these effects in accordance with Appendix G of the State CEQA Guidelines.

- Chapter 6, GHG Impact Assessment, identifies the potential construction and operational GHG impacts of the proposed Project and evaluates these effects in accordance with Appendix G of the State CEQA Guidelines.
- Chapter 7, Report Preparers and References, list the individuals involved, and the references used, in the preparation of this Report.

2 AIR QUALITY SETTING AND REGULATORY FRAMEWORK

This chapter provides information on the environmental and regulatory air quality setting of the proposed Project. Information on existing air quality conditions, federal and state ambient air quality standards, and pollutants of concern was obtained from the U.S. Environmental Protection Agency (U.S. EPA), CARB, and SCAQMD.

2.1 ENVIRONMENTAL SETTING

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

South Coast Air Basin

The U.S. EPA and CARB are the Federal and State agencies charged with maintaining air quality in the nation and State, respectively. The U.S. EPA delegates much of its authority over air quality to CARB. CARB has geographically divided the State into 15 air basins for the purposes of managing air quality on a regional basis. An air basin is a CARB-designated management unit with similar meteorological and geographic conditions.

The City of Monrovia is located in the South Coast Air Basin (Basin), which includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties. The Basin encompasses approximately 6,745 square miles of coastal plains, and is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

Air quality in the Basin is managed by the SCAQMD. The SCAQMD is responsible for bringing air quality emissions within the Basin into conformity with Federal and State air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with Federal, State, and local agencies to reduce pollutant emissions through adoption and implementation of rules and regulations (see Section 2.3).

Basin Climate and Meteorology

The climate of the Los Angeles region is classified as Mediterranean, but weather conditions within the Basin are dependent on local topography and proximity to the Pacific Ocean. The climate is dominated by the Pacific high-pressure system that results in generally mild, dry summers and mild, wet winters. This temperate climate is occasionally interrupted by extremely hot temperatures during the summer, Santa Ana winds during the fall, and storms from the Pacific Northwest during the winter. In addition to the Basin's topography and geographic location, El Niño and La Niña patterns also have large effects on weather and rainfall received between November and March.

The Pacific high-pressure system drives the prevailing winds in the Basin. The winds tend to blow onshore in the daytime and offshore at night. In the summer, an inversion layer is created over the coastal areas and increases ozone levels. A temperature inversion is created when a layer of cool air is overlain by a layer of warmer air; this can occur over coastal areas when cool, dense air that originates over the ocean is blown onto land and flows underneath the warmer, drier air that is present over land. In the winter, areas throughout the Basin often experience a shallow inversion layer that prevents the dispersion of surface level air pollutants, resulting in higher concentrations of criteria air pollutants such as carbon monoxide

(CO) and oxides of nitrogen (NO_X) (see below for a description of regulated air pollutants such as "criteria air pollutants").

In the fall months, the Basin is often impacted by Santa Ana winds. These winds are the result of a high-pressure system over the Nevada-Utah region that overcomes the westerly wind pattern and forces hot, dry winds from the east to the Pacific Ocean. These winds are powerful and incessant. A strong Santa Ana wind can easily exacerbate fire conditions, resulting in worsening air quality throughout the Basin, as smoke and ash are pushed into the region.

An El Niño is a warming of the surface waters of the eastern Pacific Ocean. It is a climate pattern that occurs across the tropical Pacific Ocean that is usually associated with drastic weather occurrences, including enhanced rainfall in Southern California. La Niña is a term for cooler than normal sea surface temperatures across the Eastern Pacific Ocean. The Los Angeles region receives less than normal rainfall during La Niña years.

Located in the foothills of the San Gabriel Mountains in the eastern part of the San Gabriel Valley and Los Angeles County, the City of Monrovia consists of approximately 13.7 square miles. It is situated adjacent to the cities of Arcadia, North El Monte, Irwindale, and Duarte. The region experiences a Mediterranean climate characterized by hot dry summers, and cool, mild winters, with precipitation occurring in the winter months. The area is within the Climatic Transition Zone from the moister coastal region to the more arid inland regions of southern California.

Regulated Air Pollutants

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six common air pollutants: ozone (O3), particulate matter (PM), which consists of "inhalable coarse" PM (particles with an aerodynamic diameter between 2.5 and 10 microns in diameter, or PM_{10}) and "fine" PM (particles with an aerodynamic diameter smaller than 2.5 microns, or $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. The U.S. EPA refers to these six common pollutants as "criteria" pollutants because the agency regulates these pollutants on the basis of human health-based and/or environmentally-based criteria because they are known to cause adverse human health effects and/or adverse effects on the environment (U.S. EPA 2019a, b). CARB has also established California Ambient Air Quality Standards (CAAQS) for the six common air pollutants regulated by the Federal Clean Air Act (the CAAQS are more stringent than the NAAQS) plus the following additional air pollutants: hydrogen sulfide (H2S), sulfates (SOX), vinyl chloride, and visibility reducing particles due to their known adverse effects on human health or the environment (CARB 2019a).

A description of the criteria pollutants associated with the Project and surrounding vicinity is provided below. Air pollutants not commonly associated with the existing or proposed sources in the vicinity of the Project, such as hydrogen sulfide, lead, and visibility-reducing particles, are not described below.

- Ground-level Ozone, or smog, is not emitted directly into the atmosphere. It is created from chemical reactions between NO_X and volatile organic compounds (VOCs), also called Reactive Organic Gases (ROGs), in the presence of sunlight (U.S. EPA 2017a). Thus, ozone formation is typically highest on hot sunny days in urban areas with NO_X and ROG pollution. Ozone irritates the nose, throat, and air pathways and can cause or aggravate shortness of breath, coughing, asthma attacks, and lung diseases such as emphysema and bronchitis (U.S. EPA 2019c).
    - ROGs is a CARB term defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,

and includes several low-reactive organic compounds which have been exempted by the U.S. EPA VOC definition (CARB 2004).

- VOCs is a U.S. EPA term defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. reactions. The term exempts organic compounds of carbon which have been determined to have negligible photochemical reactivity such as methane, ethane, and methylene chloride (CARB 2004).

- Particulate Matter, also known as particle pollution, is a mixture of extremely small solid and liquid particles made up of a variety of components such as organic chemicals, metals, and soil and dust particles (U.S. EPA 2016a).
  - PM_{10}, also known as inhalable coarse, respirable, or suspended PM_{10}, consists of particles less than or equal to 10 micrometers in diameter (approximately $1/7^{th}$ the thickness of a human hair). These particles can be inhaled deep into the lungs and possibly enter the blood stream, causing health effects that include, but are not limited to, increased respiratory symptoms (e.g., irritation, coughing), decreased lung capacity, aggravated asthma, irregular heartbeats, heart attacks, and premature death in people with heart or lung disease (U.S. EPA 2016a).
  - $PM_{2.5}$, also known as fine PM, consists of particles less than or equal to 2.5 micrometers in diameter (approximately $1/30^{th}$ the thickness of a human hair). These particles pose an increased risk because they can penetrate the deepest parts of the lung, leading to and exacerbating heart and lung health effects (U.S. EPA 2016a).
- Carbon Monoxide (CO) is an odorless, colorless gas that is formed by the incomplete combustion of fuels. At high concentrations, CO reduces the oxygen-carrying capacity of the blood and can aggravate cardiovascular disease and cause headaches, dizziness, unconsciousness, and even death (U.S. EPA 2016b).
- Nitrogen Dioxide (NO_2) is a by-product of combustion. NO_2 is not directly emitted but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to ozone formation. NO_2 also contributes to the formation of particulate matter. NO_2 can cause breathing difficulties at high concentrations (U.S. EPA 2016c).
- Sulfur Dioxide (SO_2) is one of a group of highly reactive gases known as SO_X. Fossil fuel combustion in power plants and industrial facilities are the largest emitters of SO_2. Short-term effects of SO2 exposure can include adverse respiratory effects such as asthma symptoms. SO2 and other SOX can react to form PM (U.S. EPA 2016d).
- Sulfates (SO_4^{2-}) are the fully oxidized ionic form of sulfur. SO42- are primarily produced from fuel combustion. Sulfur compounds in the fuel are oxidized to SO2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. Sulfate exposure can increase risks of respiratory disease (CARB 2009a).

Common criteria air pollutants, such as ozone precursors, SO2, and particulate matter, are emitted by a large number of sources and have effects on a regional basis (i.e., throughout the Basin). Other pollutants, such as hazardous air pollutants (HAPs) or toxic air contaminants (TACs) (described in more detail below), and fugitive dust, are generally not as prevalent and/or emitted by fewer and more specific sources. As such, these pollutants have much greater effects on local air quality conditions and local receptors.

Ambient Air Quality Standards and Basin Attainment Status

In general, the NAAQS and CAAQS define "clean" air, and are established at levels designed to protect the health of the most sensitive groups in our communities by defining the maximum amount of a pollutant (averaged over a specified period of time) that can be present in outdoor air without any harmful effects on people or the environment (U.S. EPA 2019d, CARB 2016b). Air pollutant levels are typically described in terms of concentration, which refers to the amount of pollutant material per volumetric unit of air. Concentrations are typically measured in parts per million (ppm) or micrograms per cubic meter (μg/m3).

The U.S. EPA, CARB, and regional air agencies assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- Attainment. A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.
- Nonattainment. If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.
- Unclassified. An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Table 2-1 lists the NAAQS and CAAQS and summarizes the Basin's attainment status.

Table 2-1 Ambient Air Quality Standards and Basin Attainment Status

Pollutant	Averaging Time[B]	California Standards[A]		National Standards[A]	
		Standard[C]	Attainment Status[D]	Standard[C]	Attainment Status[D]
Ozone	1-Hour (1979)	--	--	240 μg/m^3	Nonattainment
	1-Hour (Current)	180 μg/m^3	Nonattainment	--	--
	8-Hour (1997)	--	--	160 μg/m^3	Nonattainment
	8-Hour (2008)	--	--	147 μg/m^3	Nonattainment
	8-Hour (Current)	137 μg/m^3	Nonattainment	137 μg/m^3	Pending
PM_{10}	24-Hour	50 μg/m^3	Nonattainment	150 μg/m^3	Attainment
	Annual Average	20 μg/m^3	Nonattainment	--	--
$PM_{2.5}$	24-Hour	--	--	35 μg/m^3	Nonattainment
	Annual Average (1997)	--	--	15 μg/m^3	Nonattainment
	Annual Average (Current)	12 μg/m^3	Nonattainment	12 μg/m^3	Nonattainment

Table 2-1 Ambient Air Quality Standards and Basin Attainment Status					
Pollutant	Averaging Time[B]	California Standards[A]		National Standards[A]	
		Standard[C]	Attainment Status[D]	Standard[C]	Attainment Status[D]
Carbon Monoxide	1-Hour	23,000 µg/m^3	Attainment	40,000 µg/m^3	Attainment
	8-Hour	10,000 µg/m^3	Attainment	10,000 µg/m^3	Attainment
Nitrogen Dioxide	1-Hour	339 µg/m^3	Attainment	188 µg/m^3	Unclassifiable/ Attainment
	Annual Average	57 µg/m^3	Attainment	100 µg/m^3	Attainment
Sulfur Dioxide	1-Hour	655 µg/m^3	Attainment	196 µg/m^3	Attainment
	24-Hour	105 µg/m^3	Attainment	367 µg/m^3	Unclassifiable/ Attainment
	Annual Average	--	--	79 µg/m^3	Unclassifiable/ Attainment
Lead	3-Months Rolling	--	--	0.15 µg/m^3	Nonattainment (Partial)
Hydrogen Sulfide	1-Hour	42 µg/m^3	Attainment	--	
Sulfates	24-Hour	25 µg/m^3	Attainment	--	
Vinyl Chloride	24-Hour	26 µg/m^3	Attainment	--	

Source: CARB 2016b, SCAQMD 2016a, modified by MIG.

Notes:

(A) This table summarizes the CAAQS and NAAQS and the Basin's attainments status (as of February 2019). This table does not prevent comprehensive information regarding the CAAQS and NAAQS. Each CAAQS and NAAQS has its own averaging time, standard unit of measurement, measurement method, and statistical test for determining if a specific standard has been exceeded. Standards are not presented for visibility reducing particles, which are not concentration-based. The Basin is unclassified for visibility reducing particles.

(B) Ambient air standards have changed over time. This table presents information on the standards previously used by the U.S. EPA for which the Basin does not meet attainment.

(C) All standards are shown in terms of micrograms per cubic meter (µg/m^3) rounded to the nearest whole number for comparison purposes (with the exception of lead, which has a standard less than 1 µg/m^3). The actual CAAQS and NAAQS standards specify specific units for each pollutant measurement.

(D) A= Attainment, N= Nonattainment, U=Unclassifiable.

Hazardous Air Pollutants/Toxic Air Contaminants

In addition to criteria air pollutants, the U.S. EPA and CARB have classified certain pollutants as Hazardous Air Pollutants (HAPs) (by U.S. EPA) or Toxic Air Contaminants (TACs) (by CARB), respectively. These pollutants can cause severe health effects at very low concentrations (non-cancer effects), and many are suspected or confirmed carcinogens (i.e., can cause cancer) (U.S. EPA 2019b, CARB 2019b). People exposed to HAPs/TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects (U.S. EPA 2019b, CARB 2019b). These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory and other health problems (U.S. EPA 2019b, CARB 2019b).

The U.S. EPA has identified 187 HAPs, including such substances as benzene and formaldehyde; CARB also considers particulate emissions from diesel-fueled engines and other substances to be TACs. Since CARB's list of TACs references and includes U.S. EPA's list of HAPs, this EIR uses the term TAC when referring to HAPs and TACs. A description of the TACs associated with the Project and surrounding vicinity is provided below.

- Gasoline-Powered Mobile Sources. According to the SCAQMD's *Multiple Air Toxics Exposure Study in the South Coast Air Basin* (SCAQMD 2015a), or MATES IV, gasoline-powered vehicles emit TACs, such as benzene, which can have adverse health risks. Gasoline-powered sources emit TACs in much smaller amounts than diesel-powered vehicles. The MATES IV study identifies that diesel emissions account for between 68% to 80% of the total air toxics and cancer risk in the Basin.
- Diesel Particulate Matter (DPM). Diesel engines emit both gaseous and solid material; the solid material is known as DPM. Almost all DPM is less than 1 µm in diameter, and thus is a subset of $PM_{2.5}$. DPM is typically composed of carbon particles and numerous organic compounds. Diesel exhaust also contains gaseous pollutants, including VOCs and NO_x. The primary sources of diesel emissions are ships, trains, trucks, rail yards and heavily traveled roadways. These sources are often located near highly populated areas, resulting in greater DPM related health consequences in urban areas. The majority of DPM is small enough to be inhaled into the lungs and what particles are not exhaled can be deposited on the lung surface and in the deepest regions of the lungs where the lung is most susceptible to injury. In 1998, CARB identified DPM as a toxic air contaminant based on evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure (CARB 2016a).
- PM from Wheel-Rail Interaction. PM may also be generated from friction between rail and locomotive wheels (wheel-rail interaction). This abrasion process can suspend metals such as iron, chromium, manganese, and copper in the form of PM (PCJPB 2015); however, the potential for PM to be generated is dependent on the weight of the train and the conditions of the wheels and track on which the train rides. The Metro Gold Line is commuter rail that consists of an Electric Multiple Unit locomotive system that is lighter than traditional diesel locomotive commuter and freight trains, and in new condition. Thus, while the Metro Gold Line may generate PM from wheel-rail interaction, this contribution is anticipated be minimal (i.e., would not have an appreciable effect on mass emission or health risk estimates) and this issue is not discussed further in this Report.

Common criteria air pollutants, such as ozone precursors, SO_2, and PM, are emitted by a large number of sources and have effects on a regional basis (i.e., throughout the Basin); other pollutants, such as HAPs, TACs, and fugitive dust, are generally not as prevalent and/or emitted by fewer and more specific sources. As such, these pollutants have much greater effects on local air quality conditions and local receptors.

2.1.1 Local Air Quality Conditions

The SCAQMD monitors air quality within the Basin. Existing levels of ambient air quality and historical trends within the Project area are best documented by measurements taken by the SCAQMD. The station closest to Monrovia is identified as the East San Gabriel Valley 1 Station (Station #060) by SCAQMD (CARB refers to this station as Azusa). The station is located less than four miles to the east of

Monrovia's boundary and monitors CO, O_3, NO_2, PM_{10} and $PM_{2.5}$. This monitoring station represents the best approximation of the air quality conditions within the City.

Table 2-2 summarizes the published monitoring data from East San Gabriel Valley 1 monitoring station from 2014 to 2016, the three most recent years for which verified, published data is available from the SCAQMD (2017 data was not yet available as of the time of writing of this EIR). Table 2-2 shows that air quality standards at this location have been exceeded for $PM_{2.5}$, PM_{10}, and O_3. This is consistent with the entire Basin's classification as non-attainment for $PM_{2.5}$, PM_{10}, and O_3. As shown in Table 2-2:

- The maximum 1-hour and 8-hour CO concentration generally decreased from 2014 to 2016. There were no days in which CO standards were exceeded during this time period.
- The maximum 1-hour NO_2 concentration generally increased from 2014 to 2016, while the average annual NO_2 concentration generally decreased. There were no days in which NO_2 standards were exceeded during this time period.
- The maximum 1-hour and 8-hour O_3 concentration, as well as the number of days exceeding O_3 standards, generally increased from 2014 to 2016.
- The maximum 24-hour and average annual PM_{10} concentration fluctuated during the 2014 to 2016 period but there were no days/years in which the Federal PM_{10} standards were exceeded. The State PM_{10} annual standard was exceeded in 2014, 2015, and 2016; however, the annual average PM_{10} concentration and the number of days exceeding the state 24-hour standard generally decreased over this time period.
- The maximum 24-hour and average annual $PM_{2.5}$ concentration fluctuated during the 2014 to 2016 period but there were no years in which the Federal or State $PM_{2.5}$ annual average standards were exceeded. The Federal 24-hour $PM_{2.5}$ was exceeded once in 2015.

Table 2-2 Local Air Quality Conditions (2014 – 2016)

Pollutant	Ambient Air Standard	Year[(A)]		
		2014	2015	2016
Ozone (O_3)				
Maximum 1-hour Concentration (ppm)		0.123	0.122	0.146
Maximum 8-hr Concentration (ppm)		0.092	0.096	0.106
Number of Days Exceeding State 1-hr Standard	>180 µg/m3	11	21	30
Number of Days Exceeding State 8-hr Standard	>137 µg/m3	20	28	40
Days Exceeding Federal 1-hr Standard	>0.124 ppm	0	0	4
Days Exceeding Federal 8-hr Standard	>0.070 ppm	11	27	39
Carbon Monoxide (CO)				
Maximum 1-hr Concentration (ppm)		2	2.1	1.3
Maximum 8-hr Concentration (ppm)		1.9	1.3	1.2
Days Exceeding State 1-hr Standard	>23,000 µg/m^3	--	--	--
Days Exceeding Federal/State 8-hr Standard	>10,000 µg/m^3	--	--	--
Days Exceeding Federal 1-hr Standard	>40,000 µg/m^3	--	--	--
Nitrogen Dioxide (NO_2)				
Maximum 1-hr Concentration (ppb)		70.2	71.0	74.2

Table 2-2 Local Air Quality Conditions (2014 – 2016)				
Pollutant	Ambient Air Standard	Year(A)		
		2014	2015	2016
Annual Arithmetic Mean Concentration (ppb)		17.8	15.4	16.6
Days Exceeding State 1-hr Standard	>180 µg/m^3	--	--	--
Coarse Particulate Matter (PM_{10})				
Maximum 24-hr Concentration (µg/m^3)		96	101	74
Annual Arithmetic Mean (µg/m^3)		44.1	37.1	33.7
Samples Exceeding State 24-hr Standard	>50 µg/m^3	22	12	12
Samples Exceeding Federal 24-hr Standard	>150 µg/m^3	0	0	0
Fine Particulate Matter ($PM_{2.5}$)				
Maximum 24-hr Concentration (µg/m^3)		32.4	44.3	32.17
Annual Arithmetic Mean (µg/m^3)		11.63	9.4	10.15
Samples Exceeding Federal 24-hr Standard	>35 µg/m^3	0	1	0

Source: SCAQMD 2014, 2015a, 2016b.
(A) "--" indicates data are not available.

2.1.2 Emissions Sources from Existing Land Uses

The approximately 9.63-acre Project area consists of the approximately 6.77-acre Alexan Foothills Specific Plan and the 2.77-acre ZCA Areas A and C. As described in EIR Chapter 3.0, Project Description, the existing land uses in the Project area consist of a mix of single-family residential (5 total dwelling units), institutional place of worship (approximately 6,630 square feet), light industrial (approximately 70,750 square feet), office building, and warehouse (approximately 10,120 square feet) land uses. These existing land uses generate emissions from the following sources:

- Small "area" sources. Existing land uses in the Project area generate emissions from small area sources including landscaping equipment and the use of consumer products such as paints, cleaners, and fertilizers that result in the evaporation of chemicals into the atmosphere during product use.
- Energy use and consumption. Existing land uses in the Project area generate emissions from the combustion of natural gas in water and space heating equipment, as well as industrial processes.
- Mobile sources. Existing land uses in the Project area generate emissions from vehicles travelling to and from the Project.

Emissions from existing land uses in the Project area were estimated using the California Emissions Estimator Model, or CalEEMod, Version 2016.3.2. The existing emissions were estimated using default data assumptions contained within CalEEMod, with the following project-specific modifications:

- Land Use Inputs: The default lot acreage and building square footage assumptions for modeled land uses were adjusted to reflect actual existing conditions and development acreages, building sizes, etc.
- Trip Generation: The default weekday trip generation rates for the existing land use types were replaced with trip generation rates contained in the Traffic Impact Analysis (TIA) prepared

for the proposed Alexan Foothills Specific Plan and the maximum potential development scenario under ZCA Areas A and C (see Draft EIR Chapter 19.0, Transportation and Circulation, and the TIA in Draft EIR Appendix J). Default weekend trip generation rates were not modified.

- Energy Use and Consumption: The residential default electrical energy intensity and natural gas energy intensity values were adjusted upwards by a factor of 1.78 and a factor of 1.35, respectively, to reflect lower energy efficiency requirements of the 2008 energy code for which existing buildings were assumed to be subject to (Trinity Consultants, 2017). Similarly, the non-residential default electrical energy intensity, light energy intensity, and natural gas energy intensity values were adjusted upwards by a factor of 1.195, 1.10, and 1.05, respectively. This is appropriate as most buildings in the planning area were constructed prior to the adoption of 2008 (modeled energy efficiency assumption) and 2016 (CalEEMod default assumption) Title 24 building energy efficiency standards.
- Water: The default outdoor water use for non-residential land uses was set to zero to reflect the paved nature of the existing conditions.

Emissions of criteria air pollutants for existing land uses in the Project area are summarized in Table 2-3 below. The existing land uses in the Alexan Foothills Specific Plan area account for between 61% and 76% of the total ROG, NO_x, CO, SO_2, PM_{10} dust and $PM_{2.5}$ dust generated in the Project area, whereas they only account for approximately 33% of existing PM_{10} and $PM_{2.5}$ exhaust emissions.

Table 2-3 Existing Emissions in the Project Area

Emissions Source	Maximum Daily Pollutant Emissions (Pounds Per Day)(A)							
	ROG	NO_x	CO	SO_2	PM_{10}		$PM_{2.5}$	
					Dust	Exhaust	Dust	Exhaust
Alexan Foothills Specific Plan Area								
Area	1.82	0.02	0.62	<0.00(B)	--	0.08	--	0.08
Energy	0.04	0.33	0.27	<0.00	--	0.03	--	0.03
Mobile	1.52	7.05	21.20	0.06	4.41	0.07	1.18	0.07
Subtotal(C)	3.38	7.40	22.09	0.06	4.41	0.17	1.18	0.17
ZCA Areas A and C								
Area	1.72	0.09	2.37	0.01	--	0.31	--	0.31
Energy	0.01	0.11	0.08	<0.00	--	0.01	--	0.01
Mobile	0.44	2.13	6.57	0.02	1.40	0.02	0.37	0.02
Subtotal(C)	2.17	2.32	9.03	0.03	1.40	0.34	0.37	0.34
Total Project Area								
Area	3.54	0.11	2.99	0.01	--	0.39	--	0.39
Energy	0.05	0.44	0.35	<0.00	--	0.04	--	0.04
Mobile	1.96	9.18	27.77	0.08	5.81	0.09	1.55	0.09
Combined Total(C)	5.55	9.72	31.12	0.09	5.81	0.51	1.55	0.51

Source: MIG 2019, see Appendix A.

(A) Emissions estimated using CalEEMod, V 2016.3.2. Estimates are based on default model assumptions unless otherwise noted. Maximum daily ROG, CO, and SO_2 emissions occur during the summer. Maximum daily NO_X, PM_{10}, and $PM_{2.5}$ emissions occur during the winter.

(B) "<0.00" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is larger than 0 but less than 0.005.

(C) Totals may not equal due to rounding.

2.1.3 Sensitive Air Quality Receptors

The SCAQMD identifies sensitive receptors as populations more susceptible to the effects of air pollution than the general population. Some people are more affected by air pollution than others. Sensitive air quality receptors include specific subsets of the general population that are susceptible to poor air quality and the potential adverse health effects associated with poor air quality. Both CARB and the SCAQMD consider residences, schools, parks and playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes to be sensitive air quality land uses and receptors (SCAQMD 1993; CARB 2005). The potential sensitive air quality receptors adjacent or in close proximity to the perimeter of the Project area (i.e., within 1,000 feet) include:

- Single- and multi-family residential units to the east of the Project area, along South Magnolia Avenue, West Evergreen Avenue, and Pomona Avenue;
- Multi-family residential units to the south of the Project area, across the METRO Gold Line right-of-way (ROW) (accessed via Mayflower Avenue and Genoa Street);
- Single-family residential units to the west of the Project area, along Diamond Street and Mayflower Avenue;
- Single- and multi-family residential units to the north of the Project area, across the I-210, off West Central Avenue and other nearby roads;
- The First Lutheran School, located at 1227 South Magnolia Avenue, approximately 890 feet north of the Project area, across the I-210; and
- Calvary Chapel Monrovia, located at 1401 Highland Ave., approximately 970 feet east of the Project area.

One single-family residence occurs within the Alexan Foothills Specific Plan area that would be demolished. Four single-family residences also occur in the Project area, outside of the Alexan Foothills Specific Plan area, in the portion of the Project area not currently proposed for development. These residences were also considered potential sensitive receptors in this analysis in the event that they are not redeveloped

2.2 FEDERAL, STATE, AND LOCAL AIR QUALITY REGULATIONS

2.2.1 Federal Air Quality Regulations

Federal Clean Air Act

The Federal Clean Air Act (CAA), as amended, provides the overarching basis for both Federal and State air pollution prevention, control, and regulation. The Act establishes the U.S. EPA's responsibilities for protecting and improving the nation's air quality. The U.S. EPA oversees Federal programs for setting air quality standards and designating attainment status, permitting new and modified stationary sources of pollutants, controlling emissions of hazardous air pollutants, and reducing emissions from motor vehicles and other mobile sources. In 1971, to achieve the purposes of Section 109 of the CAA, the U.S. EPA developed primary and secondary NAAQS. Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and public welfare from air pollutants in the atmosphere.

The U.S. EPA requires each State prepare and submit a State Implementation Plan (SIP) that consists of background information, rules, technical documentation, and agreements that an individual State will use to attain compliance with the NAAQS within federally-imposed deadlines. State and local agencies implement the plans and rules associated with the SIP, but the rules are also federally enforceable.

2.2.2 State Air Quality Regulations

California Clean Air Act

In addition to being subject to Federal requirements, air quality in the State is also governed by more stringent regulations under the California Clean Air Act, which was enacted in 1988 to develop plans and strategies for attaining the CAAQS. As discussed above, in California, both the Federal and State Clean Air acts are administered by CARB. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional level.

On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation

CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) regulation (also known as the Truck and Bus Regulation) is intended to reduce emission of NO_X, PM, and other criteria pollutants generated from existing on-road diesel vehicles operating in California. The regulation applies to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds that are privately or federally owned, and for privately and publicly owned school buses. Heavier trucks and buses with a GVWR greater than 26,000 pounds must comply with a schedule by engine model year or owners can report to show compliance with more flexible options. Fleets complying with the heavier trucks and buses schedule must install the best available PM filter on 1996 model year and newer engines and replace the vehicle 8 years later. Trucks with 1995 model year and older engines had to be replaced starting in 2015. Replacements with a 2010 model year or newer engine must meet the final requirements, but owners can also replace the equipment with used trucks that have a future compliance date (as specified in regulation). By 2023, all trucks and buses must have at least 2010 model year engines with few exceptions.

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CARB Stationary Diesel Engines – Emission Regulations

In 1998, CARB identified DPM as a TAC. To reduce public exposure to DPM, in 2000, the Board approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and

Vehicles (Risk Reduction Plan) (CARB 2000). Integral to this plan is the implementation of control measures to reduce DPM such as the control measures for stationary diesel-fueled engines. As such, diesel generators must comply with regulations under CARB's amendments to Airborne Toxic Control Measure for Stationary Compression Ignition Engines and they must be permitted by SCAQMD.

CARB Air Quality and Land Use Handbook

In 1998, CARB identified particulate matter from diesel-fueled engines as a TAC. CARB's Air Quality and Land Use Handbook is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process (CARB 2005). The CARB Handbook recommends that planning agencies consider proximity to air pollution sources when considering new locations for "sensitive" land uses, such as residences, medical facilities, daycare centers, schools, and playgrounds. Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the Handbook relative to the Project include taking steps to consider or avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day;
- Within 300 feet of gasoline fueling stations; or
- Within 300 feet of dry cleaning operations (dry cleaning with TACs is being phased out and will be prohibited in 2023). The SCAQMD (Regulation 14, Rule 21) has established emission controls for the use of perchloroethylene, the most common dry-cleaning solvent.

CARB prepared a technical supplement to the Handbook, a *Technical Advisory on Strategies to Reduce Air Pollution Exposure Near High Volume Roadways* (CARB 2017a), that provides recommendations for strategies to minimize exposure of the public to air pollutants due to proximity to high volume roadways, such as reducing traffic emissions and removing pollution from the air.

Air Toxics "Hot Spots" Program

"Air toxics" are a special class of air pollutants especially harmful to human health, and they include carbon monoxide (CO) and TACs. State requirements specifically address emissions of air toxics through Assembly Bill (AB) 1807 (known as the Tanner Bill) that established the State Air Toxics "Hot Spots" Program and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588) (California Health and Safety Code Section 44300 et seq.). Under the Air Toxics Hot Spots Information and Assessment Act of 1987 (or Air Toxics "Hot Spots" Act) and Air Toxics Hot Spots Program, the State (CARB) must collect data on toxic emissions from stationary sources (facilities) throughout the State and ascertain potential health risks that these emissions pose to members of community for developing cancer or for resulting in non-cancer health effects. California's Children's Environmental Health Protection Act of 1999 (California Health and Safety Code Section 39606), also requires explicit consideration of infants and children in assessing risks from air toxics.

Substances regulated under California's Air Toxics Hot Spots Program are defined in statute and include a list of substances developed by the following sources:

- International Agency for Research on Cancer (IARC);
- U.S. Environmental Protection Agency (U.S. EPA);
- U.S. National Toxicology Program (NTP);

- CARB Toxic Air Contaminant Identification Program List;
- Hazard Evaluation System and Information Service (HESIS) (State of California);
- Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) list of carcinogens and reproductive toxicants (State of California); and
- Any additional substance recognized by the State Board as presenting a chronic or acute threat to public health when present in the ambient air.

On May 6, 2005, the SCAQMD adopted a *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* containing numerous recommendations focused on land use planning, such as locating sensitive receptors away from substantial sources of TACs and CO hot spots (e.g., high-traffic freeways and roads, distribution centers, refineries, etc.). When locating receptors near large generators of TAC emissions, the SCAQMD recommends conducting CO hot spot analyses and analyzing health risk for these new developments.

California's Office of Environmental Health Hazard Assessment (OEHHA) has developed procedures for performing "Health Risk Assessments" to evaluate the "likelihood" of emissions of TACs to cause cancer or non-cancer effects (OEHHA 2015). A Health Risk Assessment (or HRA) can also be used to evaluate the impacts of TAC emissions of individual projects on the public, including the likelihood to cause cancer or non-cancer effects. Often these risks are evaluated for sensitive receptors (i.e., residents, including children), as these are the members of the public most sensitive to exposure to TACs.

2.2.3 Regional Air Quality Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a Joint Powers Authority under California State Law, established as an association of Local Governments and agencies that voluntarily convene as a forum to address regional issues. SCAG encompasses the counties of Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial.

SCAG is designated as a Metropolitan Planning Organization (MPO) and as a Regional Transportation Planning Agency. Under SB 375, SCAG, as a designated MPO, is required to prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) (SCAG 2016). The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Information contained in Chapter 5: The Road to Greater Mobility and Sustainable Growth of the 2016 RTP/SCS forms the basis for the land use and transportation components of the Air Quality Management Plan (AQMP), and are utilized in the preparation of air quality forecasts and consistency analysis included in the AQMP.

SCAQMD Air Quality Management Plan

The purpose of an AQMP is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs. The 2016 AQMP for the Basin, which updated the 2012 AQMP, was approved by the SCAQMD Board of Directors on March 3, 2017. The 2016 AQMP provides new and revised demonstration's for how the SCAQMD, in coordination with Federal, State, Regional and Local Governments will bring the Basin back into attainment for the

following NAAQS: 2008 8-hour Ozone; 2012 Annual $PM_{2.5}$; 2006 24-hour $PM_{2.5}$[1]; 1997 8-hour Ozone; and 1997 1-hour Ozone.

To achieve the reductions necessary to bring ambient air quality back into attainment the SCAQMD has identified seven primary objectives for the AQMP, which include:

1. Eliminating reliance on unknown future technology measures to demonstrate future attainment of air quality standards;
2. Calculating and accounting for co-benefits associated with measures identified in other, approved planning efforts (e.g., SCAG's RTP/SCS);
3. Developing a strategy with fair-share emission reductions at the Federal, State, and local levels;
4. Investing in strategies and technologies that meet multiple objectives regarding air quality, climate change, air toxic exposure, energy, and transportation – especially in disadvantaged communities;
5. Seeking, identifying, and securing significant sources of funding for incentives to implement early deployment and commercialization of zero and near-zero technologies, particularly in the mobile source sector;
6. Enhancing the socioeconomic analysis and selecting the most efficient and cost-effective path to achieve multi-pollutant and deadline targets; and
7. Prioritize non-regulatory, innovative approaches that can contribute to the economic vitality of the regional while maximizing emission reductions.

The emission forecasts and demonstrations presented in the 2016 AMQP rely heavily on information contained in other planning and strategy documents. For example, the 2016 AQMP's long-term emissions inventory is based on the growth and land use(s) projections contained in the SCAG's 2016 RTP/SCS. Additionally, the conclusions relating to ozone compliance are based on implementation of measures presented in CARB's Mobile Source Strategy and SIP strategy. The Mobile Source Strategy outlines a suite of measures targeted at on-road light- and heavy-duty vehicles, off-road equipment, and Federal and international sources. A subset of the Statewide strategy is a mobile source strategy for the South Coast SIP. Because the SCAQMD has limited authority in regulating mobile source emissions, coordination and cooperation between SCAQMD, CARB, and the U.S. EPA is imperative to meeting the NOx reductions required to meet ozone standards. Although not incorporated specifically from another planning document strategy, the 2016 AQMP also provides numerous control measures for stationary sources.

[1] Although the 2006 24-hour $PM_{2.5}$ standard was focused on in the 2012 AQMP, it has since been determined, primarily due to unexpected drought conditions, that it is impractical to meet the standard by the original attainment year. Since adoption of the 2012 AQMP, the US EPA approved a re-classification to "serious" non-attainment for the standard, which requires a new attainment demonstration and deadline.

SCAQMD Rules and Regulations

The SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of business, processes, operations, and products to implement the AQMP and the various Federal and State air quality requirements. In general, rules that are anticipated to be applicable during buildout of the Project include:

- Rule 401 (Visible Emissions) prohibits discharge into the atmosphere from any single source of emission for any contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in shade than that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.
- Rule 402 (Nuisance) prohibits discharges of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- Rule 403 (Fugitive Dust) prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent capacity in the air). Rule 403 requires the implementation of Best Available Control Measures and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres.
- Rule 445 (Wood Burning Devices) prohibits installation of woodburning devices such as fireplaces and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development.
- Rule 481 (Spray Coating Operations) imposes equipment and operational restrictions during construction for all spray painting and spray coating operations.
- Rule 1108 (Cutback Asphalt) prohibits the sale or use of any cutback asphalt containing more than 0.5 percent by volume organic compounds which evaporate at 260°C (500°F) or lower.
- Rule 1113 (Architectural Coatings) establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.
- Rule 1143 (Consumer Paint Thinners and Multi-Purpose Solvents) prohibits the supply, sale, manufacture, blend, package or repackage of any consumer paint thinner or multi-purpose solvent for use in the SCAQMD unless consumer paint thinners or other multi-purpose solvents comply with applicable VOC content limits.
- Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) specifies work practice requirements to limit asbestos emissions from building demolitions and renovation activities, including the removal and associated disturbance of asbestos containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos containing materials handling and clean-up procedures, and storage, disposal, and land filling requirements for asbestos containing waste materials.

2.2.4 City of Monrovia General Plan

The City of Monrovia's existing General Plan does not establish specific goals, policies, or standards related to air quality; however, the City's Monrovia General Plan Proposed Land Use and Circulation Elements EIR (City of Monrovia 2008a) included the following mitigation measures related to air quality:

- AIR-A: The City shall require applicants to analyze the air quality impacts of construction for each project.
- AIR-B: If project-level analysis demonstrates that NOx emissions would be significant, the project shall provide a plan, for approval by the City, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, shall utilize all feasible measures to reduce the emissions to a less than significant level. Acceptable options for reducing emissions may include use of late model low-emission diesel engines, alternative fuels, engine retrofit technology, and/or other options as they become available. The SCAQMD web site provides specific information on mitigation options for off-road and on-road construction equipment.
- AIR-C: The following measure shall be incorporated into all project specifications to reduce diesel engine emissions of O_3 precursors including ROG and NO_X, PM_{10}, $PM_{2.5}$, and diesel PM:

  Idling Restrictions. Idling of diesel-powered vehicles and equipment shall not be permitted during periods of non-active vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:

  - When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
  - When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
  - To bring the equipment to the manufacturer's recommended operating temperature;
  - When the ambient temperature is below 40 degrees F or above 85 degrees F; or
  - When equipment is being repaired.
- AIR–D: The City shall require that all new residential fireplaces to be fueled by natural gas. Wood stoves and wood burning fireplaces shall be prohibited.
- AIR-E: The City shall require applicants to analyze the potential for creating a local CO hotspot due to traffic congestion that could result from implementation of projects anticipated in the proposed General Plan amendments to the Land Use and Circulation Element.
- AIR-F: The City shall require applicants to complete a Health Risk Assessment (HRA) to determine the cancer risk to sensitive receptors for all residential projects located within 500 feet of Interstate 210 (I-210).
- AIR-G: The City shall require applicants to assess the potential impacts to children's respiratory health for all residential projects located within 500 feet of I-210.

3 GREENHOUSE GAS SETTING AND REGULATORY FRAMEWORK

This chapter provides information on the environmental and regulatory GHG setting of the proposed Project. Information on existing GHG conditions, relevant standards, and issues of concern was obtained from the U.S. EPA, CARB, and SCAQMD.

3.1 DEFINING CLIMATE CHANGE

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term "climate change" is preferred over the term "global warming" because "climate change" conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface.

Elements that indicate that climate change is occurring on Earth include, but are not limited to:

- Rising of global surface temperatures by 1.3°F over the last 100 years;
- Changes in precipitation patterns;
- Melting ice in the Arctic;
- Melting glaciers throughout the world;
- Rising ocean temperatures;
- Acidification of oceans; and
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The Earth's surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet warmer during the nights than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

3.1.1 Greenhouse Gases

Gases that "trap" heat in the atmosphere and affect regulation of the earth's temperature are known as "greenhouse gases." (GHGs). GHGs that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants (discussed in Chapter 7) because climate regulation is global in scale (both in terms of causes and effects.

Some GHGs are emitted to the atmosphere naturally by biological and geological processes, such as evaporation (water vapor), aerobic respiration (carbon dioxide, or CO_2), and off-gassing from low oxygen environments, such as swamps or exposed permafrost (methane or CH_4). However, GHG emissions from human activities, such as fuel combustion (e.g., CO_2) and refrigerant use (e.g., hydrofluorocarbons or HFCs), significantly contribute to overall GHG concentrations in the atmosphere, climate regulation, and global climate change. Human production of GHG has increased steadily since pre-industrial times (approximately pre-1880), and atmospheric CO_2 concentrations have increased from a pre-industrial value of 280 parts per million (ppm) in the early 1800s to 409 ppm in April 2018 (NOAA 2018). The effects of increased GHG concentrations in the atmosphere include increasing shifts in temperature and precipitation patterns and amounts, reduced ice and snow cover, sea level rise, and acidification of oceans. These effects in turn will impact food and water supplies, infrastructure, ecosystems, and overall public health and welfare.

The 1997 United Nations' Kyoto Protocol international treaty set targets for reductions in emissions of four specific greenhouse gases – CO_2, CH_4, nitrous oxide (N_2O), and sulfur hexafluoride (SF_6) and two groups of gases – HFCs and perfluorocarbons (PFCs). These GHGs are the primary GHGs emitted into the atmosphere by human activities. Water vapor is also a common GHG that regulates the earth's temperature; however, the amount of water vapor in the atmosphere can change substantially from day to day, whereas other GHG emissions remain in the atmosphere for longer periods of time. Descriptions of the most common GHGs are described below.

- Carbon Dioxide (CO_2). is emitted and removed from the atmosphere naturally. Animal and plant respiration involve the release of CO_2 from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO_2 at the sea surface. CO_2 is also released from plants during wildfires. Volcanic eruptions release a small amount of CO_2 from the Earth's crust. Human activities that affect CO_2 in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels used for electricity generation and transportation are the largest source of CO_2 emissions in the United States. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO_2. Emissions from industrial activities also emit CO_2, such as cement, metal, chemical production, and use of petroleum produced in plastics, solvents, and lubricants.
- Methane (CH_4) is emitted from human activities and natural sources. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause CH_4 releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. CH_4 is produced from landfills as solid waste decomposes. CH_4 is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use.
- Nitrous Oxide (N_2O) is emitted from human sources such as agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N_2O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N_2O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of N_2O.
- Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs) are entirely manmade and are mainly generated through various industrial processes. These types of gases are used in

aluminum production, semiconductor manufacturing, and magnesium production and processing.

- Sulfur Hexafluoride (SF_6) is commonly used as an electrical insulator in high voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF_6 occur during maintenance and servicing as well as from leaks of electrical equipment.

GHGs can remain in the atmosphere long after they are emitted. The potential for a particular greenhouse gas to absorb and trap heat in the atmosphere is considered its Global Warming Potential (GWP). The reference gas for measuring GWP is CO_2, which has a GWP of one. By comparison, CH_4 has a GWP of 25, which means that one molecule of CH_4 has 25 times the effect on global warming as one molecule of CO_2. Multiplying the estimated emissions for non-CO_2 GHG by their GWP determines their CO_2 equivalent (CO_2e), which enables a project's combined global warming potential to be expressed in terms of mass CO_2 emissions. The GWPs and estimated atmospheric lifetimes of the common GHG are shown in Table 3-1.

Table 3-1: Global Warming Potential (GWP) of Common Greenhouse Gases (GHG)

GHG	GWP	GHG	GWP
Carbon Dioxide (CO_2)	1	Perfluorocarbons (PFCs)	
Methane (CH_4)	25	CF_4	6,500
Nitrous Oxide (N_2O)	298	C_2F_6	9,200
Hydrofluorocarbons (HFCs)		C_4F_{10}	7,000
HFC-23	14,800	C_6F_{14}	7,400
HFC-134a	1,430	Sulfur Hexafluoride (SF_6)	22,800
HFC-152a	140		
HCFC-22	1,700		
Sulfur Hexafluoride (SF_6)	3,200	22,800	

Source: CARB, 2014.
GWPs are based on the United Nations Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report.

3.1.2 Climate Change and California

The 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) identified anticipated impacts to California due to climate change through extensive modeling efforts. General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevada Mountain Range.
- Some reduction in precipitation is likely by the middle of the century.
- Sea levels will rise up to an estimated 55 inches.
- Extreme events such as heat waves, wildfires, droughts, and floods will increase.
- Ecological shifts of habitat and animals are already occurring and will continue to occur (CNRA 2009).

In July 2012, the CNRA and Emergency management Agency published an update, titled Emergency Management Agency published California Adaptation Planning Guide, which walks local decision-makers through the steps to create climate vulnerability assessments and adaptation strategies. This guide presents the basis for climate change adaptation planning and introduces a step-by-step process for local and regional climate vulnerability assessment and adaptation strategy development. The guide outlines nine steps in adaptation planning development, the first five steps are a vulnerability assessment which covers: 1) exposure, 2) sensitivity, 3) potential impacts, 4) adaptive capacity, and 5) risk and onset. The last four steps are guiding principles for adaptation strategy development, which are: 6) prioritize adaptive needs, 7) identify strategies, 8) evaluate and prioritize, and 9) phase and implement. The potential impacts of global climate change in California are detailed below.

Public Health and Welfare

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change would result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality would increase the severity of health impacts from criteria and other air pollutants discussed in Section 2.1.1 (Regulated Air Pollutants). Temperature increases and increases in carbon dioxide are also expected to increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence. Precipitation changes are also suspected to impact the Sierra snowpack (see "Water Management" herein). Earlier snowmelts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can cause property damage and loss of life for those affected. Increased wildfires are also of concern as the State "dries" over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises would also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state. Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face

local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes would alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

Water Management

Although disagreement among scientists on long-term precipitation patterns in the State has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the State's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The State's concern related to climate change is that due to rising temperatures, snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt would overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern is that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

Agriculture

California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County also contribute to strawberry production. Cherries are also grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds would benefit from warming temperatures. Anticipated increases in the number and severity in heat waves would have a negative impact on livestock where heat stress would make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns would impact irrigated farmlands and reduce food security. Furthermore, a drying trend would increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

Forestry

Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior or plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures.

Precipitation changes will affect forests due to longer dry periods and moisture deficits and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (e.g., the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes would impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life would increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.

3.1.3 Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO_2 from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a sink. Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that would otherwise absorb CO_2. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO_2 from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

3.2 EXISTING GHG EMISSIONS LEVELS

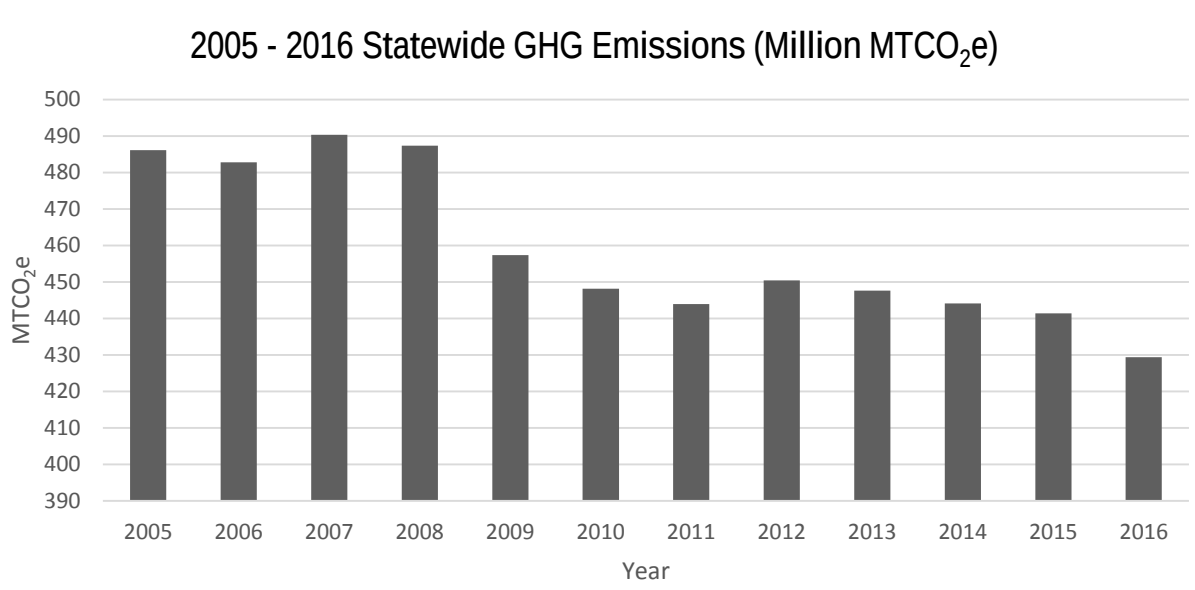
3.2.1 State GHG Emissions Levels

CARB prepares an annual Statewide GHG emissions inventory using Regional, State, and Federal data sources, including facility-specific emissions reports prepared pursuant to the State's Mandatory GHG Reporting Program. The Statewide GHG emissions inventory helps CARB track progress towards meeting the State's Assembly Bill (AB) 32 GHG emissions target of 431 million metric tons of CO_2 equivalents ($MTCO_2e$), as well as to establish and understand trends in GHG emissions[2]. Statewide GHG emissions for the 2005 to 2015 time period are shown Table 3-2.

[2] CARB approved use of 431 MMCO2e as the state's 2020 GHG emission target in May 2014. Previously, the target had been set at 427 MMCO2e.

Table 3-2: 2005 – 2016 Statewide GHG Emissions (Million $MTCO_2e$)

Scoping Plan Sector	Year											
	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
Agriculture	34	35	36	36	33	34	35	36	35	36	34	34
Commercial/Residential	42	43	43	44	44	45	46	43	44	37	38	39
Electric Power	108	105	114	120	101	90	88	95	90	88	84	69
High GWP	9	10	11	12	12	14	15	16	17	18	19	20
Industrial	96	93	90	91	88	91	91	91	94	94	92	90
Recycling and Waste	8	8	8	8	8	8	8	8	9	9	9	9
Transportation	189	189	189	178	170	165	162	161	161	162	166	169
Total Million $MTCO_2e$[(A)]	*486*	*483*	*490*	*487*	*457*	*448*	*444*	*450*	*448*	*444*	*441*	*429*



Source: CARB, 2018

(A) Totals may not equal due to rounding. CARB inventory uses GWPs based on the United Nations' ICC's 4th Assessment Report.

As shown in Table 11-2, Statewide GHG emissions have generally decreased over the last decade, with 2015 levels (440 million $MTCO_2e$) approximately 10 percent less than 2004 levels (488 million $MTCO_2e$). The transportation sector (165 million $MTCO_2e$) accounted for more than one-third (approximately 37.5%) of the State's total GHG emissions inventory (440 million $MTCO_2e$) in 2015.

3.2.2 Existing Planning Area GHG Emissions

The existing land uses within the Project area contribute to existing City, Regional, and Statewide GHG emissions. The Project area's existing GHG emissions, presented below in Table 11-3, were estimated using CalEEMod), Version 2016.3.2. GHG emissions generated within the Project area primarily

come from the area, energy, and mobile sources described in Section 2.2.1, Air Quality, as well as the following additional sources specific to GHG emissions:

- Energy use and consumption: Emissions generated from purchased electricity and natural gas. CalEEMod estimates the existing land uses in the Project area use and consume approximately 1,003,206 kilowatt hours (kWh) of electricity per year and 1,640,190 thousand British Thermal Units (kBtus) of natural gas per year.
- Solid waste disposal: Emissions generated from the transport and disposal of waste generated by land uses. CalEEMod estimates approximately 140.8 tons of solid waste are generated per year by the people working and living within the Project area.
- Water/wastewater: Emissions from electricity used to supply water to land uses, and treat the resulting wastewater generated. As estimated in CalEEMod, existing land uses within the Project area use approximately 6.52 million gallons of water per year.

The Project area's existing GHG emissions were estimated using default data assumptions contained within CalEEMod, with the project-specific modifications described in Section 2.1.2 and below:

- Mobile Sources. CalEEMod does not estimate N_2O emissions from on-road vehicle travel or off-road construction sources. To account for this, CalEEMod emissions estimates were adjusted as follows:
  - N_2O emissions were estimated by comparing the ratio of CO_2 and N_2O emissions from the on-road vehicle sector contained in the State's most recent GHG inventory (CARB 2019c). In 2017, statewide CO_2 and N_2O emissions estimates for the on-road transportation sector were 152.4 and 0.011 million metric tons, respectively (N_2O emissions are therefore equal to 0.007% of CO_2 emissions for this sector).
  - Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in transportation fuels in 2017. Therefore, the CalEEMod estimate of CO_2 emissions was reduced by 3.7% (CARB 2018a).
- Energy use and consumption: Southern California Edison (SCE) provides electricity service in the City of Monrovia. The CalEEMod default GHG intensity values for this electric service provider are from 2012 and do not represent existing and future reductions in GHG intensity that have been achieved under the State's Renewable Portfolio Standard (RPS, see Section 3.4.2). To account for this, CalEEMod default assumptions regarding energy use were adjusted as follows:
  - The SCE GHG intensity value was reduced based on an increase in renewable energy mix from 20% under estimated Year 2012 conditions (the CalEEMod default data year) to 32% under existing conditions (based on 2017 available data from SCE). This adjustment reduced the estimated amount of CO_2 produced by the SCE energy mix from approximately 702 pounds/megawatt-hour (lbs/MWh) to 539 lbs/MWh (SCE 2018).
  - Electricity generation emission factors for CH_4 (0.033 lbs/MWh) and N_20 (0.004 lbs/MWh) were obtained from the U.S. EPA's EGRID database for year 2016, the last year for which data was available at the time this EIR was prepared (U.S. EPA 2016e).

The Project area's existing GHG emissions are summarized in Table 3-3 below.

Table 3-3 Existing GHG Emissions in the Project Area				
Source	GHG Emissions (Metric Tons / Year)			
	CO_2	CH_4	N_2O	Total $MTCO_2e$
Alexan Foothills Specific Plan Area				
Area	0.3	<0.0(A)	<0.0	0.3
Energy(B)	249.2	<0.0	<0.0	250.2
Mobile(C)	600.3	<0.0	<0.0	613.7
Waste	22.1	1.3	-	54.7
Water	1.4	<0.0	<0.0	1.8
Subtotal(D)	873.2	1.4	0.0	920.7
Remaining GP/ZCA Area				
Area	1.3	<0.0	<0.0	1.4
Energy(B)	83.6	<0.0	<0.0	83.9
Mobile(C)	242.1	<0.0	<0.0	247.5
Waste	6.5	0.4	-	16.1
Water	21.3	0.2	<0.0	27.6
Subtotal(D)	354.8	0.6	<0.0	376.6
Combined Total	1,228.0	2.0	0.1	1,297.3

Source: MIG 2019 (see Appendix A)

Notes:

(A) "<0.0" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is larger than 0 but smaller than 0.05.

(B) The emissions estimated in CalEEMod account for the carbon intensity metrics provided in Southern California Edison's 2017 Corporate Sustainability Report (SCE 2018) and U.S. Environmental Protection Agency's eGrid2014v2 emission rates (USEPA 2017).

(C) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's Low Carbon Fuel Standards (LCFS). Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this Report's analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in 2017. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of .963 to account for the LCFS regulation (CARB 2018a).

(D) Totals may not equal due to rounding.

3.3 STATE AND REGIONAL ENERGY SETTING

According to the California Energy Commission's (CEC) *2015 Integrated Energy Policy Report*, Californians consumed about 280,500 gigawatt hours (GWh) of electricity in 2014 and 13,240 million BTU of natural gas in 2013. The CEC estimates that by 2025, California's electricity consumption will reach between 297,618 GWh and 322,266 GWh, an annual average growth rate of 0.54 to 1.27 percent (CEC 2015a), and natural gas consumption is expected to reach between 12,673 million and 13,731 million BTU by 2024, an average annual growth rate of -0.4 to 0.33 percent (CEC 2015a).

Approximately 70 percent of California's electricity is generated from power plants located within the State and from plants in other states but owned by California utilities. About 10 percent is imported from the Pacific Northwest and 20 percent from the American Southwest (CEC 2011). In-state power is attained from 61.1 percent natural gas, 17.1 renewable energy, and 11.7 percent large hydropower.

Due in part to the State's emphasis on renewable energy, California is second in leading the nation when it comes to net electricity generation from renewable resources. A top producer of electricity from conventional hydroelectric power, California is also a leader in net electricity generation from several other

renewable energy sources. In 2016, California generated approximately 73,900 GWh of renewable electricity, accounting for 28.9 percent of the State's overall electricity sales (CEC 2017a).

In 2016, total electricity use in Los Angeles County was 69,614 million kilowatt hours (kWh), including 48,759 million kWh of consumption for non-residential land uses (CEC 2017b). Natural gas consumption was 286.9 million BTU in 2016, including 175.8 million therms from non-residential uses (CEC 2017c).

3.4 FEDERAL, STATE, AND LOCAL CLIMATE CHANGE REGULATIONS

3.4.1 International and Federal GHG Regulations

International Regulation and the Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the "United Nations' Framework Convention on Climate Change" agreement with the goal of controlling greenhouse gas emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The plan currently consists of more than 50 voluntary programs for member nations to adopt.

Federal Regulation and the Clean Air Act

On December 7, 2009, the U.S. EPA issued an endangerment finding that current and projected concentrations of the six Kyoto GHGs in the atmosphere (CO_2, CH_4, N_2O, SF_6, HFCs, and PFCs) threaten the public health and welfare of current and future generations. This finding came in response to the Supreme Court ruling in *Massachusetts v. EPA*, which found that GHGs are pollutants under the Federal Clean Air Act. As a result, the U.S. EPA issued its GHG Tailoring Rule in 2010, which applies to facilities that have the potential to emit more than 100,000 $MTCO_2e$. In 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA* (No. 12-1146), finding that the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a permit pursuant to the "Clean Air Act's Prevention of Significant Deterioration" or "Title V" operating permit programs. The U.S. EPA's Greenhouse Gas Reporting Program requires facilities that emit 25,000 $MTCO_2e$ or more of GHG to report their GHG emissions to the U.S. EPA to inform future policy decisionmakers.

Current Administration

President Trump and the U.S. EPA have stated their intent to halt various federal regulatory activities to reduce GHG emission. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. The timing and consequences of these types of federal decisions and potential responses from California and other states are speculative at this time.

3.4.2 State Climate Change Regulations

Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond

that by year 2050. The Order requires the Secretary of the Cal-EPA to coordinate with other State departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of Cal-EPA who reports on the progress of the reduction strategies. The latest CAT Biennial Report to the Governor and Legislature was completed in April 2016.

Assembly Bill 32 – California Global Warming Solutions Act and Related GHG Reduction Goals

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 establishes the caps on Statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and established the timeline for meeting State GHG reduction targets. The deadline for meeting the 2020 reduction target is December 31, 2020.

As part of AB 32, CARB determines 1990 GHG emissions levels and projected a "business-as-usual" (BAU)[3] estimate for 2020, to determine the amount of GHG emission reductions that would need to be achieved. In 2007, CARB approved a Statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million $MTCO_2e$ (CARB 2007a). In 2008, CARB adopted its Climate Change Scoping Plan, which projects 2020 Statewide GHG emissions levels of 596 million $MTCO_2e$ and identifies numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 174 million $MTCO_2e$ of GHG reductions and bring Statewide GHG emissions to 1990 levels by 2020 (CARB 2009b).

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, set a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. To achieve this ambitious target, Governor Brown identified five key goals for reducing GHG emissions in California through 2030:

- Increase renewable electricity to 50 percent.
- Double energy efficiency savings achieved in existing buildings and make heating fuels cleaner.
- Reduce petroleum use in cars and trucks by up to 50 percent.
- Reduce emissions of short-lived climate pollutants.
- Manage farms, rangelands, forests and wetlands to increasingly store carbon.

By directing State agencies to take measures consistent with their existing authority to reduce GHG emissions, Executive Order B-30-15 establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through Executive Order B-30-15, Governor Brown went on to sign Senate Bill (SB) 32 and AB 197 on September 8, 2016. SB 32 made the GHG reduction target (to reduce GHG emissions by 40 percent below 1990 levels by 2030) a requirement, as opposed to a goal. AB 197 gives the Legislature additional authority over CARB to ensure the most successful strategies for

[3] BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies.

lowering emissions are implemented, and requires CARB to, "protect the State's most impacted and disadvantaged communities …[and] consider the social costs of the emissions of greenhouse gases."

Scoping Plan

The CARB Scoping Plan is the comprehensive plan primarily directed at identifying the measures necessary to reach the GHG reduction targets stipulated in AB 32. The key elements of the 2008 Plan were to expand and strengthen energy efficiency programs, achieve a Statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners (including seven States in the United States and four territories in Canada) in the Western Climate Initiative, establish transportation-related targets, and establish fees (CARB 2009b). CARB estimated that implementation of these measures will achieve at least 174 million $MTCO_2e$ of reductions and reduce Statewide GHG emissions to 1990 levels by 2020 (CARB 2009b).

On February 10, 2014, CARB released the public draft of the "First Update to the Scoping Plan." "The First Update" built upon the 2008 Scoping Plan with new strategies and recommendations, and identified opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. "The First Update" defined CARB's climate change priorities over the next five years, and set the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-12. It also highlighted California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. "The First Update" evaluated how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. "The First Update" to the Scoping Plan was approved by the Board on May 22, 2014.

The second update to the scoping plan, the 2017 Climate Change Scoping Plan update (CARB 2017b), was adopted by CARB in December 2017. The primary objective for the 2017 Climate Change Scoping Plan is to identify the measures required to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030) established under Executive Order B-30-15 and SB 32. The *2017* Climate Change Scoping Plan identifies an increased need for coordination among State, Regional, and local governments to realize the potential for GHG emissions reductions that can be gained from local land use decisions. It notes that emissions reductions targets set by more than one hundred local jurisdictions in the State could result in emissions reductions of up to 45 million $MTCO_2e$ and 83 million $MTCO_2e$ by 2020 and 2050, respectively. To achieve these goals, the 2017 Scoping Plan Update includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons by 2050. The major elements of the *2017* Climate Change Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero emission vehicle (ZEV) buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewable Portfolio Standard (RPS) to 50 percent and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH4 and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continued implementation of SB 375.

- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Senate Bill 375 – Sustainable Communities and Climate Protection Act

In January 2009, California SB 375 went into effect known as the Sustainable Communities and Climate Protection Act. The objective of SB 375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB 375 tasks CARB to set GHG reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In August 2010, CARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were eight percent by year 2020 and 13 percent by year 2035. In September 2010 and February 2011, the eight percent and the 13 percent targets were adopted, respectively.

On April 4, 2012, SCAG's Regional Council adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future.* The 2012 RTP/SCS included a strong commitment to reduce emissions from transportation sources to comply with SB 375. The document contained a host of improvements to the region's multimodal transportation system. These improvements included closures of critical gaps in the network that hinder access to certain parts of the region, as well as the strategic expansion of the transportation system where there is room to grow in order to provide the region with greater mobility. The RTP/SCS demonstrated the region's ability to attain and exceed the GHG emission-reduction targets set forth by the CARB and outlined a plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands.

SCAG's Regional Council adopted an update to the 2012 RTP/SCS on April 7, 2016, the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016 RTP/SCS). The 2016 RTP/SCS expands upon the 2012 RTP/SCS's goal of balancing future mobility and housing needs with economic, environmental, and public health goals. Included in the 2016 RTP/SCS are 13 major initiatives primarily focused around preserving and maintaining the existing transportation system, expanding and improving mass transit (with a specific emphasis on passenger rail), decreasing reliance on vehicular modes of transportation through the expansion of pedestrian and bicycle infrastructure, and focusing new growth around transit. Through proactive land use planning and improvements to the transportation network, implementation of the 2016 RTP/SCS will result in an eight percent reduction in greenhouse gas emissions per capita by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 when compared with 2005 levels. These reductions meet or exceed the State's mandate, which require an eight percent reduction by 2020 and 13 percent by 2035.

Executive Order B-30-15 / Senate Bill 32 and Assembly Bill 197

EO B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, set a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. To achieve this ambitious target, Governor Brown identified five key goals for reducing GHG emissions in California through 2030:

- Increase renewable electricity to 50 percent.
- Double energy efficiency savings achieved in existing buildings and make heating fuels cleaner.
- Reduce petroleum use in cars and trucks by up to 50 percent.
- Reduce emissions of short-lived climate pollutants.
- Manage farms, rangelands, forests, and wetlands to increasingly store carbon.

By directing State agencies to take measures consistent with their existing authority to reduce GHG emissions, EO B-30-15 establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through EO B-30-15, Governor Brown signed Senate Bill (SB) 32 and AB 197 on September 8, 2016. SB 32 made the GHG reduction target (to reduce GHG emissions by 40 percent below 1990 levels by 2030) a requirement, as opposed to a goal. AB 197 gives the Legislature additional authority over CARB to ensure the most successful strategies for lowering emissions are implemented, and requires CARB to, "protect the State's most impacted and disadvantaged communities …[and] consider the social costs of the emissions of greenhouse gases."

Assembly Bill 1493

With the passage of AB 1493 (Pavley I) in 2002, California launched an innovative and pro-active approach for dealing with GHG emissions and climate change at the State level. AB 1493 requires CARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards apply to automobiles and light trucks from 2009 through 2016. Although litigation was filed challenging these regulations and the U.S. EPA initially denied California's related request for a waiver, a waiver has since been granted. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 among light-duty vehicles. In January 2012, CARB approved the Advanced Clean Cars (ACC) program (formerly known as Pavley II) for model years 2017 through 2025. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations and the Zero-Emission Vehicle (ZEV) regulation. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards.

Renewables Portfolio Standard (RPS) Program

In 2002, California established its RPS Program, with the goal of increasing the percentage of renewable energy in the State's electricity mix to 20 percent of retail sales by 2017. The 2003 Integrated Energy Policy Report recommended accelerating that goal to 20 percent by 2010, and the 2004 Energy Report Update further recommended increasing the target to 33 percent by 2020. The State's Energy Action Plan also supported this goal. In 2006 under SB 107, California's 20 percent by 2010 RPS goal was codified. The legislation required retail sellers of electricity to increase renewable energy purchases by at

least one percent each year with a target of 20 percent renewables by 2010. Publicly owned utilities set their own RPS goals, recognizing the intent of the legislature to attain the 20 percent by 2010 target.

On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08 requiring "[a]ll retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020." The following year, Executive Order S-21-09 directed the California Air Resources Board, under its AB 32 authority, to enact regulations to achieve the goal of 33 percent renewables by 2020. In October 2015, Governor Brown signed SB 350 to codify the ambitious climate and clean energy goals of Executive Order S-14-08. One key provision of SB 350 is for retail sellers and publicly owned utilities to procure "half of the State's electricity from renewable sources by 2030."

Most recently, on September 10, 2018, Governor Brown signed SB 100 and issued Executive Order B-55-18. SB 100 revised the above-described legislation to mandate a 50 percent renewable energy mix by December 31, 2026, achieve a 60 percent renewable energy target by December 31, 2030, as well as call for 100 percent carbon-free electricity by 2045. Executive Order B-55-18 further strengthens California's commitment to clean energy by calling for statewide carbon-neutrality by 2045.

Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the State's model water efficiency ordinance. In 2009, the Department of Water Resources updated the Model Water Efficient Landscape Ordinance pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum applied water allowance and must be prepared and stamped by a licensed landscape architect.

Title 24 Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC).

CALGreen contains both mandatory and voluntary measures. For non-residential land uses there are 39 mandatory measures including, but not limited to exterior light pollution reduction, wastewater reduction by 20 percent, and commissioning of projects over 10,000 square feet. Two tiers of voluntary measures apply to non-residential land uses, for a total of 36 additional elective measures.

California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 standards, adopted May 9, 2018, will go into effect on January 1, 2020 and improve upon existing standards, focusing on three key areas: proposing new requirements for installation of solar photovoltaics for newly constructed low-rise residential buildings; updating current ventilation and Indoor Air Quality (IAQ) requirements, and extending Title 24 Part 6 to apply to healthcare facilities. The 2019 standards also propose several smaller improvements in energy efficiency.

Biological Diversity v. California Department of Fish and Wildlife

In its decision in *Center for Biological Diversity v. California Dep't of Fish and Wildlife* (*Newhall*) 62 Cal.4th 204 (2015), the California Supreme Court set forth several options that lead agencies may consider for evaluating the cumulative significance of a proposed project's GHG emissions:

1. A calculation of emissions reductions compared to a "business as usual" (BAU) scenario based upon the emissions reductions in CARB's Scoping Plan, including examination of the data to determine what level of reduction from BAU a new land use development at the proposed location must contribute in order to comply with statewide goals.
2. A lead agency might assess consistency with AB 32's goals by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities.
3. Use of geographically specific GHG emission reduction plans to provide a basis for tiering and streamlining of project-level CEQA analysis.
4. A lead agency may rely on existing numerical thresholds of significance for GHG emissions, though use of such thresholds is not required.

There is no applicable existing numerical threshold of significance for GHG emissions and the *Newhall* decision specifically found that use of a numerical threshold is not required.

3.4.3 City of Monrovia Climate Change Regulations

The City does not have an adopted Climate Action Plan. The City of Monrovia, along with Southern California Edison and Intergy Corporation, prepared an Energy Action Plan that contains goals and specific actions to ensure that sufficient, dependable, and reasonably-priced electrical power and energy supplies are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for the City's consumers and taxpayers (City of Monrovia 2008b). Appendix A to the Energy Action Plan includes the City's environmental accords or actions; however, none of these actions are directly applicable to individual development projects.

4 PROPOSED PROJECT DESCRIPTION

The Zoning Code Amendment will establish a Planned Development Area (PD-27: Station Square West [PD-27]) for the entire 9.63-acre Project area in order to be consistent with the General Plan Amendment. A zone change for 2.86 acres is proposed from Manufacturing to a Planned Development Area to include high density residential development as well as other uses identified in PD-27 for Areas A and C (ZCA Areas A and C). For ZCA Area B, refer to Alexan Foothills Specific Plan below.

While a new zoning designation is proposed for ZCA Areas A and C, the existing uses and structures, would be allowed to remain as legal conforming uses. Although a specific development plan is neither being proposed nor considered at this time for these two areas, the redesignation of PD-27 ZCA Areas A and C could eventually result in development of an additional 82 dwelling units in Area A (based on the 54 dwelling units/acre permitted land use density within the overall 9.63-acre GPA area).

Trammell Crow Residential proposes to implement the Alexan Foothills Specific Plan (ZCA Area B). The Specific Plan area, 6.77 acres in size, is located at 1625 Magnolia Avenue, Monrovia, California (see Figure 4-1 and Figure 4-2). The Specific Plan would allow a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure, containing 798 stalls.

4.1.1 Project Construction

Construction activities, duration, and typical equipment usage was generated using CalEEMod, V. 2016.3.2, and are shown in detail in Section 5.3.1.

Alexan Foothills Specific Plan

Approximately 65,190 square feet (sf) of existing structures would be demolished and construction of the proposed Project would involve 7,200 cubic yards (cy) of cut, 10,400 cy of fill, with a net import of 3,200 cy[4]. Construction of the proposed Project is planned to begin in 2020 and expected to take 30 months to complete, with a target construction completion date in 2022.

Remaining General Plan/Zoning Code Amendment Area

For the purposes of evaluating air quality and traffic impacts associated with buildout of ZCA Areas A and C, it was assumed that buildout would start in 2021, last approximately 12 months, and involve the demolition of approximately 28,400 square feet of existing building space and associated debris hauling activities.

4.1.2 Project Operation

Once constructed, the Project would generate emissions of regulated air pollutants and GHG from area, energy, mobile, off-road, solid waste, and water /wastewater sources. These sources are described in detail in Sections 5.3.2 and 6.2. The proposed Project also includes small stationary sources of emissions such as a back-up generator and a fire pump. The Project is anticipated to be fully operational in early 2022.

[4] Under a worst-case scenario; grading volumes may be reduced after final design.

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Figure 4-1 Aerial View of Project Area

Figure 4-2 Project Area Map

5 AIR QUALITY IMPACT ANALYSIS

This chapter evaluates the direct and indirect air quality impacts that could result from implementation of the GPA, ZCA, and Alexan Foothills Specific Plan.

5.1 SIGNIFICANCE CRITERIA

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project could result in potentially significant impacts related to air quality if it would:

(a) Conflict with or obstruct implementation of applicable air quality plan;

(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard;

(c) Expose sensitive receptors to substantial pollutant concentrations (i.e., carbon monoxide hot spots or TACs); or

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

5.1.1 Regional Significance Thresholds

Consistent with the guidance contained in Appendix G of the State CEQA Guidelines, this Report relies upon SCAQMD-recommended methods and pollutant thresholds to evaluate whether the proposed Project's emissions would violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in nonattainment criteria air pollutants. The SCAQMD's recommended thresholds of significance for criteria pollutants are shown in Table 5-1.

Table 5-1: SCAQMD-Recommended Regional Pollutant Thresholds

Pollutant	Maximum Daily Emissions (lbs/day)	
	Construction	Operation
NO_X	100	55
VOC/ROG	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3

Source: SCAQMD, 2015b

5.1.2 Localized Significance Thresholds

In addition to establishing thresholds of significance for emissions of criteria air pollutants on a regional level, the SCAQMD has also developed Localized Significance Thresholds (LSTs) that represent

the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standards, which would result in significant adverse localized air quality effects. The LST methodology takes into account a number of factors, including (1) existing ambient air quality in each Source Receptor Area (SRA); (2) how many acres the project would disturb in a day; and (3) how far project construction and operational activities would take place from the nearest sensitive receptor. Unlike the regional emission significance thresholds, LSTs have only been developed for NO_X, CO, PM_{10} and $PM_{2.5}$. This Report evaluates the proposed Project's potential to expose sensitive receptors to substantial pollutant concentrations pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five-acre project scenarios, depending on the amount of site disturbance during a day, using the SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (SCAQMD, 2016c). The construction and operational LSTs for one-acre, two-acre, and five-acre sites in SRA 9 (East San Gabriel Valley), the SRA in which the City of Monrovia is located, are shown in Table 5-2.

Table 5-2: SCAQMD Localized Significance Thresholds for Source Receptor Area 9

Pollutant Monitored	Maximum Allowable Emissions (Pounds per Day) as a Function of Receptor Distance (in Feet) from Site Boundary				
	82 Feet	164 Feet	328 Feet	656 Feet	1,640 Feet
ONE-ACRE SITE					
Construction Thresholds					
Nitrogen Oxides (NO_x)	89	112	159	251	489
Carbon Monoxide (CO)	623	945	1,914	4,803	20,721
Particulate Matter (PM_{10})	5	14	34	75	199
Particulate Matter ($PM_{2.5}$)	3	5	9	22	94
Pollutant Monitored	Maximum Allowable Emissions (Pounds per Day) as a Function of Receptor Distance (in Feet) from Site Boundary				
	82 Feet	164 Feet	328 Feet	656 Feet	1,640 Feet
ONE-ACRE SITE					
Operational Thresholds					
Nitrogen Oxides (NO_x)	89	112	159	251	489
Carbon Monoxide (CO)	623	945	1,914	4,803	20,721
Particulate Matter (PM_{10})	2	4	9	19	48
Particulate Matter ($PM_{2.5}$)	1	2	3	6	23
TWO-ACRE SITE					
Construction Thresholds					
Nitrogen Oxides (NO_x)	128	151	200	284	513
Carbon Monoxide (CO)	953	1,344	2,445	5,658	22,093
Particulate Matter (PM_{10})	7	22	42	84	207
Particulate Matter ($PM_{2.5}$)	5	7	12	26	100
Operational Thresholds					
Nitrogen Oxides (NO_x)	128	151	200	284	513
Carbon Monoxide (CO)	953	1,344	2,445	5,658	22,093
Particulate Matter (PM_{10})	2	6	11	20	50
Particulate Matter ($PM_{2.5}$)	2	2	3	7	25

Table 5-2: SCAQMD Localized Significance Thresholds for Source Receptor Area 9					
Pollutant Monitored	Maximum Allowable Emissions (Pounds per Day) as a Function of Receptor Distance (in Feet) from Site Boundary				
	82 Feet	164 Feet	328 Feet	656 Feet	1,640 Feet
FIVE-ACRE SITE					
Construction Thresholds					
Nitrogen Oxides (NO_x)	203	227	286	368	584
Carbon Monoxide (CO)	1,733	2,299	3,680	7,600	25,558
Particulate Matter (PM_{10})	14	43	63	105	229
Particulate Matter ($PM_{2.5}$)	8	11	17	35	116
Operational Thresholds					
Nitrogen Oxides (NO_x)	203	227	286	368	584
Carbon Monoxide (CO)	1,733	2,299	3,680	7,600	25,558
Particulate Matter (PM_{10})	4	11	16	26	55
Particulate Matter ($PM_{2.5}$)	2	3	5	9	28

Source: SCAQMD 2008, modified by MIG 2019

Note: The localized thresholds for NOx in this table account for the conversion of NO to NO_2. The emission thresholds are based on NO_2 levels, as this is the compound associated with adverse health effects.

5.1.3 Carbon Monoxide "Hot Spot Thresholds"

Historically, to determine whether a project poses the potential for a CO hotspot, the quantitative CO screening procedures provided in the *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) were used (UCD ITS 1997). The Protocol determines whether a project may worsen air quality by increasing the percentage of vehicles in cold start modes by two percent or more; significantly increasing traffic volumes by five percent or more; or worsening traffic flow at signalized intersections (by 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 project, to operate at LOS E or F). With new vehicles and improvements in fuels resulting in fewer emissions, the retirement of older polluting vehicles, and new controls and programs, CO concentrations have declined dramatically in California. As a result of emissions controls on new vehicles, the number of vehicles that can idle, and the length of time that vehicles can idle before emissions would trigger a CO impact, has increased. Therefore, the use of LOS as an indicator is no longer applicable for determining CO impacts.

The Bay Area Air Quality Management District (BAAQMD) developed a screening-level analysis for CO hotspots in 2010 which finds that projects that are consistent with the applicable congestion management program, and that do not cause traffic volumes at affected intersections to increase to more than 44,000 vehicles per hour, would not result in a CO hotspot that could exceed State or Federal air quality standards (BAAQMD 2017 pg. 3-4). CO modeling was conducted for the SCAQMD's 2003 AQMP at four busy intersections during morning and evening peak hour periods as well. The busiest intersection studied in this analysis, Wilshire Boulevard and Veteran Avenue, had 8,062 vehicles per hour during morning peak hours, 7,719 vehicles per hour during evening peak hours, and approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour CO concentration for this intersection was 4.6 ppm, which is less than a fourth of the 1-hour CAAQS CO standard (20 ppm) (SCAQMD 2003a). The BAAQMD screening threshold is generally consistent with the results of the CO modeling conducted for the SCAQMD's 2003 AQMP.

Therefore, for purposes of this Report, the Project would pose the potential for a CO hotspot if it would exceed the BAAQMD's screening traffic level for peak hour intersection traffic volumes (44,000 vehicles per hour) (thereby having the potential to result in CO concentrations that exceed 1-hour State [20 ppm], 1-hour Federal [35 ppm], and/or State and Federal 8-hour [9 ppm] ambient air quality standards for CO).

5.1.4 Toxic Air Contaminant Thresholds

The SCAQMD recommends preparation of a Health Risk Assessment (HRA) for large commercial or industrial projects to determine the specific health risks posed by long-term emissions of TACs from a project. Following OEHHA and SCAQMD guidance, health risks from TAC emissions are estimated based on "Individual Cancer Risk," which is the likelihood that a person exposed to TACs over 70-year lifetime will get cancer or suffer some other "non-cancer" effect (measured by what is called as a "hazard index"). Numerous weighting factors (e.g., age sensitivity factors, breathing rates, etc.) are applied during health risk calculations to account for those members of the public who may be more sensitive to pollution than others (e.g., sensitive receptors). A project is considered to have a significant effect if it results in any of the following:

- A maximum incremental cancer risk greater than or equal to 10 in one million;
- A population-wide cancer burden greater than 0.5 (in areas where cancer risk is greater than or equal to 1 in one million); or
- A chronic or acute hazard index greater than or equal to 1.0.

The California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015) ruled CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project." The opinion also holds that when a project has "potentially significant exacerbating effects on existing environmental hazards" those impacts are properly within the scope of CEQA because they can be viewed as impacts of the project on "existing conditions" rather than impacts of the environment on the project. The Supreme Court provided the example of a project that threatens to disperse existing buried environmental contaminants that would otherwise remain undisturbed. The Court concluded that it is proper under CEQA to undertake an analysis of the dispersal of existing contaminants because such an analysis would be focused on how the project "would worsen existing conditions." The court also found that the limited number of express CEQA provisions that require analysis of the impacts of the existing environment on a project – such as impacts associated with school siting and airports – should be viewed as specific statutory exceptions to the general rule that such impacts are not properly within CEQA's scope.

Consistent with this court ruling, the impact discussion presented below focuses on the proposed Project's effect on air quality and existing health risks, rather than the effect of existing air quality and its potential risks on the proposed Project's residents. The analysis evaluates whether the proposed Project would create or exacerbate adverse public health risk conditions at sensitive receptor locations, as identified in the SCAQMD's CEQA significance criteria.

5.2 Analysis Methodology

Construction and operational emissions associated with buildout of the Project were calculated and evaluated against regional and localized significance thresholds to determine potential impacts on air quality standards, as well as to evaluate potential impacts associated with DPM emissions on sensitive receptors. In addition, a discussion is provided below on the potential for the Project to generate CO

hotspots or objectionable odors. An evaluation of whether the Project is consistent with existing plans and policies protecting air quality is also included below.

For potential environmental impacts, mitigation measures were designed to avoid or reduce each effect to a less than significant level, where possible.

5.3 ENVIRONMENTAL IMPACTS

5.3.1 Consistency with the SCAQMD AQMP

As described in Section 2.1.3, the proposed Project is within the South Coast Air Basin, which is under the jurisdiction of the SCAQMD. Pursuant to the methodology provided in Chapter 12 of the SCAQMD *CEQA Air Quality Handbook*, consistency with the AQMP is affirmed if the Project:

1) Is consistent with the growth assumptions in the AQMP; and
2) Does not increase the frequency or severity of an air quality standards violation, or cause a new one.

Consistency Criterion 1 refers to the growth forecasts and associated assumptions included in the 2016 AQMP. The 2016 AQMP was designed to achieve attainment for all criteria air pollutants within the Basin while still accommodating growth in the region. Projects that are consistent with the AQMP growth assumptions would not interfere with attainment of air quality standards, because this growth is included in the projections used to formulate the AQMP. Therefore, if the growth under the Alexan Foothills Specific Plan and GP/ZCA would be consistent with the regional population, housing, and employment forecasts identified by SCAG in the RTP/SCS, plan implementation would be consistent with the AQMP, even if emissions could potentially exceed the SCAQMD's recommended daily emissions thresholds.

The parcels within the GP/ZCA area but outside the Alexan Foothills Specific Plan area would have a General Plan amendment from a Manufacturing land use designation to a Planned Development area designation and a corresponding zoning change to a Planned Development area that would permit high density residential development. Although a specific project is not proposed for the GP/ZCA, these proposed land use changes could support a total population of 227 residents. The Alexan Foothills Specific Plan would result in 436 residential units for a total population of 942 residents (see Chapter 17, Population and Housing). The 2016 RTP/SCS population and employment projections for the City of Monrovia, as well as the increase in population and employment that would occur with the implementation of the GP/ZCA including the Alexan Foothills Specific Plan, and other City projects that are currently under review, are shown in Table 5-3.

Table 5-3: RTP/SCS and Specific Plan Growth Assumptions for Air Quality Impact Analysis		
Proposed Project	Population	Employment
Alexan Foothills Specific Plan	942	0
GP/ZCA	227	0
Subtotal[1]	1,169	0
Other City Projects		
Other Past, Present, and Future Projects	2,238(A)	565(B)
Total Growth	3,407	565
RTC/SCS Growth 2012 - 2040	3,500	3,600
Within Growth Assumptions?	Yes	Yes

Source: SCAG 2016; MIG 2018

(A) According to the City's cumulative project list, approved, under-construction, or reasonably foreseeable residential projects (or portions of mixed-use projects). Assuming 20% of these are 2-bedroom units and based on the U.S. Census Bureau estimate of 1.56 people per bedroom (Linscott, Law, and Greenspan 2018).

(B) According to the City's cumulative project list approved, under-construction, or reasonably foreseeable non-residential projects (or portions of mixed-use projects) and based upon the U.S. Green Building Council's (2008) average SF/employee: General Office is 250 SF/employee, Hotel is 1,500 SF/employee, and General Retail (100,000 SF or less) is 550 SF/employee (Linscott, Law, and Greenspan 2018) .

As shown in Table 5-3, implementation of the proposed Project, along with other City projects currently under review, would not exceed the growth assumptions contained in the AQMP. Further, implementation of the Alexan Foothills Specific Plan and GP/ZCA would encourage transit-oriented development and support the use of mass transit. Thus, the Project would support AQMP objectives to reduce trips and would aid in the implementation of the AQMP.

Consistency Criterion 2 refers to the CAAQS. SCAQMD has identified CO as the best indicator pollutant for determining whether air quality violations would occur since it is most directly related to automobile traffic, the emissions of which have been modeled by the SCAQMD to determine future air quality conditions. The CO hotspot analysis described in Section 0 below indicates that the proposed Project would not result in a localized CO hotspot and, therefore, would not cause or contribute to an existing or projected air quality violation. In addition, as described in Section 5.3 and Section 5.5.1 below, the construction and operation of the proposed Project would not exceed SCAQMD regional or localize significance thresholds.

For the reasons described above, the proposed Alexan Foothills Specific Plan and GP/ZCA would not conflict with the SCAQMD 2016 AQMP.

5.3.2 Result in Cumulatively Considerable Increase in Criteria Air Pollutants

The proposed Project would generate both short-term construction emissions and long-term operational emissions. The Project's potential emissions were estimated using CalEEMod, V. 2016.3.2. As described in more detail below, with standard conditions and mitigation measures incorporated, the proposed Project would not generate short-term or long-term emissions that exceed SCAQMD-recommended pollutant thresholds.

Regional Construction Emissions

As described in Section 4.1.1, the proposed Project involves the GPA, ZCA, and Alexan Foothills Specific Plan. The Specific Plan area, 6.77 acres in size, involves the construction of a 436-unit, five-story apartment complex and an eight-level (seven stories) parking structure, containing 798 stalls. Construction

activities would include demolition, site preparation, grading, construction, paving, and architectural coating work. Although a specific development plan is neither being proposed nor considered at this time for those portions of the Project site outside the Specific Plan boundary, the redesignation of the parcels under the GPA and ZCA could eventually result in development of an additional 82 dwelling units in the area outside of the Specific Plan boundary (based on the 54 units/acre permitted land use density within the overall 9.6-acre area).

Alexan Foothills Specific Plan Analysis

The proposed Alexan Foothills Specific Plan's potential construction emissions were modeled using CalEEMod, Version 2016.3.2 (see Appendix A). Construction phase and duration information was provided by the Project Applicant; the type and amount of equipment used during construction was generated using CalEEMod default assumptions and modified as necessary to reflect additional-Project-specific construction activities, including:

- Demolition of approximately 65,190 square feet of existing building space and associated debris hauling activities; and
- Import of 3,200 cubic yards of soil during the Project's grading phase.

The unmitigated maximum daily construction emissions generated by the proposed Alexan Foothills Specific Plan are shown in Table 5-4.

Table 5-4: Unmitigated Regional Construction Emissions Estimates for the Alexan Foothills Specific Plan

Season	Total Unmitigated Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2020	4.90	53.16	40.16	0.11	7.60	4.98
Summer 2021	4.22	29.09	38.00	0.11	6.90	2.53
Summer 2022	82.55	26.64	36.19	0.11	6.74	2.39
Winter 2020	4.91	53.17	38.75	0.11	7.60	4.98
Winter 2021	4.46	29.22	36.68	0.11	6.90	2.53
Winter 2022	82.60	26.75	34.95	0.11	6.75	2.39
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	Yes	No	No	No	No	No

Source: MIG 2019 (see Appendix A).

As shown in Table 5-4, the maximum daily construction emissions generated by the Alexan Foothills Specific Plan would be below applicable SCAQMD thresholds for all pollutants except ROG in 2022, when peak architectural coating application activities would occur.

To reduce potential ROG emissions generated during coating application activities to levels below SCAQMD thresholds, the City would require the applicant to implement standard condition SC AIR-1, which requires the use of SCAQMD Rule 1113 "super compliant" coatings with a lower VOC content than the CalEEMod default assumption, as well as the application of coatings with efficient spray equipment. The City would also require the Applicant to implement Mitigation Measure AIR-1, which imposes idling restrictions consistent with General Plan EIR Mitigation Measure AIR-C.

The standard VOC content assumption for residential and non-residential coatings is 50 and 100 grams per liter, respectively. Thus, the use of coatings with a VOC content of less than 10 grams per liter of coating would substantially reduce ROG emissions during coating application activities, as shown in Table 5-5.

Table 5-5: Mitigated Regional Construction Emissions Estimates for the Alexan Foothills Specific Plan

Season	Total Mitigated Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2020	4.90	53.16	40.16	0.11	7.60	4.98
Summer 2021	4.22	29.09	38.00	0.11	6.90	2.53
Summer 2022	18.07	26.64	36.19	0.11	6.74	2.39
Winter 2020	4.91	53.17	38.75	0.11	7.60	4.98
Winter 2021	4.46	29.22	36.68	0.11	6.90	2.53
Winter 2022	18.12	26.75	34.95	0.11	6.75	2.39
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix A)

As shown in Table 5-5, the maximum daily construction emissions generated by the Alexan Foothills Specific Plan would be below the SCAQMD's regional construction emission thresholds with the inclusion of standard conditions and mitigation measure AIR-1. Thus, the standard conditions and mitigation measure ensure that the Alexan Foothills Specific Plan's regional construction emissions would have a less than significant effect.

Standard Conditions

SC AIR-1: Comply with South Coast Air Quality Rule 1113 to reduce VOC emissions from architectural coating applications. Prior to the issuance of a building permit for the Project, the Applicant shall submit, to the satisfaction of the Planning Division, a Coating Restriction Plan (CRP), consistent with South Coast Air Quality Management District (SCAQMD) guidelines. The Applicant shall include in any construction contracts and/or subcontracts a requirement that Project contractors adhere to the requirements of the CRP. The CRP shall include a requirement that all interior and exterior residential and non-residential architectural coatings used in Project construction meet the SCAQMD "super compliant" coating VOC content standard of less than 10 grams of VOC per liter of coating. The CRP shall also specify the use of high-volume, low pressure spray guns during coating applications to reduce coating waste.

Requirements and Timing: Applicant shall receive Planning Division approval of a Coating Restriction Plan (CRP) prior to receipt of building permits.

Monitoring: City Planning staff shall conduct site inspections to ensure that the CRP is followed during construction.

Mitigation Measures

MM AIR-1: Idling Restrictions: Idling of diesel-powered vehicles and equipment shall not be permitted during periods of non-active vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:

- When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
- When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
- To bring the equipment to the manufacturer's recommended operating temperature;
- When the ambient temperature is below 40 degrees F or above 85 degrees F; or
- When equipment is being repaired.

Requirements and Timing: Mitigation measure shall be printed on construction drawings and included as a requirement in the construction contract.

Monitoring: City Planning staff shall conduct site inspections during construction to ensure that the mitigation measure is adhered to.

ZCA Areas A and C

Construction activities associated with development of ZCA Areas A and C would be similar to that of the Alexan Foothills Specific Plan and include demolition, site preparation, grading, utility trenching, foundation construction, vertical building development, and architectural coating. Construction activities for ZCA Areas A and C are anticipated to be less intense given the lower maximum development potential of ZCA Areas A and C. The combustion of fuel in on- and off-site equipment would generate emissions of ROG, NOx, CO and PM. Ground-disturbing activities, such as site preparation, grading, utility trenching, and foundation construction, as well as onsite and offsite travel would generate dust and PM emissions. Architectural coating activities would result in the off gassing of ROG from paints, coatings, etc. Construction is anticipated to occur over an approximate 12-month period, with initial construction activities assumed to begin in 2021.

The potential construction emissions were modeled using CalEEMod, Version 2016.3.2 (see Appendix A). Construction phase and duration information, as well as the type and amount of equipment used during construction was generated using CalEEMod default assumptions and modified as necessary to reflect additional Project-specific construction activities, including the demolition of approximately 28,400 square feet of existing building space and associated debris hauling activities. The unmitigated maximum daily construction emissions generated by the potential redevelopment of ZCA Areas A and C are shown in Table 5-6.

Table 5-6: Regional Construction Emissions Estimates for ZCA Areas A and C						
Season	Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2021	2.40	21.47	17.82	0.04	3.98	2.39
Summer 2022	52.42	16.09	17.37	0.04	1.61	0.92
Winter 2021	2.43	21.49	17.61	0.04	3.98	2.39
Winter 2022	52.42	16.11	17.17	0.03	1.61	0.92
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Source: MIG 2019, See Appendix A.						

As shown in Table 5-6, the maximum daily construction emissions associated with buildout of ZCA Areas A and C would be below the SCAQMD's recommended regional pollutant thresholds for all pollutants. It is noted that future redevelopment of ZCA Areas A and C would be subject to standard condition SC AIR-1 and the General Plan EIR idling restriction requirements as outlined in mitigation measure MM AIR-1 above.

Standard Conditions

Refer to SC AIR-1.

Mitigation Measures

Refer to mitigation measure MM AIR-1.

Combined Emissions from Alexan Foothills Specific Plan and ZCA Areas A and C

This report assumes that construction and operation of the Alexan Foothills Specific Plan and remaining GP/ZCA area would occur simultaneously, meaning that construction and operational emissions for both development projects would overlap and be emitted at the same time. The potential for combined emissions to result in a significant air quality effect on air quality is evaluated below.

The potential combined construction emissions resulting from the concurrent development of the Alexan Foothills Specific Plan and remaining GP/ZCA area are presented in Table 5-7. As shown in Table 5-7, the total emissions associated with simultaneous implementation of the Alexan Foothills Specific Plan and remaining GP/ZCA area would be below the SCAQMD's regional pollutant thresholds for all pollutants with the implementation of standard condition SC AIR-1 and mitigation measure MM AIR-1. Thus, standard condition SC AIR-1 and mitigation measure MM AIR-1 are required for both the Alexan Foothills Specific Plan and the remaining GP/ZCA development and this effect would be less than significant with mitigation.

Table 5-7: Total Combined Regional Construction Emissions for the Alexan Foothills Specific Plan and ZCA Areas A and C						
Season	Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Alexan Foothills Specific Plan Emissions(A)						
Summer 2020	4.90	53.16	40.16	0.11	7.60	4.98
Summer 2021	4.22	29.09	38.00	0.11	6.90	2.53
Summer 2022	18.07	26.64	36.19	0.11	6.74	2.39
Winter 2020	4.91	53.17	38.75	0.11	7.60	4.98
Winter 2021	4.46	29.22	36.68	0.11	6.90	2.53
Winter 2022	18.12	26.75	34.95	0.11	6.75	2.39
Remaining GP/ZCA Area Emissions(B)						
Summer 2021	2.40	21.47	17.82	0.04	3.98	2.39
Summer 2022	10.61	16.09	17.37	0.04	1.61	0.92
Winter 2021	2.43	21.49	17.61	0.04	3.98	2.39
Winter 2022	10.61	16.11	17.17	0.03	1.61	0.92
Total Combined Emissions						
Summer 2020	4.9	53.16	40.16	0.11	7.6	4.98
Summer 2021	6.62	50.56	55.82	0.15	10.88	4.92
Summer 2022	26.68	42.73	53.56	0.15	8.35	3.31
Winter 2020	4.91	53.17	38.75	0.11	7.6	4.98
Winter 2021	6.89	50.71	54.29	0.15	10.88	4.92
Winter 2022	28.73	42.86	52.12	0.14	8.36	3.31
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (See Appendix A)
(A) Alexan Foothills Specific Plan emissions represent mitigated emissions values as shown in Table 5-5.
(B) GP/ZCA emissions from Table 5-6. ROG emissions reflect use of super compliant coatings (see Appendix A).

Standard Conditions

Refer to SC AIR-1.

Mitigation Measures

Refer to mitigation measure MM AIR-1.

Regional Operational Emissions

Alexan Foothills Specific Plan Analysis

Once operational, the Alexan Foothills Specific Plan would result in long-term emissions from area, energy, and mobile sources. The net change in emissions of regulated air pollutants that would occur with

implementation of the Alexan Foothills Specific Plan was modeled using CalEEMod, Version 2016.3.2. The operation emissions for the Alexan Foothills Specific Plan were modeled based on the Project's first full year of operation (2022), using default data assumptions provided by CalEEMod, with the following Project-specific modifications:

- Land Use Inputs: The default lot acreage and building square footage assumptions for modeled land uses were adjusted to reflect actual proposed conditions and development acreages, building sizes, etc.
- Trip Generation: The default weekday trip generation rates for the existing land use types were replaced with trip generation rates contained in the Traffic Impact Analysis (TIA) prepared for the proposed Alexan Foothills Specific Plan and the maximum potential development scenario under ZCA Areas A and C (see Draft EIR Chapter 19.0, Transportation and Circulation, and the TIA in Appendix J). In addition, default weekend trip generation rates were adjusted to maintain the same percent reduction for Saturday and Sunday trip rates shown in CalEEMod User's Guide Appendix D, Table 4.3. Finally, large trucks and buses were excluded from the fleet mix because the proposed residential project would not generate these types of trips. Owners and occupants of the project's residential units are expected to park in the on-site parking garage, which would have deck heights that preclude large truck and bus trips and the Project would provide no other parking amenities that would accommodate such vehicles. Accordingly, it is not reasonably foreseeable that operation of the Project would generate trips from heavy-heavy duty trucks, buses, or motor homes.
- Wood stoves and fireplaces: The use of wood stoves and fireplaces was prohibited according to SCAQMD Rule 445.
- Energy Use and Consumption: CalEEMod contains default energy efficiency values that are based on the 2016 energy code. To account for more efficient energy use that is anticipated to occur under the 2019 and subsequent energy codes, CalEEMod default assumptions regarding energy efficiency were adjusted as follows:
  - CalEEMod default energy efficiency values for residential land uses were adjusted downwards by a factor of 0.47 to reflect increased energy efficiency and solar photovoltaic requirements of the 2019 energy code (CEC 2018).
- Water: The default indoor and outdoor water use assumptions were replaced with project-specific water use estimates from the Water Supply Assessment prepared for the Project.
- Stationary Sources: One 50-horsepower diesel-fueled back-up generator and one 50-horsepower, diesel-fueled fire pump were presumed to be present on-site and operate a total of 18 hours per year.

The net change in long-term operational emissions that would be generated by buildout of the proposed Alexan Foothills Specific Plan is shown in Table 5-8 below.

Table 5-8: Operational Emissions Estimates for the Alexan Foothills Specific Plan						
Emission Scenario	Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Alexan Foothills Specific Plan Buildout Emissions(A)						
Area Sources	13.26	6.93	38.86	0.04	0.73	0.73
Energy Sources	0.17	1.48	0.63	0.01	0.12	0.12
Mobile Sources	3.84	7.33	54.65	0.18	16.9	4.59
Total Buildout Emissions(B)	17.27	15.73	94.14	0.23	17.75	5.43
Existing Alexan Foothills Specific Plan Area Emissions						
Total Existing Emissions(C)	3.38	7.40	22.09	0.06	4.58	1.35
Net Change in Emissions Levels						
Total Net Change	13.89	8.33	72.05	0.17	13.17	4.08
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix A)

(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. Maximum daily ROG, CO, SOX emissions occur during the summer. Maximum daily NOX emissions occur during the winter. In general, due to rounding, there is no difference between summer and winter PM_{10} and $PM_{2.5}$ emissions levels for the purposes of this table.

(B) Totals may not equal due to rounding. Stationary sources would add less than 0.000 pounds per day of emissions to the project's area, energy, and mobile source total.

(C) See Table 3-2.

As shown in Table 5-8, the maximum daily operational emissions associated with the proposed Alexan Foothills Specific Plan would not exceed the SCAQMD's recommended regional pollutant thresholds for all pollutants.

Standard Conditions

SC AIR-2: Natural Gas Fireplaces. All residential fireplaces installed shall be fueled by natural gas. Wood stoves and wood burning fireplaces shall be prohibited. (Consistent with General Plan EIR Mitigation Measure AIR-D).

Requirements and Timing: Standard condition shall be printed on construction drawings.

Monitoring: City Planning staff shall conduct site inspections during construction to confirm condition is adhered to.

ZCA Areas A and C

The potential redevelopment of ZCA Areas A and C would result in long-term emissions from area, energy, and mobile sources. The net change in emissions of regulated air pollutants that would occur with implementation of potential redevelopment of ZCA Areas A and C was modeled using CalEEMod, Version 2016.3.2. The operational emissions for ZCA Areas A and C were modeled based on a project's anticipated earliest partial year of operation (2022), using default data assumptions provided by CalEEMod, with the Project-specific modifications discussed above for the Alexan Foothills Specific Plan, substituted as follows:

- Trip Generation: The default weekday and weekend trip generation rates were used for the proposed land uses.

Table 5-9: Operational Emissions Estimates for ZCA Areas A and C

Emission Scenario	Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
GP/ZCA Buildout Emissions Levels(A)						
Area Sources	2.13	1.30	7.29	0.01	0.14	0.14
Energy Sources	0.03	0.28	0.12	0.01	0.02	0.02
Mobile Sources	0.90	1.71	12.78	0.04	3.95	1.07
Total Buildout Emissions(B)	3.05	3.29	20.19	0.05	4.10	1.23
Existing GP/ZCA Area Emissions Levels						
Total Existing Emissions(C)	2.17	2.32	9.03	0.03	1.74	0.71
Net Change in Emissions Levels						
Total Net Change	0.88	0.97	11.16	0.02	2.36	0.52
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix A).

(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. Maximum daily ROG, CO, SO_X, emissions occur during the summer. Maximum daily NO_X, PM_{10} and $PM_{2.5}$ emissions occur during the winter.

(B) Totals may not equal due to rounding.

(C) See Table 3-2.

As shown in Table 5-9, the maximum daily operational emissions associated with implementation of new development within ZCA Areas A and C would not exceed SCAQMD's regional pollutant thresholds. This effect would be less than significant.

Standard Conditions

Refer to standard condition SC AIR-2 above.

Combined Alexan Foothills Specific Plan and ZCA Areas A and C Emissions

The net change in long-term operational emissions that would be generated by the concurrent buildout of the Alexan Foothills Specific Plan and the remaining GP/ZCA area in the earliest partial year of operation for both projects (2022) is shown in Table 5-10.

Table 5-10: Long-Term Operational Emissions of Combined Buildout of Alexan Foothills Specific Plan & ZCA Areas A and C						
Emission Scenario	Maximum Daily Emissions (Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Total Emissions from Combined Buildout of Alexan Foothills Specific Plan and ZCA Areas A and C(A)						
Area Sources	15.39	8.23	46.15	0.05	0.87	0.87
Energy Sources	0.2	1.76	0.75	0.02	0.14	0.14
Mobile Sources	4.74	9.04	67.43	0.22	20.85	5.66
Total Buildout Emissions(B)	20.32	19.02	114.33	0.28	21.85	6.66
Total Existing Project Area (Alexan Foothills Specific Plan and ZCA Areas A and C) Emissions(C)						
Total Existing Emissions	5.55	9.72	31.12	0.09	6.32	2.06
Total Net Change in Emissions						
Total Net Change	14.77	9.3	83.21	0.19	15.53	4.6
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG 2019 (see Appendix A).

(A) Buildout emissions are from Table 5-8 and Table 5-9.
(B) Totals may not equal due to rounding.
(C) Existing emissions are from Table 3-2.

As shown in Table 5-10, the maximum daily emissions from the concurrent operation of the Alexan Foothills Specific Plan and ZCA Areas A and C would not exceed the SCAQMD's recommended regional pollutant thresholds. Therefore, implementation of the proposed Project would not generate operations-related emissions that exceed SCAQMD CEQA thresholds.

Standard Conditions

Refer to standard condition SC AIR-2 above.

5.3.3 Sensitive Receptors and Substantial Pollutant Concentrations

The proposed Project would generate both short-term construction emissions and long-term operational emissions that could impact sensitive residential receptors located near the Project; however, as described in more detail below, the proposed Project would not generate short-term or long-term emissions that exceed SCAQMD-recommended localized significance thresholds or result in other substantial pollutant concentrations.

Localized Significance Thresholds Analysis

Construction Emissions

Alexan Foothills Specific Plan Analysis

The Alexan Foothills Specific Plan's maximum daily construction emissions are compared against the SCAQMD's-recommended LSTs in Table 5-2. Consistent with the SCAQMD's LST methodology, the emissions included in the construction LST analysis are onsite emissions only, and the LST thresholds

against which these onsite emissions are compared are based on the Project size, in acres, as determined using the specific equipment list generated by the CalEEMod project file and the SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (SCAQMD 2016c)[5]. The LST thresholds are for SRA 9 (East San Gabriel Valley), the SRA in which the proposed Alexan Foothills Specific Plan is located, and are based on a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

The emissions presented in Table 5-11 incorporate certain best available control measures the Project would be subject to pursuant to SCAQMD Rule 403, Fugitive Dust. Specifically, the CalEEMod project file applies a 60% to 69% total reduction in PM_{10} and $PM_{2.5}$ fugitive dust emissions through site watering (three times daily) and replacement of ground cover. These estimated reductions are consistent with the reductions realized by implementation of the numerous best available control measures contained in SCAQMD Rule 403 (also shown as standard condition SC AIR-3).

Table 5-11: LST Construction Analysis for the Alexan Foothills Specific Plan

Construction Phase	Maximum Daily Emissions (Pounds per Day)(A)			
	NO_X	CO	PM_{10}(E)	$PM_{2.5}$(E)
Demolition				
Maximum Daily Onsite Emissions	33.2	21.8	2.1	1.6
SCAQMD LST Threshold (1.5-Acre)(B)	108.5	784.0	6.0	3.9
LST Threshold Exceeded?	No	No	No	No
Site Preparation				
Maximum Daily Emissions	53.1	22.0	7.4	4.9
SCAQMD LST Threshold (2.5-acre)(C)	147.5	1,057.4	8.3	5.1
LST Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Emissions	26.4	16.1	3.0	2.1
SCAQMD LST Threshold (1.0-Acre)(D)	89.0	623.0	5.0	3.0
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix A)

(A) Emissions presented are worst-case total emissions and may reflect summer or winter emissions levels.

(B) Demolition would involve the use of three rubber-tired dozers, which equals a 1.5-acre project site for LST purposes (3*0.5=1.5). Accordingly, a 1.5-acre LST threshold was developed using linear regression.

(C) Site Preparation would involve the use of two crawler-tractors and three rubber-tired dozers, which equals a 2.5-acre project site for LST purposes (5*0.5=2.5). Accordingly, a 2.5-acre LST threshold was developed using linear regression.

(D) Grading would involve the use of one grader and one rubber-tired dozer, which equals a 1.0-acre project site for LST purposes (1*0.5)+(1*0.5)=1. Accordingly, a 1 -acre LST threshold was used in this evaluation.

(E) PM emissions assume compliance with SCAQMD Rule 403 best available control measures for site watering and replacing ground cover.

[5] According to the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, the maximum number of acres disturbed on the peak day of use per crawler tractor, grader, and rubber tired dozer is 0.5 acres per 8 hour day, while the maximum number of acres disturbed on the peak day of use per scraper is 1 acre per 8 hour day.

As shown in Table 5-11, the maximum daily onsite emissions generated during demolition, site preparation, and grading activities associated with the Alexan Foothills Specific Plan would not exceed the SCAQMD's recommended LST thresholds. The onsite emissions levels during all other construction phases (building construction, paving, architectural coating) would be less than the values presented in Table 5-11, and below the SCAQMD's LST thresholds for a one-acre site (a conservative comparison since the Project area is larger than one acre in size).

Standard Conditions

SC AIR-3: Comply with South Coast Air Quality Management District Rule 403, Fugitive Dust, by incorporating best available control measures during construction.

Requirements and Timing: Standard condition shall be printed on construction drawings and included as a requirement in the construction contract.

Monitoring: City Planning staff shall conduct site inspections during construction to ensure that the standard condition is adhered to.

ZCA Areas A and C

The potential maximum daily construction emissions for ZCA Areas A and C are compared against the SCAQMD's-recommended LSTs in Table 5-12. Consistent with the SCAQMD's LST methodology, the emissions included in the construction LST analysis are onsite emissions only, and the LST thresholds against which these onsite emissions are compared are based on the Project size, in acres, as determined using the specific equipment list generated by the CalEEMod project file and the SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. The LST thresholds are for SRA 9 (East San Gabriel Valley), the SRA in which the GP/ZCA is located, and are based on a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

The emissions presented in Table 5-12 incorporate certain best available control measures the Project would be subject to pursuant to SCAQMD Rule 403, Fugitive Dust. Specifically, the CalEEMod project file applies an approximate 69% total reduction in PM_{10} and $PM_{2.5}$ fugitive dust emissions through site watering (once daily). These estimated reductions are consistent with the reductions that would result from the implementation of the best available control measures required by SCAQMD Rule 403 (see standard condition SC AIR-3).

As shown in Table 5-12, the maximum daily onsite emissions generated during demolition, site preparation, and grading activities associated with ZCA Areas A and C would not exceed the SCAQMD's recommended LST thresholds. The onsite emissions levels during all other construction phases (building construction, paving, architectural coating) would be less than the values presented in Table 5-13, and below the SCAQMD's LST thresholds for a one-acre site (a conservative comparison since the Project area would be larger than one acre in size).

Standard Conditions

Refer to SC AIR-3.

Table 5-12: LST Construction Analysis for ZCA Areas A and C				
Construction Phase	Maximum Daily Emissions (Pounds Per Day)(A)			
	NO_X	CO	PM_{10}(E)	$PM_{2.5}$(E)
Demolition				
Maximum Daily Emissions	19.7	14.5	1.7	1.1
SCAQMD LST Threshold (1.0-Acre)(B)	89.0	623.0	5.0	3.0
Threshold Exceeded?	No	No	No	No
Site Preparation				
Maximum Daily Emissions	18.3	10.8	1.4	0.7
SCAQMD LST Threshold (1.5-Acre)(C)	108.5	784.0	6.0	3.9
Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Emissions	20.2	9.8	3.9	2.4
SCAQMD LST Threshold (1.0-Acre)(D)	89.0	623.0	5.0	3.0
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix A).

(A) Emissions presented are worst-case total emissions and may reflect summer or winter emissions levels.

(B) Demolition would involve the use of one rubber-tired dozer, which equals a 1.0-acre project site for LST purposes (the minimum size recommended by the SCAQMD).

(C) Site Preparation would involve the use of one scraper and one grader, which equals a 1.5-acre project site for LST purposes (1*1)+(1*0.5)=1.5. Accordingly, a 1.5-acre LST threshold was developed using linear regression.

(D) Grading would involve the use of one grader and one rubber-tired dozer, which equals a 1.0-acre project site for LST purposes (1*0.5)+(1*0.5)=1.0. Accordingly, a 1.0-acre LST threshold was used in the grading LST analysis.

(E) PM emissions assume compliance with SCAQMD Rule 403 best available control measures for site watering and replacing ground cover.

Combined Alexan Foothills Specific Plan and ZCA Areas A and C Emissions

The Alexan Foothills Specific Plan would be constructed over a 30-month period beginning in 2020. The Specific Plan's building construction phase in 2021 and 2022 could overlap with the potential demolition, site preparation, and grading phases associated with potential redevelopment within the GP/ZCA. It is not anticipated that overlapping construction would occur prior to 2021 because there is no current specific project proposed for ZCA Areas A and C. The Specific Plan's building construction phase would add 1.0 and 0.9 pounds per day of total PM_{10} and $PM_{2.5}$, respectively, to the onsite emission estimates presented in Table 5-13 for ZCA Areas A and C. The combined emissions from buildout of the Alexan Foothills Specific Plan and ZCA Areas A and C would not exceed the 1.5-acre LST threshold listed in Table 5-12 (a conservative comparison since actual construction activities would be spread out over the approximately 9.63-acre Project area during this combined construction activity period). Therefore, combined construction emissions during the Alexan Foothills Specific Plan building construction and ZCA Areas A and C grading phases are considered less than significant. The combined emissions during all other potential combined construction phase in 2021 and 2022 would not exceed an applicable LST threshold.

Operational Emissions

Alexan Foothills Specific Plan Analysis

The Alexan Foothills Specific Plan's maximum daily operational emissions are compared against the SCAQMD's-recommended LSTs in Table 5-13. Consistent with the SCAQMD's LST methodology, the emissions included in the operational LST analysis are onsite emissions only, and the LST thresholds against which these onsite emissions are compared are based on the Project size, in acres. The LST thresholds are for SRA 9 (East San Gabriel Valley), the SRA in which the Alexan Foothills Specific Plan is located and are based on a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

Table 5-13: LST Operational Analysis for the Alexan Foothills Specific Plan

Emissions	Maximum Onsite Pollutant Emissions (Pounds Per Day)(A)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources	6.9	38.9	0.7	0.7
Energy Sources	1.5	0.6	0.1	0.1
Mobile Sources(B)	0.1	1.1	0.3	0.1
Stationary Sources	<0.0(C)	0.0	0.0	0.0
Subtotal Emissions(D)	8.6	40.6	1.2	0.9
SCAQMD LST Threshold(E)	203	1,733	4	2
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix A).

(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.

(B) Mobile source emissions estimates reflect potential onsite vehicle emissions only and were derived by assuming 2% of operational mobile source emissions in Table 5-8 will occur onsite.

(C) "<0.00" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.05 but larger than 0.

(D) Totals may not equal due to rounding.

(E) LST threshold is conservatively based on a 5.0-acre project size and 25-meter (82-foot) receptor distance.

As shown in Table 5-13, the maximum daily onsite emissions generated during operation of the proposed Alexan Foothills Specific Plan would not exceed the SCAQMD's recommended LST thresholds.

Standard Conditions

Refer to standard condition SC AIR-2 above.

ZCA Areas A and C

The maximum daily operational emissions for ZCA Areas A and C are compared against the SCAQMD's-recommended LSTs in Table 5-14. Consistent with the SCAQMD's LST methodology, the emissions included in the operational LST analysis are onsite emissions only, and the LST thresholds against which these onsite emissions are compared are based on the Project size, in acres. The LST thresholds are for SRA 9 (East San Gabriel Valley), the SRA in which ZCA Areas A and C are located, and are based on a

receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

Table 5-14: LST Operational Analysis for ZCA Areas A and C				
Emissions	Maximum Onsite Pollutant Emissions (Pounds Per Day)(A)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources	1.3	7.3	0.1	0.1
Energy Sources	0.3	0.1	0.0	0.0
Mobile Sources(B)	0.0	0.3	0.1	0.0
Stationary Sources	<0.0(C)	<0.0	<0.0	<0.0
Subtotal Emissions(D)	1.6	7.7	0.2	0.2
SCAQMD LST Threshold(E)	203	1,733	4	2
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix A).
(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.
(B) Mobile source emissions estimates reflect potential onsite vehicle emissions only; and were derived by assuming 2% of operational mobile source emissions in Table 5-9 will occur onsite.
(C) "<0.0" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.05 but larger than 0.
(D) Totals may not equal due to rounding.
(E) LST threshold is conservatively based on a 5.0-acre project size and 25-meter (82-foot) receptor distance.

Combined Alexan Foothills Specific Plan and ZCA Areas A and C Emissions

The total combined maximum daily onsite operational emissions resulting from concurrent operation of the Alexan Foothills Specific Plan and ZCA Areas A and C are compared against the SCAQMD's-recommended LSTs in Table 5-15. The LST thresholds are for a five-acre project site (a conservative assumption since the Project area is greater than five acres in size), SRA 9 (East San Gabriel Valley, the SRA in which the Project area is located), and a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

Table 5-15: Combined LST Operational Analysis for the Alexan Foothills Specific Plan and ZCA Areas A and C				
Total Combined Emissions	Maximum Pollutant Emissions (Pounds Per Day)(A)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources	8.2	46.2	0.9	0.9
Energy Sources	1.8	0.8	0.1	0.1
Mobile Sources	0.2	1.3	0.4	0.1
Stationary Sources	<0.0(B)	<0.0	<0.0	<0.0
Subtotal Emissions(C)	10.2	48.2	1.4	1.1
SCAQMD LST Threshold (5.0-Acre)(D)	203	1,733	4	2
Threshold Exceeded?	No	No	No	No

Source: MIG 2019 (see Appendix A).
(A) Onsite emissions are from Table 5-13 and 5-14 (GP/ZCA).
(B) "<0.0" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.05 but larger than 0.
(C) Totals may not equal due to rounding.
(D) LST threshold is conservatively based on a 5.0-acre project size and 25-meter (82-foot) receptor distance.

As shown in Table 5-15, the total combined emissions from onsite operational activities associated with the Alexan Foothills Specific Plan and ZCA Areas A and C would not exceed the SCAQMD's recommended LST thresholds for a five-acre project.

Carbon Monoxide Hot Spots

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near high volume intersections. Several screening procedures have been developed by air districts throughout the state to assess whether a project may result in a CO impact. For example, the Bay Area Air Quality Management District (BAAQMD) developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis (BAAQMD, 2017 pg. 3-4). Additionally, the SCAQMD's 2003 AQMP and *1992 Federal Attainment Plan for Carbon Monoxide* demonstrated that CO levels were below the CAAQS at an intersection with a daily traffic volume of up to approximately 100,000 vehicles per day. According to the City's General Plan Circulation and Noise Elements, there are no roadways in the City that experience hourly volumes close to 44,000 vehicles or more or daily volumes of 100,000 vehicles or more. Based on the TIA prepared for the Project (LSA 2018), the maximum number of vehicles moving through any study intersection would be substantially below the screening threshold of 44,000 vehicles per hour for a CO hotspot analysis, and would not cause intersection volumes to exceed any the daily threshold (100,000 vehicles). Therefore, the Project would not cause or significantly contribute to CO concentrations that exceed State or Federal ambient air quality standards for CO.

Fugitive Dust and DPM Emissions

The proposed Project would have the potential to expose existing sensitive receptors present within and near the Project area to fugitive dust and DPM during construction and operation. Construction activities associated with the Project would have the potential to generate fugitive dust and emissions of DPM, a TAC, which could impact sensitive air quality receptors. Operation of the project would generate vehicle DPM emissions in the area, also having the potential to impact sensitive receptors.

In addition, portions of the Project area range from 80 feet to 600 feet south of the I-210, an existing local source of DPM emissions[6]. Buildout of the Alexan Foothills Specific Plan would result in the placement of new sensitive residential receptors within 500 feet of the I-210, and future buildout of the remaining GP/ZCA area would have the potential to place new sensitive residential receptors within 500 feet of the I-210 as well. Pursuant to the California Supreme Court's decision in *CBIA v. BAAQMD* (see Section 2.3.2), the following analysis evaluates whether the Proposed Project would exacerbate the existing health risks associated with I-210 vehicle emissions.

According to the SCAQMD's MATES IV Carcinogenic Risk Map, the existing cancer risk on either side of the I-210 in the vicinity of the Project (south and north of I-210) is 1,456 and 1,142, respectively (i.e.,

[6] Gasoline and diesel-fueled vehicles travelling on the I-210 would emit other TACs besides DPM; however, these other TACs would be emitted in much lower quantities than DPM. In addition, the SCAQMD's MATES IV study continues to identify DPM as the primary contributor to mobile source risks estimates. Accordingly, this Report focuses on the risk from DPM emitted by vehicles travelling on the I-210 as an overall indicator of potential adverse health risks from mobile sources operating near the site.

there is a probability of 1,456 and 1,142 cases of cancer out of a population of one million) (SCAQMD 2018a). These cancer risks are orders of magnitude higher than the SCAQMD's significance threshold of 10 cases in one million for cancer risk. These estimates, however, are based upon regional modeling efforts that largely do not account for site specific emission rates and dispersion characteristics that typically result in refined and substantially lower health risk estimates. Therefore, potential health risks associated with vehicle emissions along the I-210 in the Project vicinity were calculated (see below).

CalEnviroScreen is another mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. The tool uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. The scores are then mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores. According to the OEHHA CalEnviroScreen 3.0 Map, the Project area is in census tract 6037430902 and has an average pollution indicator percentile of 60% to 65% based on the CalEnviroScreen indicators (e.g., exposure, environmental effects, population characteristics, socioeconomic factors) (OEHHA 2018). These numbers also indicate relatively high health risks in the Project area, likely attributable to the proximity to the I-210.

Consistent with the City's 2008 Monrovia General Plan Proposed Land Use and Circulation Elements Update EIR and to determine if the Project would exacerbate health risks associated with DPM emissions in the area, a Health Risk Assessment (HRA) was conducted to evaluate the potential health hazards to new residential receptors in the Project area from the I-210, as well as to children. Emission factor calculations, dispersion model inputs, outputs, and HRA calculations are all contained in the report in Appendix B and Appendix C.

Construction Fugitive Dust and DPM Emissions

Construction activities associated with the proposed Project would result in demolition, site preparation, grading, and other activities that would generate fugitive dust; however, as shown under above, the total PM_{10} and $PM_{2.5}$ emissions generated during construction of the Project would be below SCAQMD LST thresholds. The SCAQMD's LST thresholds represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State AAQS. Thus, since Project construction emissions would not exceed applicable LST thresholds, the proposed Project would not expose sensitive receptors to substantial fugitive dust concentrations.

A portion of the PM_{10} and $PM_{2.5}$ emissions generated during construction of the Alexan Foothills Specific Plan (Table 5-11) and ZCA Areas A and C (Table 5-12) would be DPM. DPM is a TAC that can potentially cause substantial adverse health risks at concentrations lower than the ambient air quality standards for PM_{10} and $PM_{2.5}$ set by the Federal and State CAA. Equipment with diesel engines would be used during all phases of development of the proposed Alexan Foothills Specific Plan and ZCA Areas A and C, and some construction activities would occur as close as approximately 60 feet away from sensitive receptor locations (e.g., receptors across Mayflower Avenue, S. Magnolia Avenue, and the Metro Gold Line ROW), although most construction activities on the interior of the Alexan Foothills Specific Plan and ZCA Areas A and C would occur several hundred feet or more from sensitive receptor locations.

Furthermore, implementation of idling restrictions under mitigation measure MM AIR-1 would minimize DPM emissions from construction equipment. Second, as shown in Figure 5-1, the prevailing daytime wind direction is from the west/southwest at the nearest meteorological station maintained by the SCAQMD in Azusa (less than five miles east of the Project area). Wind conditions at this location are

considered representative of wind conditions in the Project area, meaning that DPM emissions generated by construction equipment would generally be pushed to the east/northeast, away from the closest sensitive residential receptors, and pollutants would quickly disperse over distance. Finally, potential long-term adverse health risks from DPM are evaluated assuming a constant exposure to emissions over a 70-year lifetime, 24 hours a day, seven days a week, with increased risks generally associated with increased proximity to emissions sources. Since construction activities would only generate DPM emissions on an interim, short-term basis, DPM emissions from construction activities would be unlikely to result in adverse health effects to existing sensitive receptors that exceed the SCAQMD's significance criteria[7]. Therefore, construction activities associated with buildout of the Project would not expose nearby sensitive receptors to substantial levels of DPM that would pose a significant adverse health risk.

Operational – Health Risks Related to Exposure from I-210 Emissions

Once operational, the proposed Project would result in the placement of new sensitive residential receptors within 500 feet of the I-210, a local source of DPM emissions[8]. An HRA was performed to determine the health risk associated with operation of the Project consistent with the guidance and recommendations contained in the SCAQMD's CEQA *Air Quality Handbook*, as amended and supplemented (SCAQMD 2019a), SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions* (SCAQMD 2003c), and OEHHA's *Air Toxics Hot Spots Program Guidance Manual* (OEHHA 2015).

The U.S. EPA's AERMOD dispersion model was used to predict pollutant concentrations from the I-210 at the proposed Project boundary along West Evergreen Avenue. The AERMOD dispersion model is a U.S. EPA-approved and SCAQMD-recommended model for simulating the dispersion of pollutant emissions and estimating ground level concentrations of pollutants at specified receptor locations. AERMOD requires the user to input information on the source(s) of pollutants being modeled, the receptors where pollutant concentrations are modeled, and the meteorology, terrain, and other factors that affect the potential dispersion of pollutants. These variables are described below.

Modeled I-210 Sources/Emission Rates. Emissions from the I-210 were modeled as a polygon-area source as shown in Table 5-16. The area source representing the freeway was extended 1,000 feet to the northwest and east of the Project area boundary to capture emissions emanating from the I-210 both adjacent and in close proximity to the Project area. The total length of the I-210 modeled was approximately 3,350 feet, or 0.63 miles, as shown in Table 5-16.

[7] The SCAQMD has established the following thresholds of significance for TAC emissions: Maximum Incremental Cancer Risk ≥ 10 in 1 million; Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million); Chronic & Acute Hazard Index ≥ 1.0 (project increment).

[8] Gasoline and diesel-fueled vehicles travelling on the I-210 would emit other TACs besides DPM; however, these other TACs would be emitted in much lower quantities than DPM. In addition, the SCAQMD's Mates IV study continues to identify DPM as the primary contributor to mobile source risks estimates (see Section 2.1.8, "Sensitive Air Quality Receptors and Existing Regional Health Risks"). Accordingly, this anlaysis focuses on the risk from DPM emitted by vehicles travelling on the I-210 as an overall indicator of potential adverse health risks from mobile sources operating near the site.

Table 5-16: AERMOD Source Parameters				
ID	Description	UTM Coordinates(A)		Size (m^2)
		X	Y	
PAREA1	I-210 (Eastbound and Westbound)	406639.35	3777858.98	51185.1

Source: MIG 2019 (See Appendix B)

(A) UTM coordinates represent the northwest corner of the source.

Consistent with SCAQMD recommendations, PM_{10} exhaust from diesel vehicles travelling along I-210 was evaluated in the HRA. The emission rate for the segment of I-210 modeled in the operational HRA was derived from diesel vehicle emission factors and vehicle population data contained in CARB's EMFAC model and annual average daily traffic volume data available from Caltrans. Using EMFAC data (for the Los Angeles South Coast Sub-Area), an average diesel emission factor, in terms of grams per mile, was developed for each vehicle class, based on a speed of 65 miles per hour. Then the population percentage for each vehicle class was multiplied by the annual average daily trips (AADT) for the segment of I-210 adjacent to the Project area, between Huntington Drive and South Myrtle Avenue (252,000 vehicles), to determine the total amount of diesel vehicles traveling adjacent to the Project area. This diesel vehicle estimate was then multiplied by the total segment length (0.63 miles) to determine the total miles travelled by each vehicle class. The total miles travelled were then multiplied by the average emission factor to determine total diesel vehicle emissions emitted from the modeled portion of I-210. Table 5-17 summarizes the average emission factors, vehicle class population percentage, vehicle miles traveled, and total diesel emissions occurring within the modeled source.

Table 5-17: AERMOD Source Emissions Rate Information					
Vehicle Class	Emission Factor at 65 MPH (grams per mile)(A)	Vehicle Population(B)	Vehicle Miles Traveled(C)	Total Daily PM_{10} Emissions (Grams)(D)	Total Daily PM_{10} (Grams Per Second)(E)
LDA	0.001611306	0.49%	776	1.2509421	1.44785E-05
LDT1	0.028116599	0.00%	5	0.1499634	1.73569E-06
LDT2	0.003345548	0.13%	206	0.6903391	7.99004E-06
LHDT1	0.006014986	0.91%	1,453	8.7415092	0.000101175
LHDT2	0.010734683	0.37%	589	6.3226286	7.31786E-05
HHDT	0.033787693	0.76%	1,217	41.133135	0.000476078
MDV	0.001345391	0.28%	450	0.6054664	7.00771E-06
MH	0.038410995	0.08%	130	5.0052745	5.79314E-05
MHDT	0.015244088	0.85%	1,363	20.783071	0.000240545
OBUS	0.023503175	0.04%	65	1.5253977	1.76551E-05
SBUS	0.018215134	0.05%	74	1.3460165	1.55789E-05
UBUS	0.003787529	0.00%	0	0.0008114	9.39173E-09
Total	--	3.96%	6,330	65.888827	7.62602E-04

Source: EMFAC2017 and Caltrans 2016

(A) Emission factors represent the average emission factor for the vehicle class over the 2023 to 2050 time period. Emission factors are reported for a speed of 65 miles per hour.

(B) Population percentage reflects the proportion of each vehicle class out of the total amount of vehicles in the Los Angeles (South Coast) sub-area.

(C) Vehicle miles travelled is estimated by multiplying the vehicle population percentage times 252,000 (the ADT on I-210), times the modeled segment length (0.63 miles).

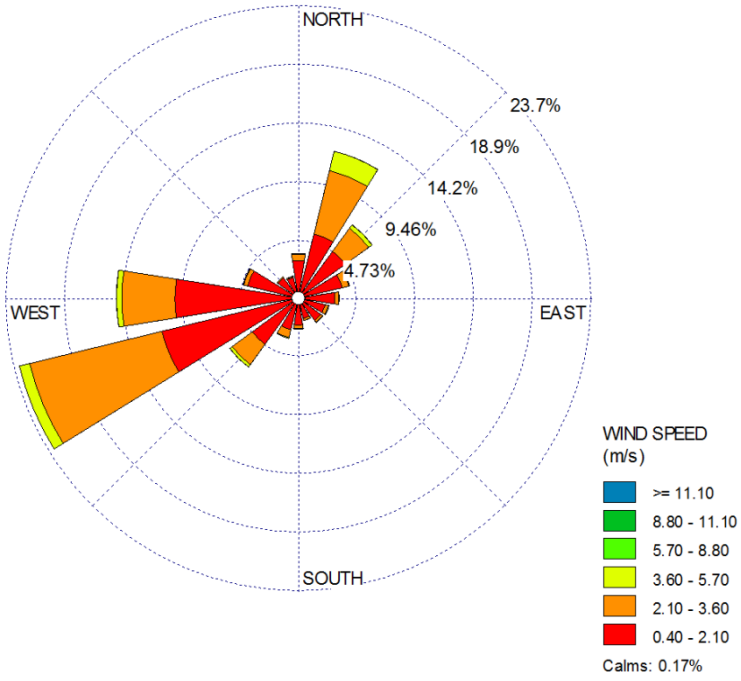
(D) Total daily emissions is estimated by multiplying the vehicle miles travelled by the average emission factor.

(E) Grams per second is derived based on 86,400 seconds per day.

The release height for the modeled source was set to 3.28 meters to approximate an average of height of all vehicle exhaust sources.

Meteorological Data Inputs. AERMOD requires meteorological data as an input into the model. The meteorological data is processed using AERMET, a pre-processor to AERMOD. AERMET requires surface meteorological data, upper air meteorological data, and surface parameter data such as albedo (reflectivity) and surface roughness. For the proposed Project, pre-processed surface data from the SCAQMD was obtained for the Azusa meteorological station. The wind rose for the Azusa meteorological station data is shown above in Figure 5-1.

Figure 5-1 Wind Rose for Azusa Meteorological Station (Blowing From)



Source: SCAQMD 2018b

Terrain Inputs. Terrain was incorporated by using AERMAP (an AERMOD pre-processer) to import the elevation of the Project site using data from the National Elevation Dataset with a resolution of 1/3 arcsecond.

Modeled Receptors. Emissions were modeled in a single-tier fenceline grid. The single tier consisted of 5-meter spacing from the fenceline for a distance of 25 meters. Primary and intermediate (spaced every 5 meters) were also modeled. The receptor grids were then converted to discrete Cartesian receptors (1,529 in total). Receptors were modeled at heights of 0.0 and 10 meters and (33 feet) above the ground.

Cancer Risk. Cancer risk is the calculated, pollutant-specific estimated probability of developing cancer based upon the dose and exposure to the TAC. Cancer risk is determined by calculating the combinatory effects of a cancer potency factor (CPF) when inhaling the toxic, the daily inhalation dose, the age group the receptor is cohort to, the duration of exposure over a lifetime (70 years), and other factors such as age sensitivity and the amount of time spent at the location of exposure.

For the proposed Project, risks were assessed for the inhalation pathway (i.e., breathing) for both residential and worker receptors. Additionally, residential receptors were assessed under a 70-year exposure duration to further detail potential risk to those under lifetime exposure. Cancer risk equations for residential receptors is summarized in Table 5-18 and Table 5-19.

Table 5-18: Cancer Risk Equations

Equation 1 - Residential Risk: $$RISK_{INH.RES} = DOSE_{AIR.RES} \times CPF \times ASF \times \frac{ED}{AT} \times FAH$$

Where:

$DOSE_{AIR}$ =	Daily Inhalation Dose (mg/kg-day). See Table 5-19
CPF =	Cancer Potency Factor for Inhalants (mg/kg-day). CPF is expressed as the 95th percent upper confidence limit of the slope of the dose response curve under continuous lifetime exposure conditions. The CPF for diesel exhaust is 1.1 mg/kg-day.
ASF =	Age Sensitivity Factor. ASF is a protective coefficient intended to take into account increased susceptibility to long-term health effects from early-life exposure to TACs. The recommended ASFs are 10 for the third-trimester to birth and two-year age bins, three for the two-year to nine-year and 16-year age bins, and one for receptors over 16 years of age.
ED =	Exposure Duration (years). Exposure duration characterizes the length of residency (30 Years) of the receptor.
AT =	Averaging Time (years). A 70-year (lifetime) averaging time is used to characterize to total risk as a factor of average risk over a typical lifespan.
FAH =	Fraction at Home. FAH is the percentage of time the receptor is physically at the receptor location. The recommended percentages are 85 percent for the third-trimester to birth and two-year age bins, 72 percent for the two-year to nine-year and 16-year age bins, and 73 for receptors over 16 years of age.

Table 5-19: Inhalation Dose Equations

Residential Dose $$DOSE_{AIR.RES} = C_{AIr} \times \frac{BR}{BW} \times A \times EF \times 10^{-6}$$

Where:

C_{AIR} =	Concentration of TAC in air (µg/m^3). Concentration of toxic in micrograms per one cubic meter of air. The AERMOD program is used in the study to determine concentrations of diesel particulate matter at surrounding discrete and grid receptor points.
BR/BW =	Breathing Rate ÷ Body Weight (L/kg/day). Daily breathing rate normalized to body weight. The 95th percentile breathing rate to body weight ratios are used in this study with a recommended 361 L/kg/day for the third-trimester to birth age bin, 1,090 L/kg/day for the birth to two-years age bin, 861 L/kg/day for the two-years to nine-years age bin, 745 for the two-years to 16-years age bin, 335 L/kg/day for the 16-years to 30-years age bin, and 290 L/kg/day for the 16-years to 70-years age bin.
A =	Inhalation Absorption Factor. Is a coefficient that reflects the fraction of chemical absorbed in studies used in the development of CPF and Reference Exposure Levels (RELs). An absorption factor of one is recommended for all chemicals.
EF =	Exposure Frequency. EF is the ratio of days in a year that a receptor is receiving the dose. The recommended EF is 0.96 characterizing an assumed 350 days a year that a residential receptor is home for some portion of the day.

Maximally Exposed Individual Resident. Cancer risk was assessed for the maximally exposed individual resident (MEIR) in the Project area over a 30-year exposure duration (which characterizes the maximum residency tendency in California). The Point of Maximum Impact (PMI) was also determined. The

MEIR is the location of the resident expected to have the highest exposure to TACs. The PMI corresponds to the location where the highest concentration of TACs is expected. Residential risk calculations account for presumed sensitivity to carcinogens and differences in intake rates for the third-trimester to birth, birth to two-years, two-years to nine-years, two-years to 16-years, 16-years to 30-years, and 16-years to 70 years age bins. Concentrations were modeled using AERMOD and then input into CARB's Hot Spots Analysis and Reporting Program (HARP) Health Risk Assessment Standalone Tool (RAST) to calculate cancer risk based on the methods and recommendations found in the OEHHA HRA Guidelines. The RAST intake rate percentile was set to the 95th percentile and the fraction of time at home factor was applied to age bins less than 16 years. The resulting annual average DPM concentration and corresponding excess cancer risk at the MEIR are summarized in Table 5-19. For this analysis, two MEIRs were identified: the MEIR in the Alexan Foothills Specific Plan area only and the MEIR in ZCA Areas A and C. The PMI is located off-site, adjacent to West Evergreen Avenue in an area that would not be occupied by residential receptors; cancer risks at this location, therefore, were not estimated.

Modeling Results. The results of the modeling indicate that, in general, DPM concentrations are higher on the northern and western side of the Project area. This is due to the proximity of the northern Project boundary to the I-210. In general, the estimated cancer risks along the northern Project area boundary range from 21.1 to 25.7, while risks along the southern Project area boundary range from 7.5 to 10.2 (see Appendix C for more details). The MEIR for the Alexan Foothills Specific Plan area is located near the center of the Project area, while the MEIR for ZCA Areas A and C is located near the corner of West Evergreen Avenue and Mayflower Avenue. Table 5-20 summarizes the location, annual average concentration, and calculated excess cancer risk at the modeled MEIR locations.

Table 5-20: Estimated Cancer Risk at PMI, MEIR, and MEIR (Uncontrolled I-210 DPM Emissions)

Receptor	UTM Location		Annual Average DPM Concentration ($\mu g/m^3$)	Excess Cancer Risk (per million population)	Threshold Exceeded?
	Easting	Northing			
PMI[(A)]	406946.81	3777692.37	0.07087	--	--
MEIR (in Alexan Foothills Specific Plan area)	407063.01	3777615.42	0.03481	23.7	Yes
MEIR (in ZCA Areas A and C)	406932.28	3777671.45	0.03768	25.7	Yes

Source: MIG 2019

The PMI is located in a public roadway and is not an occupied nor a potential receptor location. Therefore, cancer risk was not calculated

As shown in Table 5-20, site-specific cancer risks are much lower than CARB's MATES IV results, but uncontrolled DPM emissions would generate cancer risks in the Project area that are above the SCAQMD recommended cancer risk thresholds (10 cases of cancer per a population of one million) by a factor of approximately 2.5 as a worst case. This would occur along the northern portion of the Project area. Potential risks in the southern portion of the Project area, however, would be much lower (by approximately one-half or more) and either below or only slightly above the thresholds (10.2 cases in one million). Parts of

the Alexan Foothills Specific Plan in the southeast corner of the Project area would also be exposed to risks that are below the SCAQMD cancer risk threshold. Without control of DPM emissions, therefore, vehicle emissions from the I-210 have an adverse impact on sensitive receptors in the Project area, and the addition of DPM emissions to the area from project vehicle trips could exacerbate this condition. It is important to note, however, that the above estimates are conservative and are likely to overestimate potential risks for the following reasons:

1. The lifetime exposure for a sensitive receptor was assumed to begin in the 3rd trimester (i.e., in the womb) in the Project area and it was assumed that sensitive receptors would then continue to be exposed through the infant stage and into early childhood. Risks to adult receptors (receptors older than 16 at the time of initial exposure) would be much lower (approximately 80% lower and less than the SCAQMD carcinogenic risk threshold).
2. The HRA estimates are based on near continuous exterior exposure at property line locations. Concentrations within the interior of the property where receptors would actually be located would be lower.
3. Because the project is an infill, transit-oriented development, it would result in an overall reduction of vehicle miles traveled by residents and workers in the City of Monrovia, thereby reducing overall traffic in the City and along the I-210. This is one of CARB's strategies for reducing air pollution exposure near high-volume roadways (CARB 2017a).
4. The HRA does not take into account any reductions in PM that would be achieved by mechanically supplied air systems. Specifically, the 2019 amendments made to the California Building Standards Code, set to go into effect on January 1, 2020, would require high-rise[9] multifamily dwellings within 500 feet of busy roadways (more than 100,000 ADT) to use HVAC systems and filters with a Minimum Efficiency Rating Value (MERV) of 13. MERV-13 filters can remove up to 90% of particles less than 10 microns in size, which would result in a corresponding reduction in exposure to PM_{10} and associated adverse health risks by 90%. While the California Building Standards code would require these HVAC systems to be appropriately designed and sized for individual dwelling units, the long-term air quality benefit and risk reduction realized by these enhanced filtration systems would be dependent in part, on individual owners and occupants of each dwelling unit (due to system maintenance and filter replacement requirements). Nonetheless, less efficient filters, such as a MERV-8, can remove up to 70% of particles less than 10 microns in size, which would result in a corresponding reduction in exposure to PM_{10} and associated adverse health risks by 70%. A 70% reduction in modeled PM concentrations (i.e., indoor air quality levels) would reduce risks to levels below the SCAQMD threshold.

For the reasons outlined above, it is reasonable to assume that installation of HVAC systems with MERV-8 or MERV-13 filters in the Project area would reduce cancer risk to below SCAQMD significance thresholds. For full effectiveness, the HVAC system must be in operation at all times while residents are

[9] A high-rise building is defined by the California Building Code as any building used for human occupancy greater than 55 feet above the lowest level of Fire Department vehicle access. For the purposes of compliance with prescriptive indoor air quality requirements, the building energy efficiency standards consider a high rise residential building to be any building with four or more habitable stories.

inside their unit and must be properly maintained. In addition, HVAC systems may not be a California Building Code requirement for all new structures in the Project area. Therefore, effects would be significant without additional mitigation. Therefore, to ensure indoor air quality concentrations remain at or are lower than the estimates presented in Table 5-20 for all residents in the Project area, mitigation measure MM AIR-2 requires installation of HVAC systems in all new residential buildings with a MERV of 13 and would ensure that all HVAC systems are maintained on a regular basis and that filters are replaced as required to ensure their effectiveness. With implementation of this mitigation measure, buildout under the Project would not exacerbate cancer risk associated with DPM emissions, including from the I-210.

Mitigation Measures

MM AIR-2: For all new residential units in the Project area, the developer shall install, and owner maintain, HVAC systems with air filters meeting or exceeding the most current California Building Standards Code requirement for an ASHRAE Standard 52.2 Minimum Efficiency Rating Value (MERV) of 13 (a Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size). Air filters shall be replaced at a minimum of two times per year, or more, as needed, by the owner.

Requirements and Timing: This measure shall be printed on construction drawings and included as a requirement of the construction contract for new residential buildings. This measure shall also be recorded in a Notice to Property Owner for the Alexan Specific Plan units and for each new residential property within the Project area.

Monitoring: City Planning staff shall confirm that HVAC units and MERV-13 filters (or better) are installed in accordance with this measure prior to final sign off on construction for all new residential units. City Planning staff shall also review and approve of the Notice to Property Owner language and ensure recordation prior to final sign-off on construction of new residential units in the Project area.

Population-Wide Cancer Burden. Cancer burden is the product of public cancer risk and the population exposed to the carcinogen. The population of the Alexan Foothills Specific Plan and the remaining GP/ZCA area is conservatively estimated to be 1,169 people (see Table 5-3). Using the higher of the two MEIRs identified in Table 5-20, the average cancer risk based on the lifetime exposure scenario (70 years) is 3.02E-05 (approximately 30 cases per million people). The product of cancer risk and the estimated population is 0.036 and is below the SCAQMD threshold of 0.5 excess cancer cases in the Project population.

Non-Cancer Risks. The chronic non-cancer hazard quotient is the calculated pollutant-specific indicator for risk of developing an adverse health effect on specific organ system(s) targeted by the identified TAC, in this case, DPM. The potential for exposure to result in chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration to the chemical-specific, non-cancer chronic reference exposure levels (RELs). The REL is a concentration below which there is assumed to be no observable adverse health impact to a target organ system. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient. The annual average air concentration is divided by the REL to calculate a hazard quotient. To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the hazard quotients for all chemicals are summed, yielding a hazard index. The chronic REL for DPM was established by OEHHA as 5 µg/m^3. There is no acute REL for DPM. Chronic non-cancer risks are considered significant if a project's TAC emissions result in a hazard index greater than or equal to one. Non-cancer risk equations are summarized in Table 5-21.

Table 5-21: Non-Cancer Risk Equation	
Chronic Hazard Quotient:	$HI_{DPM} = \frac{C_{DPM}}{REL_{AAC}}$
Where:	
HI_{DPM} =	Hazard Index; an expression of the potential for non-cancer health effects.
C_{DPM} =	Annual average DPM concentration (µg/m^3).
REL_{DPM} =	Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

Existing sensitive receptors are exposed to air pollution associated with motor vehicles travelling on the I-210, located adjacent to the Project area. As shown in Table 5-20, the annual average DPM concentration associated with vehicle emissions along the I-210 at the PMI is 0.07087, which yields a chronic hazard quotient of 0.014, which is less than the SCAQMD threshold of 1.0. As indicated above, the PMI is not an occupied receptor location; thus, the calculated hazard quotient at all other receptor locations would be less than 0.001 and less than the SCAQMD threshold of 1.0.

Operational - Exacerbation of Existing I-210 Emissions and Risks. In addition, as shown in Table 5-8 through Table 5-15, operation of the Project would not exceed any regional or local significance thresholds recommended for use by the SCAQMD. All emissions of PM, including DPM, would be substantially below LST thresholds. In addition, any emissions would be dispersed along multiple vehicle travel routes, reducing the potential for the Project to exacerbate pollutant concentrations in any one area. Therefore, the proposed Project would not have a considerable contribution to DPM emissions in the area and would not significantly exacerbate I-210 vehicle emissions or the potential adverse health risks associated with these emissions.

In addition, as discussed above, the proposed Project would not exceed SCAQMD-recommended thresholds for regional pollutants with the incorporation of standard conditions and Mitigation Measure AIR-1, nor would it exceed SCAQMD-recommended thresholds for localized pollutants. As explained in Section 5.1.2, the SCAQMD's LST thresholds represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standards. In developing the CAAQS and NAAQS, the U.S. EPA and CARB considered scientific evidence linking exposure to air pollutants to health risks. Although each individual's health characteristics, environment, and pre-disposition to adverse respiratory health effects is different, compliance with the CAAQS and NAAQS is intended to protect the most sensitive individuals.

Children's Respiratory Health. The presence of pollutants in ambient and indoor air, as well as other factors such as humidity level, can affect respiratory health by making it harder to breath, damaging tissue, and/or modifying symptoms of pre-existing conditions. Most pollutants can affect respiratory health (see Section 2.1.1). PM can pass through the throat and lungs and if small enough even enter the bloodstream. CO can reduce oxygen delivery to the body's organs. NO_X can inflame the respiratory tract. In particular, air pollutants, can trigger asthmatic responses, especially in children.

According to the OEHHA CalEnviroScreen 3.0 report (2017a), asthma is a disease that affects the lungs and makes it hard to breathe. Symptoms include breathlessness, wheezing, coughing, and chest tightness. While the causes of asthma are poorly understood, it is well established that exposure to traffic and outdoor air pollutants, including PM, O_3, and DPM can trigger asthma attacks. Nearly three million Californians currently have asthma and about five million have had it at some point in their lives. Children, the elderly and low-income Californians suffer disproportionately from asthma. Asthma increases an

individual's sensitivity to pollutants. Children living near major roadways and traffic corridors in California have been shown to suffer disproportionate rates of asthma, and DPM has been implicated as a potential cause of new-onset asthma (CARB 2016a).

As described above, CalEnviroScreen data indicate that the Project area's census tract is in the 20th percentile for asthma, meaning that the asthma rate in this census tract is higher than 20% of the census tracts in the State (OEHHA 2018). This factor indicates that adverse respiratory health is not prevalent in the census tract in which the proposed Project area is located, and that the existing conditions in the census tract are such that sensitive receptors, including children, are in an area of lower risk for adverse respiratory health effects.

In addition, with implementation of standard conditions and mitigation measures MM AIR-1 and MM AIR-2, the proposed Project's air emissions would remain below SCAQMD health risk thresholds as well as SCAQMD-recommended LST thresholds that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standards. In developing the CAAQS and NAAQS, the U.S. EPA and CARB considered scientific evidence linking exposure to air pollutants to health risks, including the potential to exacerbate asthma symptoms. Although each individual's health characteristics, environment, and pre-disposition to adverse respiratory health effects is different, compliance with the CAAQS and NAAQS, as well as health risk thresholds, is intended to protect the most sensitive individuals, including and especially, children.

Therefore, the proposed Project would not place sensitive receptors, including children, in conditions that are associated with or have a high existing rate of adverse respiratory health effects, and Project emissions would be below the levels that have been studied and developed by the U.S. EPA, CARB, and the SCAQMD to be protective of children's respiratory health.

Formaldehyde emissions from off gassing wood products in the building's interior. Formaldehyde is a colorless, volatile, flammable gas at room temperature and pressure. It has a pungent, highly irritating, suffocating odor and may cause a burning sensation to the eyes, nose, and lungs at high concentrations. In 1988, the State listed formaldehyde as a human carcinogen pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986 (i.e., Proposition 65). In 1992, the California Air Resources Board (CARB) designated formaldehyde as a toxic air contaminant (TAC). Composite wood products used in building construction, such as hardwood plywood, particle board, and medium density fiberboard, often contain formaldehyde resins or glues used to bond wood materials together (CARB 2007b p. 15). Over time, the resins in composite wood products may off-gas (i.e., emit) or degrade, releasing formaldehyde into the indoor environments until air circulation occurs and emissions are vented to outside, ambient air (CARB, 2007b, pp. 16-17).

A paper by Chan et al. (2019) evaluating formaldehyde in homes built between 2011 and 2017 found formaldehyde concentrations in newer homes are approximately 38% lower than homes built from a 2002 to 2004 period (Chan et al., 2019, pp. 69-70). Mean concentrations were even less – 45% lower (Chan et al., 2019 pp. 69 – 70). The basis for the reduction in formaldehyde concentrations in newer homes is most likely due to CARB's Airborne Toxic Control Measure (ATCM) to Reduce Formaldehyde Emissions from Composite Wood Products (17 CCR Section 93120 *et seq.*). This Composite Woods Products regulation reduces public exposure to formaldehyde through the establishment of strict emission performance standards on particleboard, medium density fiberboard and hardwood plywood (collectively known as composite wood products). The regulation, adopted in 2009, established two phases of emissions standards: and initial Phase 1 and, later, a more stringent Phase 2 that requires all finished good, such as flooring, destined for sale or use in California to made using complying composite wood

products. As of January 2014, only Phase 2 products are legal for sale in California. Furthermore, the U.S. EPA also now requires all composite wood products to meet emissions standards that are nearly identical to California's Phase 2 standards. This EPA requirement became effective in March 2019 (CARB 2019d).

The proposed Project would be constructed beginning in 2020 at the earliest, meaning all building construction materials would be fully compliant with Phase 2 regulations, which further reduce formaldehyde emission below Phase 1 requirements by approximately 37% to 50%, depending on the material. The Proposed project would also be subject to 2019 building code requirements for indoor air ventilation, which improve ventilation, indoor air quality, and air filtration systems. Finally, the 2019 Cal Green Building Standards Code imposes stringent volatile organic compound (VOC) restrictions on paints, coatings, etc. and strict emissions standards for carpets and composite wood products. The Project must comply with all of these requirements, which are specifically intended to promote healthy places to live and work. For these reasons, formaldehyde off-gassing from consumer products would not result in a significant impact requiring detailed evaluation in the EIR.

Odors. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed Project does not include such sources but would result in the construction of a new apartment complex and parking garage that could generate odors related to vehicle parking and refuse collection (e.g. oils, lubricants, fuel vapors, short-term waste odors). These activities would not generate sustained odors that would affect substantial numbers of people. In addition, although industrial land uses are present east of the Project area, these sources are unlikely to generate objectionable odors in the Project area given the typical meteorological patterns present (see Figure 5-1).

6 GREENHOUSE GAS IMPACT ANALYSIS

This chapter evaluates the GHG impacts that could result from implementation of the proposed Alexan Foothills Specific Plan and ZCA Areas A and C. Unlike air quality, which is influenced by local and regional factors and is therefore considered on the local or regional scale, the effects of global climate change are the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to influence global climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis focused on whether an individual project's contribution to global climate change is cumulatively considerable.

6.1 SIGNIFICANCE CRITERIA

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project could result in potentially significant GHG impacts if it would:

(a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

(b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG; or

To date, the SCAQMD has not adopted a numerical threshold for determining the significance of GHG emissions in the Basin; however, to provide guidance to local lead agencies on determining the significance of GHG emissions in their CEQA documents, the SCAQMD convened a GHG Significance Threshold Working Group (Working Group) meeting on April 30, 2008. In December, 2008, the SCAQMD Governing Board adopted a GHG significance threshold of 10,000 MTCO2e for industrial projects where the SCAQMD is lead agency; however, the City would be the lead agency for the proposed Project. The SCAQMD has not formally adopted GHG thresholds for local lead agency consideration; however, to date, the Working Group has convened a total of 15 times, with the last meeting taking place on September 28, 2010. At this last meeting, SCAQMD presented their proposed GHG thresholds for use by local lead agencies. The proposed thresholds are tiered as follows:

- Tier 1 consists of evaluating whether or not the project qualifies for applicable CEQA exemptions.
- Tier 2 consists of determining whether or not a project is consistent with a greenhouse gas reduction plan. If a project is consistent with a greenhouse gas reduction plan, it would not have a significant impact.
- Tier 3 consists of using screening values at the discretion of the Lead Agency; however, the Lead Agency should be consistent for all projects within its jurisdiction. The following thresholds were proposed for consideration:
  - 3,000 MTCO2e/year for all land use types; or
  - 3,500 MTCO2e/year for residential; 1,400 MTCO2e/year for commercial; 3,000 MTCO2e/year for mixed-use projects.
- Tier 4 has three options for projects that exceed the screening values identified in Tier 3:
  - Option 1: Reduce emissions from business as usual by a certain percentage (currently undefined)
  - Option 2: Early implementation of applicable AB 32 Scoping Measures
  - Option 3: For plan-level analyses, analyze a project's emissions against an efficiency value of 6.6 MTCO2e/year/SP in 2020 and 4.1 MTCO2e/year/SP by 2035. For project-level

analyses, analyze a project's emissions against an efficiency value of 4.8 and 3.0 MTCO2e/year/SP for the 2020 and 2035 calendar years, respectively.

6.2 ANALYSIS METHODOLOGY

Tier 3 and Tier 4 thresholds were used as significance criteria in this analysis to determine if GHG emissions under the proposed Project would have a significant effect on the environment. A project level analysis was applied to the Alexan Foothills Specific Plan since it involves a specific development project pursuant to City regulations; however, a program level analysis was applied to the remainder of the GP/ZCA area because a specific development plan is not currently proposed nor considered at this time.

For potential environmental impacts, mitigation measures were designed to avoid or reduce each effect to a less than significant level, where possible.

6.3 ENVIRONMENTAL IMPACTS

6.3.1 Generation of Greenhouse Gas Emissions

This report quantifies and evaluates the potential GHG emissions resulting from by the Alexan Foothills Specific Plan and the remainder of the GP/ZCA area. Each individual Project component's GHG emissions are presented and discussed below, and the resulting combined emissions that would occur from both project components are presented and nor considered at this time

The proposed Project would generate GHG emissions from both short-term construction and long-term operational activities. As described in more detail below, the proposed Project would not generate short-term or long-term emissions that exceed SCAQMD-recommended pollutant thresholds.

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Construction Emissions. Construction activities would generate GHG emissions primarily from equipment fuel combustion as well as worker, vendor, and haul trips to and from the Project site during demolition, site preparation, grading, building construction, paving, and architectural coating activities. Construction activities would cease to emit GHG upon completion, unlike operational emissions that would be continuous year after year until the Project is decommissioned. Accordingly, the SCAQMD recommends amortizing construction GHG emissions over a 30-year period. This normalizes construction emissions so that they can be grouped with operational emissions and compared to appropriate thresholds, plans, etc. GHG emissions from construction of the proposed Alexan Foothills Specific Plan were estimated using CalEEMod, Version 2016.3.2, based on the anticipated construction schedule and construction activities described earlier in this report. The estimated construction GHG emissions resulting from the Alexan Foothills Specific Plan are presented below in Table 6-1.

Table 6-1: Estimated Construction GHG Emissions for the Alexan Foothills Specific Plan				
Construction Year	GHG Emissions (Metric Tons / Year)			
	CO_2	CH_4	N_2O	Total $MTCO_2e$
2020	972.5	0.1	--	975.6
2021	1,243.4	0.1	--	1,246.2
2022	293.6	<0.0(B)	--	294.5
Total	2,509.5	0.3	--	2,516.2
Total Amortized Emissions(A)				83.9

Source: MIG 2019 (see Appendix A).
(A) Emissions amortized over 30 year-period for inclusion in total GHG emissions.
(B) "<0.0" does not indicate the emissions are less than or equal to 0; rather, it indicates the emission is smaller than 0.05 but larger than 0.

Operational Emissions. Once operational, the Alexan Foothills Specific Plan would result in continuous GHG emissions from mobile, energy, and area sources. Mobile sources would result primarily in emissions of CO_2, with emissions of CH_4 and NO_2 also occurring in minor amounts. In addition to mobile sources, GHG emissions would also be generated from natural gas usage, electricity use, water conveyance and use, wastewater treatment, and solid waste disposal. Natural gas use would result in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use associated with both the physical usage of the development, as well as the energy needed to transport water/wastewater, would result in the production of GHGs if the electricity is generated through non-renewable sources (i.e., combustion of fossil fuels). Solid waste generated by the proposed Project, would contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy when transporting and managing the waste. In addition, landfilling, the most common waste management practice, results in the release of CH_4 from the decomposition of organic materials.

Potential operational GHG emissions resulting from the Alexan Foothills Specific Plan were modeled using CalEEMod, Version 2016.3.2. The modeling accounted for the types of sources described in Sections 2.1.2 and 3.2.2. Operational GHG emissions were estimated using default data assumptions contained within CalEEMod, with the project-specific modifications described in Section 5.1.1 and below:

- Mobile Sources. CalEEMod does not estimate N_2O emissions from on-road vehicle travel or off-road construction sources. To account for this, CalEEMod emissions estimates were adjusted as follows:
    - N_2O emissions were estimated by comparing the ratio of CO_2 and N_2O emissions from the on-road vehicle sector contained in the State's most recent GHG inventory (CARB 2019c). In 2017, statewide CO_2 and N_2O emissions estimates for the on-road transportation sector were 152.4 and 0.011 million metric tons, respectively (N_2O emissions are therefore equal to 0.007% of CO_2 emissions for this sector).
    - Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in transportation fuels in 2017 and is anticipated to result in a 10% reduction by 2022. Therefore, the CalEEMod estimate of CO_2 emissions was reduced by 10% (CARB 2018a).
- Energy use and consumption: Southern California Edison (SCE) provides electricity service in the City of Monrovia. The CalEEMod default GHG intensity values for this electric service provider are from 2012 and do not represent existing and future reductions in GHG intensity that have been achieved under the State's Renewable Portfolio Standard (RPS, see Section

3.4.2). To account for this, CalEEMod default assumptions regarding energy use were adjusted as follows:

- The SCE GHG intensity value was reduced based on an increase in renewable energy mix from 20% under estimated Year 2012 conditions (the CalEEMod default data year) to 38.5% under Year 2022 conditions (based on 2017 available data from SCE). This adjustment reduced the estimated amount of CO_2 produced by the SCE energy mix from approximately 702 pounds/megawatt-hour (lbs/MWh) to 427 lbs/MWh (SCE 2018).
- Electricity generation emission factors for CH_4 (0.033 lbs/MWh) and N_20 (0.004 lbs/MWh) were obtained from the U.S. EPA's EGRID database for year 2016, the last year for which data was available at the time this EIR was prepared (U.S. EPA 2016e).

In addition, CalEEMod contains default energy efficiency values that are based on the 2016 energy code. To account for more efficient energy use that is anticipated to occur under the 2019 and subsequent energy codes, CalEEMod default assumptions regarding energy efficiency were adjusted as follows:

- CalEEMod default energy efficiency values for residential land uses were adjusted downwards by a factor of 0.47 to reflect increased energy efficiency and solar photovoltaic requirements of the 2019 energy code (CEC 2018).

The total GHG emissions associated with the Alexan Foothills Specific Plan are presented below in Table 6-2, based on an operational year of 2022. To account for all potential GHG emissions generated through construction and operational activities, the amortized construction emissions calculated in Table 6-1 have been added to Alexan Foothills Specific Plan operational GHG emissions estimate.

As shown in Table 6-2, construction and operation of the Alexan Foothills Specific Plan would result in a net increase in GHG emissions equal to 2,774.2 $MTCO_2e$ per year. This net emissions increase is below the SCAQMD Tier 3 "bright-line" threshold of 3,000 $MTCO_2e$. In addition, as shown in Table 6-2, the Alexan Foothills Specific Plan would result in a GHG efficiency of 3.9 $MTCO_2e$/yr/service population. This value is below the SCAQMD's 2020 project-level efficiency target of 4.8 $MTCO_2e$/yr/service population; however, the Alexan Foothills Specific Plan would be operational after 2020, in Year 2022. Therefore, it is not necessarily appropriate to compare the 2022 Alexan Foothills Specific Plan GHG efficiency to the SCAQMD 2020 efficiency threshold, although this threshold does provide useful context for the City in determining the significance of a project's GHG emissions. For example, presuming a 40% reduction in the SCAQMD's existing CEQA thresholds is necessary to achieve the State's 2030 GHG reduction goal (which is a 40% reduction below 1990 GHG emissions levels), a threshold of 2,760 $MTCO_2e$ or an efficiency threshold of 4.4 $MTCO_2e$/yr/service population may be more appropriate for use in evaluating the project's long-term emissions in Year 2022.[10] As shown in Table 6-2, the Alexan Foothills Specific Plan would result in a net increase in GHG emissions that is slightly above 2,760 $MTCO_2e$; however, emissions would not exceed 4.4 $MTCO_2e$/yr/service population.

[10] This estimate represents the equivalent reduction from the SCAQMD's existing 3,000 $MTCO_2e$ and 4.8 MTCO2e/yr/service population necessary to maintain progress towards a 40% reduction in GHG emissions below 1990 levels by 2030. Calculated as: 1) 3,000-(2*((3,000-(3,000*.6))/10)) and 2) 4.8-(2*((4.8-(4.8*.6))/10)).

Table 6-2: Estimated Operational GHG Emissions for the Alexan Foothills Specific Plan			
Emission Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing[A]	Proposed	Net Change
Area	0.3	102.3	+102.0
Energy	250.2	757.4	+507.2
Mobile[B]	613.7	2,574.6	+1,960.9
Stationary	-	0.3	+0.3
Waste	54.7	100.9	+46.2
Water	1.8	75.6	+73.8
Amortized Construction	–	83.9	+83.9
Total[C]	920.7	3,694.6	+2,774.2
SCAQMD Tier 3 Screening Threshold	--	--	3,000
SCAQMD Tier 3 Threshold Exceeded?	--	--	No
Estimated Service Population[D]	133 [E]	942[F]	+809
Estimated GHG Efficiency ($MTCO_2e$/yr/service population)	6.9	3.9	-3.0
SCAQMD Tier 4 Project-Level Efficiency Threshold	--	4.8	--
SCAQMD Tier 4 Threshold Exceeded?	--	No	--

Source: MIG 2019 (see Appendix A).

Notes:

(A) See Table 3-3 for existing GHG emissions in Alexan Foothills Specific Plan area.

(B) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's LCFS. Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this Report's analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in 2017 and should result in a 10% reduction in average carbon intensity in 2022. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of .963 (existing conditions) and 0.90 (proposed Project) to account for the LCFS regulation (CARB 2018a, 2018b).

(C) Totals may not equal due to rounding.

(D) Service population is defined as the number of employees and residents living and working within the Project area. The existing land uses include a mix of employees and residents; however, the Alexan Foothills Specific Plan service population is based on residents only.

(E) Based upon the U.S. Green Building Council's (2008) average SF/employee: Place of Worship is 6,630 square feet (SF)/1,250 SF/employee = 5.3 employees, for General Light Industrial is 56,190 SF/463 SF/employee = 121.4 employees, and Office Building (100,000 SF or less) is 706 SF/221 SF/employee = 3.19 employees. According to the U.S. Census Bureau the average household size in Monrovia is 2.77 persons (1 unit X 2.77 persons/unit =2.77 persons). This yields a total service population of 133.

(F) Residential population provided by Draft EIR population and housing analysis.

Conversely, it is not appropriate to directly compare the 2022 Alexan Foothills Specific Plan GHG efficiency to a 2035 efficiency target since the current modeling does not account for any energy or mobile source improvements embedded in a future efficiency target. Therefore, to compare the Alexan Foothills Specific Plan to the SCAQMD 2035 efficiency target of 3.0 $MTCO_2e$/yr/service population, operational emissions were modeled using CalEEMod Version 2016.3.2 with the operational year set to 2035, to reflect the expected reduction in energy and mobile source emissions that will occur with implementation of the State RPS and advances in vehicle emission and other standards adopted by the State (see Section 3.4). The 2035 modeling only accounted for changes to energy and mobile source emissions as a result of increased renewable energy generation under the RPS standard and fleet turnover and improved vehicle emission standards associated with a 2035 operational year. The 2035 amortized construction and operational emissions for the Alexan Foothills Specific Plan, as estimated using CalEEMod (see Appendix A), are estimated to be 2,727.4 $MTCO_2e$/yr. Dividing through by the service population for the Alexan Foothills Specific Plan (942 residents), the resulting Year 2035 GHG efficiency is 2.9 $MTCO_2e$/yr/service

population, which does not exceed the SCAQMD 2035 efficiency target of 3.0. Thus, the proposed Alexan Foothills Specific Plan would result in less than significant levels of GHG emissions and not impede progress towards the State's GHG reduction goals.

ZCA Areas A and C

The short-term construction and long-term operational emissions associated with ZCA Areas A and C were estimated using the same methodology (CalEEMod) as described above for the Alexan Foothills Specific Plan. As was done for the Alexan Foothills Specific Plan modeling, default energy assumptions were reduced to account for increases in SCE's renewable energy mix and the adoption of the 2019 energy efficiency code. Although traffic was calculated in the TIA for the Project (LSA 2018), default trip generation rates were used for emissions calculations. The use of default trip generation rates is likely to overestimate mobile source emissions since the Project's proximity to the Monrovia Metro Station is likely to reduce vehicle trips compared to default values. The construction and operational emissions associated with the ZCA Areas A and C are summarized in Tables 6-3 and 6-4 below.

Table 6-3: Estimated Construction GHG Emissions for Buildout of ZCA Areas A and C

Construction Year	GHG Emissions (Metric Tons / Year)			
	CO_2	CH_4	N_2O	Total $MTCO_2e$
2021	218.1	0.0	-	219.0
2022	171.9	0.0	-	172.6
Total	390.0	0.1	-	391.5
Total Amortized Emissions(A)				13.1

Source: MIG 2019 (see Appendix A).
(A) Emissions amortized over 30 year-period for inclusion in total GHG emissions.

As shown in Table 6-4, construction and operation of ZCA Areas A and C would result in a net increase in GHG emissions equal to 422.7 $MTCO_2e$ per year. This net emissions increase is below the SCAQMD Tier 3 threshold of 3,000 $MTCO_2e$ and would thus represent a less than significant effect; however, it would be inappropriate to use this threshold since ZCA Areas A and C are being analyzed at a programmatic level. Instead, the total GHG emissions within ZCA Areas A and C are evaluated on a per capita basis to determine if GHG emissions in these areas would be consistent with the SCAQMD's Tier 4 analysis. As shown in Table 6-5, the proposed buildout of ZCA Areas A and C in Year 2022 falls below the SCAQMD's 2020 GHG efficiency target of 6.6 $MTCO_2e$/yr/service population, as well as the SCAQMD's 2035 GHG efficiency target of 4.1 $MTCO_2e$/yr/service population.

Combined Alexan Foothills Specific Plan and ZCA Areas A and C Impact Analysis

As described above, this report assumes that construction and operation of the Alexan Foothills Specific Plan and ZCA Areas A and C would occur simultaneously, meaning that both construction and operational emissions for both Project components would overlap and be emitted at the same time. The combined net GHG emissions associated with buildout of the Alexan Foothills Specific Plan ZCA Areas A and C in Year 2022 are presented below in Table 6-5.

Table 6-4: Total GHG Emissions for Buildout of ZCA Areas A and C			
Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing[A]	Buildout	Net Change
Area	1.4	19.2	+17.9
Energy	83.9	127.5	+43.5
Mobile[B]	247.5	602.0	+354.5
Stationary	--	0.3	+0.3
Waste	16.1	19.0	+2.8
Water	27.6	18.2	-9.4
Amortized Construction	-	13.1	+13.1
Total[C]	376.6	799.2	+422.7
SCAQMD Tier 3 Screening Threshold	--	--	3,000
SCAQMD Tier 3 Threshold Exceeded?	--	--	No
Estimated Service Population[D]	55[E]	227[F]	+172
Estimated GHG Efficiency ($MTCO_2e$/yr/service population	6.8	3.5	-3.3
SCAQMD Tier 4 Plan-Level Efficiency Threshold	--	6.6	--
SCAQMD Tier 4 Threshold Exceeded?	--	No	--

Source: MIG 2019 (see Appendix A).

(A) See Table 3-3 for existing GHG emissions in ZCA Areas A and C.

(B) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's LCFS. Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this Report's analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in 2017 and should result in a 10% reduction in average carbon intensity in 2022. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of .963 (existing conditions) and 0.90 (proposed project) to account for the LCFS regulation (CARB 2018a, 2018b).

(C) Totals may not equal due to rounding.

(D) Service population is defined as the number of employees and residents living and working within the Project area. The existing land uses include a mix of employees and residents; however, the Alexan Foothills Specific Plan service population is based on residents only.

(E) Based upon the U.S. Green Building Council's (2008) average SF/employee for: General Light Industrial is 14,560 SF/463 SF/employee = 31.4 employees, and for Warehouse is 10,120 SF/781 SF/employee = 13 employees. According to the U.S. Census Bureau the average household size in Monrovia is 2.77 persons (4 units x 2.77 persons/unit =11.08). This yields a total service population of 55.

(F) According to the U.S. Census Bureau, the average household size in Monrovia is 2.77 persons (2.77 persons/unit X 82 units = 227.1) = 227 residents at full buildout.

Table 6-5: Total Combined GHG Emissions for the Alexan Foothills Specific Plan and ZCA Areas A and C (Year 2022)

Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing[A]	Project Buildout[B]	Net Change
Area	1.7	121.6	+119.9
Energy	334.2	884.9	+550.7
Mobile	861.2	3,176.5	+2,315.3
Stationary	0.0	0.7	+0.7
Waste	70.8	119.8	+49.0
Water	29.4	93.8	+64.4
Amortized Construction	0.0	96.9	+96.9
Total[C]	1,297.3	4,494.2	+3,196.9
SCAQMD Tier 3 Screening Threshold			3,000
SCAQMD Tier 3 Threshold Exceeded?			Yes
Estimated Service Population	188	1,169	981
Estimated GHG Efficiency ($MTCO_2e$/yr/service population)	6.9	3.8	-3.1
SCAQMD Tier 4 Project-Level Efficiency Threshold	–	4.8	–
SCAQMD Tier 4 Threshold Exceeded?	–	No	–

Source: MIG 2019 (see Appendix A)

Notes:

(A) See Table 3-3 for the existing emissions within the Project area.

(B) See Tables 6-2 and 6-4 for buildout emissions for the Alexan Foothills Specific Plan and remaining GP/ZCA area, respectively.

(C) Totals may not equal due to rounding.

As shown in Table 6-5, buildout of the full Project would result in a net GHG emissions increase of 3,196.9 $MTCO_2e$ per year above existing conditions. This is above the SCAQMD Tier 3 threshold of 3,000 $MTCO_2e$.

As stated previously, the Alexan Foothills Specific Plan is being analyzed at a project level, while ZCA Areas A and C are being evaluated at a programmatic level. As a conservative (i.e., worst-case) evaluation of potential GHG emission impacts, the combined GHG efficiency of both the Alexan Foothills Specific Plan and ZCA Areas A and C was determined and compared to the SCAQMD's project level Tier 4 efficiency threshold. As shown in Table 6-5, the combined efficiency threshold for the Alexan Foothills Specific Plan and ZCA Areas A and C (3.8 $MTCO_2e$/yr/service population) in Year 2022 would not exceed the SCAQMD 2020 project-level GHG efficiency target of 4.8 $MTCO_2e$/yr/service population but would be above the SCAQMD's 2035 project efficiency threshold of 3.0 $MTCO_2e$/yr/service population.

As explained above, it is not necessarily appropriate to compare the 2022 Alexan Foothills Specific Plan GHG efficiency to the SCAQMD 2020 efficiency threshold, although this threshold does provide useful context for the City in determining the significance of a project's GHG emissions. Presuming a 40% reduction in the SCAQMD's existing CEQA thresholds is necessary to achieve the State's 2030 GHG reduction goal (which is a 40% reduction below 1990 GHG emissions levels), a threshold of 4.4 $MTCO_2e$/yr/service population may be more appropriate for use in evaluating the project's long-term

emissions in Year 2022.[11] As shown in Table 6-5, the Alexan Foothills Specific Plan would not result in emissions that exceed 4.4 $MTCO_2e$/yr/service population.

Furthermore, the operational emissions for the Alexan Foothills Specific Plan as well as ZCA Areas A and C were modeled under year 2035 conditions to account for changes to energy and mobile source emissions as a result continued implementation of the RPS, fleet turnover, and improved vehicle emissions standards; all other inputs were held to 2022 values (e.g., energy efficiency, LCFS reductions, etc.). The 2035 operational emissions (including amortized construction emissions), as estimated using CalEEMod (see Appendix A), are estimated to be 3,127.5 $MTCO_2e$ per year (see Table 6-6). Dividing through by the combined service population (1,169) results in a combined efficiency of 2.7 $MTCO_2e$/yr/service population, which does not exceed the SCAQMD 2035 project-level target of 3.0 $MTCO_2e$/yr/service population.

Table 6-6: Total Combined GHG Emissions for the Alexan Foothills Specific Plan and ZCA Areas A and C (Operating Year 2035)

Source	GHG Emissions ($MTCO_2e$ / Year)		
	Existing(A)	Project 2035	Net Increase
Area	1.7	121.6	119.9
Energy	334.2	438.9	104.7
Mobile	861.2	2,317.3	1,456.0
Stationary	0.0	0.7	0.7
Waste	70.8	112.2	41.5
Water	29.4	40.0	10.5
Amortized Construction	--	96.9	96.9
Total(C)	1,297.3	3,127.5	1,830.2
SCAQMD Tier 3 Screening Threshold	–	–	3,000
SCAQMD Tier 3 Threshold Exceeded?		–	No
Estimated Service Population	188	1,169	+981
Estimated GHG Efficiency ($MTCO_2e$/yr/service population)	6.9	2.7	-4.2
SCAQMD Tier 4 Project-Level Efficiency Threshold	–	3.0	–
SCAQMD Tier 4 Threshold Exceeded?	–	No	–

Source: MIG 2019 (see Appendix A)
(A) See Table 3-3 for the existing emissions within the Project area.
(B) See Tables 6-2 and 6-4 for buildout emissions for the Alexan Foothills Specific Plan and remaining GP/ZCA area, respectively.
(C) Totals may not equal due to rounding.

[11] This estimate represents the equivalent reduction from the SCAQMD's existing 3,000 $MTCO_2e$ and 4.8 MTCO2e/yr/service population necessary to maintain progress towards a 40% reduction in GHG emissions below 1990 levels by 2030. Calculated as: 1) 3,000-(2*((3,000-(3,000*.6))/10)) and 2) 4.8-(2*((4.8-(4.8*.6))/10)).

6.3.2 Consistency With GHG Reduction Plans

The proposed Project would not conflict with CARB's Scoping Plan, the regional SCS, the City's General Plan, or the City's Energy Plan. The Project's consistency with these plans is described in more detail below.

CARB Scoping Plan

As discussed under Section 3.4.2, the 2017 Climate Change Scoping Plan is CARB's primary document used to ensure State GHG reduction goals are met. The *2017 Climate Change Scoping Plan's* primary objective is to identify the measures needed to achieve the 2030 reduction target established under Executive Order B-30-15 and SB 32. The major elements of the plan are generally geared toward actions either CARB or other state entities will pursue, such as, but not limited to:

- Implementing the LCFS, with an increased stringency (18 percent by 2030);
- Implementation of SB 350, which expands the RPS to 50 percent and doubles energy efficiency savings; and
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH_4 and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by the year 2030.

Although most of these measures would be implemented at the State level, the GHG reductions achieved by these state measures would be realized at the local level. For example, regardless of actions taken by the City, emissions generated through gasoline combustion in motor vehicles within Monrovia would produce less GHG in 2030 than they do now. As shown in Table 6-5, the proposed Alexan Foothills Specific Plan and ZCA Areas A and C would meet the recommended plan-level efficiency threshold of 6 $MTCO_2e$ per capita per year by 2030 and would therefore contribute to the substantial progress necessary to achieve the *2017 Climate Change Scoping Plan* target of a 2 $MTCO_2e$ per capita per year threshold in Year 2050. The proposed Project, therefore, would not conflict with the goals of the *2017 Climate Change Scoping Plan.*

In addition to State measures, Appendix B to CARB's *2017 Climate Change Scoping Plan* identifies potential actions that could be undertaken at a local level to support the State's climate goals. This appendix is organized into two categories. Category A applies to code and broad planning documents and is not applicable to a Specific Plan. Category B includes measures that could be considered for individual projects. The Alexan Foothills Specific Plan and ZCA Areas A and C is consistent with many of the suggested measures in Appendix B through required compliance with SCAQMD rules and the California Green Building Standards Code. The proposed Project, therefore, would not conflict with the goals of the *2017 Climate Change Scoping Plan.*

Southern California Association of Governments RTP/SCS

As described in Section 3.4.2, the 2016 RTP/SCS is a growth strategy and transportation plan whose primary intent is to demonstrate how the SCAG region will meet its GHG reduction target through the year 2040. Many of the measures included in the RTP/SCS are focused on: the expansion of, and access to, mass transit (e.g., light rail, commuter rail, bus rapid transit, etc.); planning growth around livable corridors; and locating new housing and job growth in high quality transit areas. Approval of the proposed Project would support these goals, because it (1) results in and encourages infill development and/or involves the revitalization of already developed areas, (2) has existing, supporting transit infrastructure and

enhances the use of this infrastructure (the METRO Station is a 0.2-mile walk from to the east of the Project boundary), and (3) encourages the use of non-vehicular modes of transportation.

Under California law, SCAG is required to implement strategies that reduce per capita GHG emissions in the region by eight percent by 2020—compared with 2005 levels—and by 13 percent by 2035 (SCAG 2016). Although the existing emissions in the Project area have not been estimated for Year 2005, it is very likely that 2005 GHG emissions levels (and efficiency metrics) would be higher than the Year 2018 existing conditions presented in Table 3-3. As shown in Table 6-5, the Project is anticipated to reduce per capita GHG emissions by approximately 64 percent from existing conditions, which exceeds the progress needed to achieve the mandated reduction in GHG emissions of 13 percent by 2035. One of the reasons the Project results in such low GHG emissions is the Project area's proximity to the Monrovia METRO Station. The proximity of this transit station to the Project is estimated to reduce Project-related trips by 20%.

Since the implementation of the proposed Project would result in transit-oriented development, support the use of mass transit, and result in vehicle trips that are approximately 20% lower than standard values due to the proximity of the Monrovia METRO station, the proposed Project would be consistent with the SCAG 2016 RTP/SCS.

City of Monrovia Energy Action Plan

The City of Monrovia has an *Energy Action Plan* that seeks to decrease energy use and dependence. The plan suggests the need for citizen involvement and focuses heavily on actionable items related to managing City facilities and vehicles. Additionally, the City requires consistency with energy saving strategies (such as Title 24 which requires energy efficient practices). The Project is consistent with Title 24 building codes, and therefore is consistent with the goals of the Energy Action Plan.

6.3.3 Energy Consumption

Short-term energy demand would result from construction activities occurring as a result of buildout of the Project. Short-term demand would include energy needed to power worker and vendor vehicle trips as well as construction equipment. Long-term energy demand would result from operation of businesses and land uses within the Project area, which would include activities such as lighting, heating and cooling of structures, etc. Operational energy demands would typically result from vehicle trips, electricity and natural gas usage, and water and wastewater conveyance.

As estimated by the TIA prepared for the Project and the emissions modeling conducted using CalEEMod defaults, buildout of the proposed Project is anticipated to result in an increase in vehicle miles traveled (VMT) by approximately 9,611,277 per year, natural gas consumption by 5,299,030 kBTU per year, and electricity consumption by 1,629,052 kWh per year. Although VMT and energy consumption increases, consumption rates per capita would decrease. Buildout of the Project would result in a VMT decrease from 27.4 VMT/service population/day to 22.5 VMT/service population/day. Natural gas consumption would also reduce from 8,724.4 kBTU/service population/year to 5,936.0 kBTU/service population/year, and annual electricity consumption would decrease from 5,336.2 kWh/service population/year to 2,251.7 kWh/service population/year.

Although implementation of the Project may increase VMT and energy and natural gas usage compared to current conditions, increased density would provide for more efficient use of resources within the City, thus ensuring that the proposed Project would not result in the wasteful or inefficient use of energy resources. This would be a less than significant effect.

In addition, as discussed above, the Project would be consistent with CARB's Scoping Plan and SCAG's RTP/SCS which also incorporate goals for use of renewable energy and efficient energy use as well as for reducing GHG emissions. Therefore, the Project would be consistent with applicable State and local plans for promoting use of renewable energy and energy efficiency.

7 REPORT PREPARERS AND REFERENCES

This report was prepared by MIG under contract to Trammell Crow Residential. This report reflects the independent, objective, professional opinion of MIG.

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APPENDIX A: CalEEMod Output Files

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Existing Emissions Estimates:
Alexan Foothills Specific Plan and GP/CZA

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Alexan Spcific Plan (Existing Emissions)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	6.63	1000sqft	0.15	6,630.00	0
General Light Industry	56.19	1000sqft	1.29	56,190.00	0
Other Asphalt Surfaces	221.19	1000sqft	5.08	221,190.00	0
Single Family Housing	1.00	Dwelling Unit	0.27	2,368.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.87	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan.
SCE CO2 intensity based on 2017 corporate sustainability report (p. 10) and adjusted down to reflect estimated SCE 2018 RPS mix.
SCE CH4 and N2O intensity basd on USEPA EGRID emission factors for CAMX Subregion, WECC California.

Land Use - Land use information reflects existing conditions. See Draft EIR Table 3-4 and Appendix M.

Construction Phase - Existing emissions estimate - no construction emissions estimated.

Off-road Equipment - Existing emissions estimate - no construction emissions estimated.

Trips and VMT - Existing emissions estimate - no construction emissions estimated.

Vehicle Trips - Weekday trip rate from TIA (Table B). Calculated by dividing total existing trips (393) by total existing trip generating sf (6.630 KSF + 56,190 KSF). Calculation excludes the 1 SFR on-site.

Energy Use - T24 electric energy, lighting energy, and T24 natural gas energy intensities reduced to reflect 2008 energy code values per data in CalEEMod Appendix E5, Tables 1, 3, and 4.

Water And Wastewater - All water use assumed to be indoor water use. Existing indoor water use estimate is from project Water Supply Assessment.

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	443.48	789.69
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	21,090.59	28,552.89
tblLandUse	LandUseSquareFeet	1,800.00	2,368.00
tblLandUse	LotAcreage	0.32	0.27
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Summer

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.87
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.97	6.25
tblVehicleTrips	WD_TR	9.11	6.25
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	12,993,937.50	391,021.00
tblWater	IndoorWaterUseRate	207,445.46	0.00
tblWater	IndoorWaterUseRate	65,154.03	0.00
tblWater	OutdoorWaterUseRate	324,465.98	0.00
tblWater	OutdoorWaterUseRate	41,075.36	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0938	0.0720	0.9234	1.9500e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459	0.0000	193.3376	193.3376	8.0300e-003	0.0000	193.5383
Maximum	**0.0938**	**0.0720**	**0.9234**	**1.9500e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**	**0.0000**	**193.3376**	**193.3376**	**8.0300e-003**	**0.0000**	**193.5383**

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					
2017	0.0938	0.0720	0.9234	1.9500e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459	0.0000	193.3376	193.3376	8.0300e-003	0.0000	193.5383
Maximum	**0.0938**	**0.0720**	**0.9234**	**1.9500e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**	**0.0000**	**193.3376**	**193.3376**	**8.0300e-003**	**0.0000**	**193.5383**

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Summer

	ROG	NOx	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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734
Energy	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632
Mobile	1.5224	6.8298	21.2023	0.0601	4.4091	0.0706	4.4797	1.1803	0.0664	1.2467		6,089.2992	6,089.2992	0.3661		6,098.4508
Total	**3.3753**	**7.1782**	**22.0939**	**0.0633**	**4.4091**	**0.1724**	**4.5815**	**1.1803**	**0.1682**	**1.3485**	**9.3669**	**6,499.8417**	**6,509.2086**	**0.4018**	**7.8300e-003**	**6,521.5874**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734
Energy	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632
Mobile	1.5224	6.8298	21.2023	0.0601	4.4091	0.0706	4.4797	1.1803	0.0664	1.2467		6,089.2992	6,089.2992	0.3661		6,098.4508
Total	**3.3753**	**7.1782**	**22.0939**	**0.0633**	**4.4091**	**0.1724**	**4.5815**	**1.1803**	**0.1682**	**1.3485**	**9.3669**	**6,499.8417**	**6,509.2086**	**0.4018**	**7.8300e-003**	**6,521.5874**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.08

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated 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	0.0938	0.0720	0.9234	1.9500e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459		193.3376	193.3376	8.0300e-003		193.5383
Total	**0.0938**	**0.0720**	**0.9234**	**1.9500e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**		**193.3376**	**193.3376**	**8.0300e-003**		**193.5383**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.0938	0.0720	0.9234	1.9500e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459		193.3376	193.3376	8.0300e-003		193.5383
Total	**0.0938**	**0.0720**	**0.9234**	**1.9500e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**		**193.3376**	**193.3376**	**8.0300e-003**		**193.5383**

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	1.5224	6.8298	21.2023	0.0601	4.4091	0.0706	4.4797	1.1803	0.0664	1.2467		6,089.2992	6,089.2992	0.3661		6,098.4508
Unmitigated	1.5224	6.8298	21.2023	0.0601	4.4091	0.0706	4.4797	1.1803	0.0664	1.2467		6,089.2992	6,089.2992	0.3661		6,098.4508

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	351.19	74.17	38.21	1,181,918	1,181,918
Other Asphalt Surfaces	0.00	0.00	0.00		
Place of Worship	41.44	68.75	242.86	158,069	158,069
Single Family Housing	0.00	0.00	0.00		
Total	392.63	142.92	281.07	1,339,988	1,339,988

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 Light Industry	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
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Other Asphalt Surfaces	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Place of Worship	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Single Family Housing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

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	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632
NaturalGas Unmitigated	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632

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 Light Industry	2897.25	0.0312	0.2840	0.2386	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.8528	340.8528	6.5300e-003	6.2500e-003	342.8783
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
Place of Worship	341.854	3.6900e-003	0.0335	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.2181	40.2181	7.7000e-004	7.4000e-004	40.4571
Single Family Housing	95.7175	1.0300e-003	8.8200e-003	3.7500e-003	6.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		11.2609	11.2609	2.2000e-004	2.1000e-004	11.3278
Total		**0.0360**	**0.3264**	**0.2705**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.3318**	**392.3318**	**7.5200e-003**	**7.2000e-003**	**394.6632**

5.2 Energy by Land Use - NaturalGas

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 Light Industry	2.89725	0.0312	0.2840	0.2386	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.8528	340.8528	6.5300e-003	6.2500e-003	342.8783
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
Place of Worship	0.341854	3.6900e-003	0.0335	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.2181	40.2181	7.7000e-004	7.4000e-004	40.4571
Single Family Housing	0.0957175	1.0300e-003	8.8200e-003	3.7500e-003	6.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		11.2609	11.2609	2.2000e-004	2.1000e-004	11.3278
Total		**0.0360**	**0.3264**	**0.2705**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.3318**	**392.3318**	**7.5200e-003**	**7.2000e-003**	**394.6632**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734
Unmitigated	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734

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	0.1805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2620	0.0208	0.5086	1.3000e-003		0.0764	0.0764		0.0764	0.0764	9.3669	18.0000	27.3669	0.0279	6.4000e-004	28.2547
Landscaping	5.3700e-003	1.2400e-003	0.1125	1.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004		0.2107	0.2107	3.2000e-004		0.2187
Total	**1.8169**	**0.0220**	**0.6210**	**1.3100e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**	**9.3669**	**18.2107**	**27.5776**	**0.0283**	**6.4000e-004**	**28.4734**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2620	0.0208	0.5086	1.3000e-003		0.0764	0.0764		0.0764	0.0764	9.3669	18.0000	27.3669	0.0279	6.4000e-004	28.2547
Landscaping	5.3700e-003	1.2400e-003	0.1125	1.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004		0.2107	0.2107	3.2000e-004		0.2187
Total	**1.8169**	**0.0220**	**0.6210**	**1.3100e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**	**9.3669**	**18.2107**	**27.5776**	**0.0283**	**6.4000e-004**	**28.4734**

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

Alexan Spcific Plan (Existing Emissions)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	6.63	1000sqft	0.15	6,630.00	0
General Light Industry	56.19	1000sqft	1.29	56,190.00	0
Other Asphalt Surfaces	221.19	1000sqft	5.08	221,190.00	0
Single Family Housing	1.00	Dwelling Unit	0.27	2,368.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.87	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan.
SCE CO2 intensity based on 2017 corporate sustainability report (p. 10) and adjusted down to reflect estimated SCE 2018 RPS mix.
SCE CH4 and N2O intensity basd on USEPA EGRID emission factors for CAMX Subregion, WECC California.

Land Use - Land use information reflects existing conditions. See Draft EIR Table 3-4 and Appendix M.

Construction Phase - Existing emissions estimate - no construction emissions estimated.

Off-road Equipment - Existing emissions estimate - no construction emissions estimated.

Trips and VMT - Existing emissions estimate - no construction emissions estimated.

Vehicle Trips - Weekday trip rate from TIA (Table B). Calculated by dividing total existing trips (393) by total existing trip generating sf (6.630 KSF + 56,190 KSF). Calculation excludes the 1 SFR on-site.

Energy Use - T24 electric energy, lighting energy, and T24 natural gas energy intensities reduced to reflect 2008 energy code values per data in CalEEMod Appendix E5, Tables 1, 3, and 4.

Water And Wastewater - All water use assumed to be indoor water use. Existing indoor water use estimate is from project Water Supply Assessment.

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	443.48	789.69
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	21,090.59	28,552.89
tblLandUse	LandUseSquareFeet	1,800.00	2,368.00
tblLandUse	LotAcreage	0.32	0.27
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Winter

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.87
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.97	6.25
tblVehicleTrips	WD_TR	9.11	6.25
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	12,993,937.50	391,021.00
tblWater	IndoorWaterUseRate	207,445.46	0.00
tblWater	IndoorWaterUseRate	65,154.03	0.00
tblWater	OutdoorWaterUseRate	324,465.98	0.00
tblWater	OutdoorWaterUseRate	41,075.36	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.1037	0.0797	0.8549	1.8300e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459	0.0000	182.0869	182.0869	7.6100e-003	0.0000	182.2772
Maximum	**0.1037**	**0.0797**	**0.8549**	**1.8300e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**	**0.0000**	**182.0869**	**182.0869**	**7.6100e-003**	**0.0000**	**182.2772**

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					
2017	0.1037	0.0797	0.8549	1.8300e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459	0.0000	182.0869	182.0869	7.6100e-003	0.0000	182.2772
Maximum	**0.1037**	**0.0797**	**0.8549**	**1.8300e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**	**0.0000**	**182.0869**	**182.0869**	**7.6100e-003**	**0.0000**	**182.2772**

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Winter

	ROG	NOx	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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734
Energy	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632
Mobile	1.4885	7.0534	20.1740	0.0571	4.4091	0.0710	4.4801	1.1803	0.0668	1.2471		5,790.9886	5,790.9886	0.3632		5,800.0672
Total	**3.3414**	**7.4018**	**21.0655**	**0.0604**	**4.4091**	**0.1728**	**4.5819**	**1.1803**	**0.1686**	**1.3489**	**9.3669**	**6,201.5311**	**6,210.8980**	**0.3989**	**7.8300e-003**	**6,223.2038**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734
Energy	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632
Mobile	1.4885	7.0534	20.1740	0.0571	4.4091	0.0710	4.4801	1.1803	0.0668	1.2471		5,790.9886	5,790.9886	0.3632		5,800.0672
Total	**3.3414**	**7.4018**	**21.0655**	**0.0604**	**4.4091**	**0.1728**	**4.5819**	**1.1803**	**0.1686**	**1.3489**	**9.3669**	**6,201.5311**	**6,210.8980**	**0.3989**	**7.8300e-003**	**6,223.2038**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.08

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated 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	0.1037	0.0797	0.8549	1.8300e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459		182.0869	182.0869	7.6100e-003		182.2772
Total	**0.1037**	**0.0797**	**0.8549**	**1.8300e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**		**182.0869**	**182.0869**	**7.6100e-003**		**182.2772**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.1037	0.0797	0.8549	1.8300e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459		182.0869	182.0869	7.6100e-003		182.2772
Total	**0.1037**	**0.0797**	**0.8549**	**1.8300e-003**	**0.1677**	**1.5600e-003**	**0.1692**	**0.0445**	**1.4400e-003**	**0.0459**		**182.0869**	**182.0869**	**7.6100e-003**		**182.2772**

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	1.4885	7.0534	20.1740	0.0571	4.4091	0.0710	4.4801	1.1803	0.0668	1.2471		5,790.9886	5,790.9886	0.3632		5,800.0672
Unmitigated	1.4885	7.0534	20.1740	0.0571	4.4091	0.0710	4.4801	1.1803	0.0668	1.2471		5,790.9886	5,790.9886	0.3632		5,800.0672

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	351.19	74.17	38.21	1,181,918	1,181,918
Other Asphalt Surfaces	0.00	0.00	0.00		
Place of Worship	41.44	68.75	242.86	158,069	158,069
Single Family Housing	0.00	0.00	0.00		
Total	392.63	142.92	281.07	1,339,988	1,339,988

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 Light Industry	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
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Other Asphalt Surfaces	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Place of Worship	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Single Family Housing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

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	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632
NaturalGas Unmitigated	0.0360	0.3264	0.2705	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.3318	392.3318	7.5200e-003	7.1900e-003	394.6632

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 Light Industry	2897.25	0.0312	0.2840	0.2386	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.8528	340.8528	6.5300e-003	6.2500e-003	342.8783
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
Place of Worship	341.854	3.6900e-003	0.0335	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.2181	40.2181	7.7000e-004	7.4000e-004	40.4571
Single Family Housing	95.7175	1.0300e-003	8.8200e-003	3.7500e-003	6.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		11.2609	11.2609	2.2000e-004	2.1000e-004	11.3278
Total		**0.0360**	**0.3264**	**0.2705**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.3318**	**392.3318**	**7.5200e-003**	**7.2000e-003**	**394.6632**

5.2 Energy by Land Use - NaturalGas

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 Light Industry	2.89725	0.0312	0.2840	0.2386	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.8528	340.8528	6.5300e-003	6.2500e-003	342.8783
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
Place of Worship	0.341854	3.6900e-003	0.0335	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.2181	40.2181	7.7000e-004	7.4000e-004	40.4571
Single Family Housing	0.0957175	1.0300e-003	8.8200e-003	3.7500e-003	6.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		11.2609	11.2609	2.2000e-004	2.1000e-004	11.3278
Total		**0.0360**	**0.3264**	**0.2705**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.3318**	**392.3318**	**7.5200e-003**	**7.2000e-003**	**394.6632**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734
Unmitigated	1.8169	0.0220	0.6210	1.3000e-003		0.0770	0.0770		0.0770	0.0770	9.3669	18.2107	27.5776	0.0283	6.4000e-004	28.4734

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	0.1805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2620	0.0208	0.5086	1.3000e-003		0.0764	0.0764		0.0764	0.0764	9.3669	18.0000	27.3669	0.0279	6.4000e-004	28.2547
Landscaping	5.3700e-003	1.2400e-003	0.1125	1.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004		0.2107	0.2107	3.2000e-004		0.2187
Total	**1.8169**	**0.0220**	**0.6210**	**1.3100e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**	**9.3669**	**18.2107**	**27.5776**	**0.0283**	**6.4000e-004**	**28.4734**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2620	0.0208	0.5086	1.3000e-003		0.0764	0.0764		0.0764	0.0764	9.3669	18.0000	27.3669	0.0279	6.4000e-004	28.2547
Landscaping	5.3700e-003	1.2400e-003	0.1125	1.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004		0.2107	0.2107	3.2000e-004		0.2187
Total	**1.8169**	**0.0220**	**0.6210**	**1.3100e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**	**9.3669**	**18.2107**	**27.5776**	**0.0283**	**6.4000e-004**	**28.4734**

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

Alexan Spcific Plan (Existing Emissions)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	6.63	1000sqft	0.15	6,630.00	0
General Light Industry	56.19	1000sqft	1.29	56,190.00	0
Other Asphalt Surfaces	221.19	1000sqft	5.08	221,190.00	0
Single Family Housing	1.00	Dwelling Unit	0.27	2,368.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.87	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan.
SCE CO2 intensity based on 2017 corporate sustainability report (p. 10) and adjusted down to reflect estimated SCE 2018 RPS mix.
SCE CH4 and N2O intensity basd on USEPA EGRID emission factors for CAMX Subregion, WECC California.

Land Use - Land use information reflects existing conditions. See Draft EIR Table 3-4 and Appendix M.

Construction Phase - Existing emissions estimate - no construction emissions estimated.

Off-road Equipment - Existing emissions estimate - no construction emissions estimated.

Trips and VMT - Existing emissions estimate - no construction emissions estimated.

Vehicle Trips - Weekday trip rate from TIA (Table B). Calculated by dividing total existing trips (393) by total existing trip generating sf (6.630 KSF + 56,190 KSF). Calculation excludes the 1 SFR on-site.

Energy Use - T24 electric energy, lighting energy, and T24 natural gas energy intensities reduced to reflect 2008 energy code values per data in CalEEMod Appendix E5, Tables 1, 3, and 4.

Water And Wastewater - All water use assumed to be indoor water use. Existing indoor water use estimate is from project Water Supply Assessment.

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	443.48	789.69
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	21,090.59	28,552.89
tblLandUse	LandUseSquareFeet	1,800.00	2,368.00
tblLandUse	LotAcreage	0.32	0.27
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Alexan Spcific Plan (Existing Emissions) - Los Angeles-South Coast County, Annual

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.87
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.97	6.25
tblVehicleTrips	WD_TR	9.11	6.25
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	12,993,937.50	391,021.00
tblWater	IndoorWaterUseRate	207,445.46	0.00
tblWater	IndoorWaterUseRate	65,154.03	0.00
tblWater	OutdoorWaterUseRate	324,465.98	0.00
tblWater	OutdoorWaterUseRate	41,075.36	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0840	0.0840	0.0000	0.0000	0.0841
Maximum	**5.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0840**	**0.0840**	**0.0000**	**0.0000**	**0.0841**

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					
2017	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0840	0.0840	0.0000	0.0000	0.0841
Maximum	**5.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0840**	**0.0840**	**0.0000**	**0.0000**	**0.0841**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2017**	**3-31-2017**	0.0001	0.0001
		Highest	0.0001	0.0001

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	0.2867	4.1000e-004	0.0204	2.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.1062	0.2280	0.3342	3.5000e-004	1.0000e-005	0.3452
Energy	6.5600e-003	0.0596	0.0494	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	249.1553	249.1553	0.0125	2.5600e-003	250.2307
Mobile	0.1611	0.8163	2.3615	6.7800e-003	0.5087	8.2500e-003	0.5169	0.1364	7.7700e-003	0.1442	0.0000	623.3493	623.3493	0.0381	0.0000	624.3009
Waste						0.0000	0.0000		0.0000	0.0000	22.0651	0.0000	22.0651	1.3040	0.0000	54.6654
Water						0.0000	0.0000		0.0000	0.0000	0.1241	1.2445	1.3686	0.0128	3.1000e-004	1.7814
Total	**0.4544**	**0.8763**	**2.4313**	**7.1600e-003**	**0.5087**	**0.0138**	**0.5225**	**0.1364**	**0.0133**	**0.1497**	**22.2954**	**873.9771**	**896.2725**	**1.3678**	**2.8800e-003**	**931.3236**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2867	4.1000e-004	0.0204	2.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.1062	0.2280	0.3342	3.5000e-004	1.0000e-005	0.3452
Energy	6.5600e-003	0.0596	0.0494	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	249.1553	249.1553	0.0125	2.5600e-003	250.2307
Mobile	0.1611	0.8163	2.3615	6.7800e-003	0.5087	8.2500e-003	0.5169	0.1364	7.7700e-003	0.1442	0.0000	623.3493	623.3493	0.0381	0.0000	624.3009
Waste						0.0000	0.0000		0.0000	0.0000	22.0651	0.0000	22.0651	1.3040	0.0000	54.6654
Water						0.0000	0.0000		0.0000	0.0000	0.1241	1.2445	1.3686	0.0128	3.1000e-004	1.7814
Total	**0.4544**	**0.8763**	**2.4313**	**7.1600e-003**	**0.5087**	**0.0138**	**0.5225**	**0.1364**	**0.0133**	**0.1497**	**22.2954**	**873.9771**	**896.2725**	**1.3678**	**2.8800e-003**	**931.3236**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.08

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

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

Unmitigated 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	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0840	0.0840	0.0000	0.0000	0.0841
Total	**5.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0840**	**0.0840**	**0.0000**	**0.0000**	**0.0841**

3.2 Demolition - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0840	0.0840	0.0000	0.0000	0.0841
Total	**5.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0840**	**0.0840**	**0.0000**	**0.0000**	**0.0841**

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	0.1611	0.8163	2.3615	6.7800e-003	0.5087	8.2500e-003	0.5169	0.1364	7.7700e-003	0.1442	0.0000	623.3493	623.3493	0.0381	0.0000	624.3009
Unmitigated	0.1611	0.8163	2.3615	6.7800e-003	0.5087	8.2500e-003	0.5169	0.1364	7.7700e-003	0.1442	0.0000	623.3493	623.3493	0.0381	0.0000	624.3009

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	351.19	74.17	38.21	1,181,918	1,181,918
Other Asphalt Surfaces	0.00	0.00	0.00		
Place of Worship	41.44	68.75	242.86	158,069	158,069
Single Family Housing	0.00	0.00	0.00		
Total	392.63	142.92	281.07	1,339,988	1,339,988

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 Light Industry	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
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Other Asphalt Surfaces	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Place of Worship	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Single Family Housing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

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	184.2004	184.2004	0.0113	1.3700e-003	184.8898
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	184.2004	184.2004	0.0113	1.3700e-003	184.8898
NaturalGas Mitigated	6.5600e-003	0.0596	0.0494	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	64.9549	64.9549	1.2400e-003	1.1900e-003	65.3409
NaturalGas Unmitigated	6.5600e-003	0.0596	0.0494	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	64.9549	64.9549	1.2400e-003	1.1900e-003	65.3409

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 Light Industry	1.0575e+006	5.7000e-003	0.0518	0.0435	3.1000e-004		3.9400e-003	3.9400e-003		3.9400e-003	3.9400e-003	0.0000	56.4320	56.4320	1.0800e-003	1.0300e-003	56.7674
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
Place of Worship	124777	6.7000e-004	6.1200e-003	5.1400e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	6.6586	6.6586	1.3000e-004	1.2000e-004	6.6981
Single Family Housing	34936.9	1.9000e-004	1.6100e-003	6.9000e-004	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8644	1.8644	4.0000e-005	3.0000e-005	1.8754
Total		**6.5600e-003**	**0.0596**	**0.0494**	**3.6000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**64.9549**	**64.9549**	**1.2500e-003**	**1.1800e-003**	**65.3409**

5.2 Energy by Land Use - NaturalGas

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 Light Industry	1.0575e+006	5.7000e-003	0.0518	0.0435	3.1000e-004		3.9400e-003	3.9400e-003		3.9400e-003	3.9400e-003	0.0000	56.4320	56.4320	1.0800e-003	1.0300e-003	56.7674
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
Place of Worship	124777	6.7000e-004	6.1200e-003	5.1400e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	6.6586	6.6586	1.3000e-004	1.2000e-004	6.6981
Single Family Housing	34936.9	1.9000e-004	1.6100e-003	6.9000e-004	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8644	1.8644	4.0000e-005	3.0000e-005	1.8754
Total		**6.5600e-003**	**0.0596**	**0.0494**	**3.6000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**64.9549**	**64.9549**	**1.2500e-003**	**1.1800e-003**	**65.3409**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	666413	162.8896	9.9800e-003	1.2100e-003	163.4993
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	78631.8	19.2198	1.1800e-003	1.4000e-004	19.2917
Single Family Housing	8554.5	2.0910	1.3000e-004	2.0000e-005	2.0988
Total		**184.2004**	**0.0113**	**1.3700e-003**	**184.8898**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	666413	162.8896	9.9800e-003	1.2100e-003	163.4993
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	78631.8	19.2198	1.1800e-003	1.4000e-004	19.2917
Single Family Housing	8554.5	2.0910	1.3000e-004	2.0000e-005	2.0988
Total		**184.2004**	**0.0113**	**1.3700e-003**	**184.8898**

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	0.2867	4.1000e-004	0.0204	2.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.1062	0.2280	0.3342	3.5000e-004	1.0000e-005	0.3452
Unmitigated	0.2867	4.1000e-004	0.0204	2.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.1062	0.2280	0.3342	3.5000e-004	1.0000e-005	0.3452

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	0.0329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.2800e-003	2.6000e-004	6.3600e-003	2.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.1062	0.2041	0.3103	3.2000e-004	1.0000e-005	0.3204
Landscaping	6.7000e-004	1.5000e-004	0.0141	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0239	0.0239	4.0000e-005	0.0000	0.0248
Total	**0.2867**	**4.1000e-004**	**0.0204**	**2.0000e-005**		**1.0200e-003**	**1.0200e-003**		**1.0200e-003**	**1.0200e-003**	**0.1062**	**0.2280**	**0.3342**	**3.6000e-004**	**1.0000e-005**	**0.3452**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.2800e-003	2.6000e-004	6.3600e-003	2.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.1062	0.2041	0.3103	3.2000e-004	1.0000e-005	0.3204
Landscaping	6.7000e-004	1.5000e-004	0.0141	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0239	0.0239	4.0000e-005	0.0000	0.0248
Total	**0.2867**	**4.1000e-004**	**0.0204**	**2.0000e-005**		**1.0200e-003**	**1.0200e-003**		**1.0200e-003**	**1.0200e-003**	**0.1062**	**0.2280**	**0.3342**	**3.6000e-004**	**1.0000e-005**	**0.3452**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3686	0.0128	3.1000e-004	1.7814
Unmitigated	1.3686	0.0128	3.1000e-004	1.7814

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.391021 / 0	1.3686	0.0128	3.1000e-004	1.7814
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.3686**	**0.0128**	**3.1000e-004**	**1.7814**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.391021 / 0	1.3686	0.0128	3.1000e-004	1.7814
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.3686**	**0.0128**	**3.1000e-004**	**1.7814**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.0651	1.3040	0.0000	54.6654
Unmitigated	22.0651	1.3040	0.0000	54.6654

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	69.68	14.1444	0.8359	0.0000	35.0422
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	37.79	7.6710	0.4533	0.0000	19.0047
Single Family Housing	1.23	0.2497	0.0148	0.0000	0.6186
Total		**22.0651**	**1.3040**	**0.0000**	**54.6654**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	69.68	14.1444	0.8359	0.0000	35.0422
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	37.79	7.6710	0.4533	0.0000	19.0047
Single Family Housing	1.23	0.2497	0.0148	0.0000	0.6186
Total		**22.0651**	**1.3040**	**0.0000**	**54.6654**

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

Alexan GPCZA (Existing Emissions)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	14.56	1000sqft	0.33	14,560.00	0
Unrefrigerated Warehouse-No Rail	10.12	1000sqft	0.23	10,120.00	0
Other Asphalt Surfaces	46.33	1000sqft	1.06	46,325.00	0
Single Family Housing	4.00	Dwelling Unit	1.20	3,720.00	11

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.87	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Existing Emissions) - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan.
SCE CO2 intensity based on 2017 corporate sustainability report (p. 10) and adjusted down to reflect estimated SCE 2018 RPS mix.
SCE CH4 and N2O intensity basd on USEPA EGRID emission factors for CAMX Subregion, WECC California

Land Use - Land use information reflects existing conditions. See Draft EIR Table 3-4 and Appendix M.

Construction Phase - Existing emissions estimate - no construction emissions estimated.

Off-road Equipment - Existing emissions estimate - no construction emissions estimated.

Vehicle Trips -

Energy Use - T24 electric energy, lighting energy, and T24 natural gas energy intensities reduced to reflect 2008 energy code values per data in CalEEMod Appendix E5, Tables 1, 3, and 4.

Alexan GPCZA (Existing Emissions) - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	LightingElect	1.91	2.10
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	443.48	789.69
tblEnergyUse	T24E	0.65	0.78
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	21,090.59	28,552.89
tblEnergyUse	T24NG	0.84	0.88
tblLandUse	LandUseSquareFeet	46,330.00	46,325.00
tblLandUse	LandUseSquareFeet	7,200.00	3,720.00
tblLandUse	LotAcreage	1.30	1.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.87
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	0.00	13.00

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					
2017	0.0813	0.0624	0.8003	1.6900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398	0.0000	167.5593	167.5593	6.9600e-003	0.0000	167.7332
Maximum	**0.0813**	**0.0624**	**0.8003**	**1.6900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**	**0.0000**	**167.5593**	**167.5593**	**6.9600e-003**	**0.0000**	**167.7332**

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					
2017	0.0813	0.0624	0.8003	1.6900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398	0.0000	167.5593	167.5593	6.9600e-003	0.0000	167.7332
Maximum	**0.0813**	**0.0624**	**0.8003**	**1.6900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**	**0.0000**	**167.5593**	**167.5593**	**6.9600e-003**	**0.0000**	**167.7332**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444
Energy	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441
Mobile	0.4418	2.0518	6.5727	0.0189	1.3988	0.0222	1.4210	0.3745	0.0209	0.3953		1,917.3309	1,917.3309	0.1137		1,920.1722
Total	**2.1707**	**2.2501**	**9.0255**	**0.0248**	**1.3988**	**0.3382**	**1.7370**	**0.3745**	**0.3369**	**0.7113**	**37.4677**	**2,126.2746**	**2,163.7423**	**0.2286**	**5.0400e-003**	**2,170.9607**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444
Energy	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441
Mobile	0.4418	2.0518	6.5727	0.0189	1.3988	0.0222	1.4210	0.3745	0.0209	0.3953		1,917.3309	1,917.3309	0.1137		1,920.1722
Total	**2.1707**	**2.2501**	**9.0255**	**0.0248**	**1.3988**	**0.3382**	**1.7370**	**0.3745**	**0.3369**	**0.7113**	**37.4677**	**2,126.2746**	**2,163.7423**	**0.2286**	**5.0400e-003**	**2,170.9607**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.06

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated 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	0.0813	0.0624	0.8003	1.6900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398		167.5593	167.5593	6.9600e-003		167.7332
Total	**0.0813**	**0.0624**	**0.8003**	**1.6900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**		**167.5593**	**167.5593**	**6.9600e-003**		**167.7332**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.0813	0.0624	0.8003	1.6900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398		167.5593	167.5593	6.9600e-003		167.7332
Total	**0.0813**	**0.0624**	**0.8003**	**1.6900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**		**167.5593**	**167.5593**	**6.9600e-003**		**167.7332**

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	0.4418	2.0518	6.5727	0.0189	1.3988	0.0222	1.4210	0.3745	0.0209	0.3953		1,917.3309	1,917.3309	0.1137		1,920.1722
Unmitigated	0.4418	2.0518	6.5727	0.0189	1.3988	0.0222	1.4210	0.3745	0.0209	0.3953		1,917.3309	1,917.3309	0.1137		1,920.1722

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	101.48	19.22	9.90	339,419	339,419
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	38.08	39.64	34.48	129,129	129,129
Unrefrigerated Warehouse-No Rail	17.00	17.00	17.00	72,864	72,864
Total	156.56	75.86	61.38	541,412	541,412

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 Light Industry	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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Other Asphalt Surfaces	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Single Family Housing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

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	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441
NaturalGas Unmitigated	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441

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 Light Industry	750.738	8.1000e-003	0.0736	0.0618	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.3221	88.3221	1.6900e-003	1.6200e-003	88.8469
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
Single Family Housing	382.87	4.1300e-003	0.0353	0.0150	2.3000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		45.0435	45.0435	8.6000e-004	8.3000e-004	45.3112
Unrefrigerated Warehouse-No Rail	25.2307	2.7000e-004	2.4700e-003	2.0800e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		2.9683	2.9683	6.0000e-005	5.0000e-005	2.9860
Total		**0.0125**	**0.1114**	**0.0789**	**6.8000e-004**		**8.6300e-003**	**8.6300e-003**		**8.6300e-003**	**8.6300e-003**		**136.3339**	**136.3339**	**2.6100e-003**	**2.5000e-003**	**137.1441**

5.2 Energy by Land Use - NaturalGas

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 Light Industry	0.750738	8.1000e-003	0.0736	0.0618	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.3221	88.3221	1.6900e-003	1.6200e-003	88.8469
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
Single Family Housing	0.38287	4.1300e-003	0.0353	0.0150	2.3000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		45.0435	45.0435	8.6000e-004	8.3000e-004	45.3112
Unrefrigerated Warehouse-No Rail	0.0252307	2.7000e-004	2.4700e-003	2.0800e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		2.9683	2.9683	6.0000e-005	5.0000e-005	2.9860
Total		**0.0125**	**0.1114**	**0.0789**	**6.8000e-004**		**8.6300e-003**	**8.6300e-003**		**8.6300e-003**	**8.6300e-003**		**136.3339**	**136.3339**	**2.6100e-003**	**2.5000e-003**	**137.1441**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444
Unmitigated	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444

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	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0830	2.0342	5.1900e-003		0.3056	0.3056		0.3056	0.3056	37.4677	72.0000	109.4677	0.1117	2.5400e-003	113.0189
Landscaping	0.0110	3.9300e-003	0.3397	2.0000e-005		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		0.6098	0.6098	6.3000e-004		0.6255
Total	**1.7164**	**0.0869**	**2.3739**	**5.2100e-003**		**0.3074**	**0.3074**		**0.3074**	**0.3074**	**37.4677**	**72.6098**	**110.0774**	**0.1124**	**2.5400e-003**	**113.6444**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0830	2.0342	5.1900e-003		0.3056	0.3056		0.3056	0.3056	37.4677	72.0000	109.4677	0.1117	2.5400e-003	113.0189
Landscaping	0.0110	3.9300e-003	0.3397	2.0000e-005		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		0.6098	0.6098	6.3000e-004		0.6255
Total	**1.7164**	**0.0869**	**2.3739**	**5.2100e-003**		**0.3074**	**0.3074**		**0.3074**	**0.3074**	**37.4677**	**72.6098**	**110.0774**	**0.1124**	**2.5400e-003**	**113.6444**

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

Alexan GPCZA (Existing Emissions)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	14.56	1000sqft	0.33	14,560.00	0
Unrefrigerated Warehouse-No Rail	10.12	1000sqft	0.23	10,120.00	0
Other Asphalt Surfaces	46.33	1000sqft	1.06	46,325.00	0
Single Family Housing	4.00	Dwelling Unit	1.20	3,720.00	11

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.87	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Existing Emissions) - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan.
SCE CO2 intensity based on 2017 corporate sustainability report (p. 10) and adjusted down to reflect estimated SCE 2018 RPS mix.
SCE CH4 and N2O intensity basd on USEPA EGRID emission factors for CAMX Subregion, WECC California

Land Use - Land use information reflects existing conditions. See Draft EIR Table 3-4 and Appendix M.

Construction Phase - Existing emissions estimate - no construction emissions estimated.

Off-road Equipment - Existing emissions estimate - no construction emissions estimated.

Vehicle Trips -

Energy Use - T24 electric energy, lighting energy, and T24 natural gas energy intensities reduced to reflect 2008 energy code values per data in CalEEMod Appendix E5, Tables 1, 3, and 4.

Alexan GPCZA (Existing Emissions) - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	LightingElect	1.91	2.10
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	443.48	789.69
tblEnergyUse	T24E	0.65	0.78
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	21,090.59	28,552.89
tblEnergyUse	T24NG	0.84	0.88
tblLandUse	LandUseSquareFeet	46,330.00	46,325.00
tblLandUse	LandUseSquareFeet	7,200.00	3,720.00
tblLandUse	LotAcreage	1.30	1.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.87
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	0.00	13.00

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					
2017	0.0899	0.0691	0.7409	1.5900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398	0.0000	157.8087	157.8087	6.5900e-003	0.0000	157.9735
Maximum	**0.0899**	**0.0691**	**0.7409**	**1.5900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**	**0.0000**	**157.8087**	**157.8087**	**6.5900e-003**	**0.0000**	**157.9735**

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					
2017	0.0899	0.0691	0.7409	1.5900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398	0.0000	157.8087	157.8087	6.5900e-003	0.0000	157.9735
Maximum	**0.0899**	**0.0691**	**0.7409**	**1.5900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**	**0.0000**	**157.8087**	**157.8087**	**6.5900e-003**	**0.0000**	**157.9735**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444
Energy	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441
Mobile	0.4319	2.1253	6.2153	0.0180	1.3988	0.0223	1.4211	0.3745	0.0210	0.3954		1,823.9476	1,823.9476	0.1124		1,826.7576
Total	**2.1608**	**2.3235**	**8.6681**	**0.0239**	**1.3988**	**0.3383**	**1.7371**	**0.3745**	**0.3370**	**0.7115**	**37.4677**	**2,032.8913**	**2,070.3589**	**0.2274**	**5.0400e-003**	**2,077.5462**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444
Energy	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441
Mobile	0.4319	2.1253	6.2153	0.0180	1.3988	0.0223	1.4211	0.3745	0.0210	0.3954		1,823.9476	1,823.9476	0.1124		1,826.7576
Total	**2.1608**	**2.3235**	**8.6681**	**0.0239**	**1.3988**	**0.3383**	**1.7371**	**0.3745**	**0.3370**	**0.7115**	**37.4677**	**2,032.8913**	**2,070.3589**	**0.2274**	**5.0400e-003**	**2,077.5462**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.06

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated 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	0.0899	0.0691	0.7409	1.5900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398		157.8087	157.8087	6.5900e-003		157.9735
Total	**0.0899**	**0.0691**	**0.7409**	**1.5900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**		**157.8087**	**157.8087**	**6.5900e-003**		**157.9735**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.0899	0.0691	0.7409	1.5900e-003	0.1453	1.3500e-003	0.1467	0.0385	1.2500e-003	0.0398		157.8087	157.8087	6.5900e-003		157.9735
Total	**0.0899**	**0.0691**	**0.7409**	**1.5900e-003**	**0.1453**	**1.3500e-003**	**0.1467**	**0.0385**	**1.2500e-003**	**0.0398**		**157.8087**	**157.8087**	**6.5900e-003**		**157.9735**

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	0.4319	2.1253	6.2153	0.0180	1.3988	0.0223	1.4211	0.3745	0.0210	0.3954		1,823.9476	1,823.9476	0.1124		1,826.7576
Unmitigated	0.4319	2.1253	6.2153	0.0180	1.3988	0.0223	1.4211	0.3745	0.0210	0.3954		1,823.9476	1,823.9476	0.1124		1,826.7576

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	101.48	19.22	9.90	339,419	339,419
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	38.08	39.64	34.48	129,129	129,129
Unrefrigerated Warehouse-No Rail	17.00	17.00	17.00	72,864	72,864
Total	156.56	75.86	61.38	541,412	541,412

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 Light Industry	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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Other Asphalt Surfaces	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Single Family Housing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

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	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441
NaturalGas Unmitigated	0.0125	0.1114	0.0789	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003		136.3339	136.3339	2.6100e-003	2.5000e-003	137.1441

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 Light Industry	750.738	8.1000e-003	0.0736	0.0618	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.3221	88.3221	1.6900e-003	1.6200e-003	88.8469
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
Single Family Housing	382.87	4.1300e-003	0.0353	0.0150	2.3000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		45.0435	45.0435	8.6000e-004	8.3000e-004	45.3112
Unrefrigerated Warehouse-No Rail	25.2307	2.7000e-004	2.4700e-003	2.0800e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		2.9683	2.9683	6.0000e-005	5.0000e-005	2.9860
Total		**0.0125**	**0.1114**	**0.0789**	**6.8000e-004**		**8.6300e-003**	**8.6300e-003**		**8.6300e-003**	**8.6300e-003**		**136.3339**	**136.3339**	**2.6100e-003**	**2.5000e-003**	**137.1441**

5.2 Energy by Land Use - NaturalGas

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 Light Industry	0.750738	8.1000e-003	0.0736	0.0618	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.3221	88.3221	1.6900e-003	1.6200e-003	88.8469
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
Single Family Housing	0.38287	4.1300e-003	0.0353	0.0150	2.3000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		45.0435	45.0435	8.6000e-004	8.3000e-004	45.3112
Unrefrigerated Warehouse-No Rail	0.0252307	2.7000e-004	2.4700e-003	2.0800e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		2.9683	2.9683	6.0000e-005	5.0000e-005	2.9860
Total		**0.0125**	**0.1114**	**0.0789**	**6.8000e-004**		**8.6300e-003**	**8.6300e-003**		**8.6300e-003**	**8.6300e-003**		**136.3339**	**136.3339**	**2.6100e-003**	**2.5000e-003**	**137.1441**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444
Unmitigated	1.7164	0.0869	2.3739	5.2100e-003		0.3074	0.3074		0.3074	0.3074	37.4677	72.6098	110.0774	0.1124	2.5400e-003	113.6444

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	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0830	2.0342	5.1900e-003		0.3056	0.3056		0.3056	0.3056	37.4677	72.0000	109.4677	0.1117	2.5400e-003	113.0189
Landscaping	0.0110	3.9300e-003	0.3397	2.0000e-005		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		0.6098	0.6098	6.3000e-004		0.6255
Total	**1.7164**	**0.0869**	**2.3739**	**5.2100e-003**		**0.3074**	**0.3074**		**0.3074**	**0.3074**	**37.4677**	**72.6098**	**110.0774**	**0.1124**	**2.5400e-003**	**113.6444**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0830	2.0342	5.1900e-003		0.3056	0.3056		0.3056	0.3056	37.4677	72.0000	109.4677	0.1117	2.5400e-003	113.0189
Landscaping	0.0110	3.9300e-003	0.3397	2.0000e-005		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		0.6098	0.6098	6.3000e-004		0.6255
Total	**1.7164**	**0.0869**	**2.3739**	**5.2100e-003**		**0.3074**	**0.3074**		**0.3074**	**0.3074**	**37.4677**	**72.6098**	**110.0774**	**0.1124**	**2.5400e-003**	**113.6444**

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

Alexan GPCZA (Existing Emissions)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	14.56	1000sqft	0.33	14,560.00	0
Unrefrigerated Warehouse-No Rail	10.12	1000sqft	0.23	10,120.00	0
Other Asphalt Surfaces	46.33	1000sqft	1.06	46,325.00	0
Single Family Housing	4.00	Dwelling Unit	1.20	3,720.00	11

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.87	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Existing Emissions) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan.
SCE CO2 intensity based on 2017 corporate sustainability report (p. 10) and adjusted down to reflect estimated SCE 2018 RPS mix.
SCE CH4 and N2O intensity basd on USEPA EGRID emission factors for CAMX Subregion, WECC California

Land Use - Land use information reflects existing conditions. See Draft EIR Table 3-4 and Appendix M.

Construction Phase - Existing emissions estimate - no construction emissions estimated.

Off-road Equipment - Existing emissions estimate - no construction emissions estimated.

Vehicle Trips -

Energy Use - T24 electric energy, lighting energy, and T24 natural gas energy intensities reduced to reflect 2008 energy code values per data in CalEEMod Appendix E5, Tables 1, 3, and 4.

Alexan GPCZA (Existing Emissions) - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.10	3.42
tblEnergyUse	LightingElect	1.91	2.10
tblEnergyUse	T24E	2.25	2.69
tblEnergyUse	T24E	443.48	789.69
tblEnergyUse	T24E	0.65	0.78
tblEnergyUse	T24NG	13.65	14.37
tblEnergyUse	T24NG	21,090.59	28,552.89
tblEnergyUse	T24NG	0.84	0.88
tblLandUse	LandUseSquareFeet	46,330.00	46,325.00
tblLandUse	LandUseSquareFeet	7,200.00	3,720.00
tblLandUse	LotAcreage	1.30	1.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.87
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	0.00	13.00

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					
2017	4.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0728	0.0728	0.0000	0.0000	0.0728
Maximum	**4.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0000**	**0.0728**

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					
2017	4.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0728	0.0728	0.0000	0.0000	0.0728
Maximum	**4.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0000**	**0.0728**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2017	3-31-2017	0.0001	0.0001
		Highest	0.0001	0.0001

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	0.1344	1.5300e-003	0.0679	7.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8856	1.3105	1.3400e-003	3.0000e-005	1.3526
Energy	2.2800e-003	0.0203	0.0144	1.2000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003	0.0000	83.5821	83.5821	4.1700e-003	8.7000e-004	83.9446
Mobile	0.0636	0.3255	0.9474	2.7300e-003	0.2055	3.3300e-003	0.2089	0.0551	3.1300e-003	0.0582	0.0000	251.3757	251.3757	0.0153	0.0000	251.7579
Waste						0.0000	0.0000		0.0000	0.0000	6.5099	0.0000	6.5099	0.3847	0.0000	16.1281
Water						0.0000	0.0000		0.0000	0.0000	1.8933	19.4400	21.3334	0.1957	4.7400e-003	27.6360
Total	**0.2003**	**0.3473**	**1.0297**	**2.9200e-003**	**0.2055**	**8.9600e-003**	**0.2145**	**0.0551**	**8.7600e-003**	**0.0639**	**8.8281**	**355.2835**	**364.1116**	**0.6012**	**5.6400e-003**	**380.8191**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1344	1.5300e-003	0.0679	7.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8856	1.3105	1.3400e-003	3.0000e-005	1.3526
Energy	2.2800e-003	0.0203	0.0144	1.2000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003	0.0000	83.5821	83.5821	4.1700e-003	8.7000e-004	83.9446
Mobile	0.0636	0.3255	0.9474	2.7300e-003	0.2055	3.3300e-003	0.2089	0.0551	3.1300e-003	0.0582	0.0000	251.3757	251.3757	0.0153	0.0000	251.7579
Waste						0.0000	0.0000		0.0000	0.0000	6.5099	0.0000	6.5099	0.3847	0.0000	16.1281
Water						0.0000	0.0000		0.0000	0.0000	1.8933	19.4400	21.3334	0.1957	4.7400e-003	27.6360
Total	**0.2003**	**0.3473**	**1.0297**	**2.9200e-003**	**0.2055**	**8.9600e-003**	**0.2145**	**0.0551**	**8.7600e-003**	**0.0639**	**8.8281**	**355.2835**	**364.1116**	**0.6012**	**5.6400e-003**	**380.8191**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.06

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0728	0.0728	0.0000	0.0000	0.0728
Total	**4.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0000**	**0.0728**

3.2 Demolition - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0728	0.0728	0.0000	0.0000	0.0728
Total	**4.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0000**	**0.0728**

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	0.0636	0.3255	0.9474	2.7300e-003	0.2055	3.3300e-003	0.2089	0.0551	3.1300e-003	0.0582	0.0000	251.3757	251.3757	0.0153	0.0000	251.7579
Unmitigated	0.0636	0.3255	0.9474	2.7300e-003	0.2055	3.3300e-003	0.2089	0.0551	3.1300e-003	0.0582	0.0000	251.3757	251.3757	0.0153	0.0000	251.7579

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	101.48	19.22	9.90	339,419	339,419
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	38.08	39.64	34.48	129,129	129,129
Unrefrigerated Warehouse-No Rail	17.00	17.00	17.00	72,864	72,864
Total	156.56	75.86	61.38	541,412	541,412

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 Light Industry	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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Other Asphalt Surfaces	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Single Family Housing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

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	61.0105	61.0105	3.7400e-003	4.5000e-004	61.2389
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	61.0105	61.0105	3.7400e-003	4.5000e-004	61.2389
NaturalGas Mitigated	2.2800e-003	0.0203	0.0144	1.2000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003	0.0000	22.5716	22.5716	4.3000e-004	4.1000e-004	22.7057
NaturalGas Unmitigated	2.2800e-003	0.0203	0.0144	1.2000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003	0.0000	22.5716	22.5716	4.3000e-004	4.1000e-004	22.7057

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 Light Industry	274019	1.4800e-003	0.0134	0.0113	8.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	14.6227	14.6227	2.8000e-004	2.7000e-004	14.7096
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
Single Family Housing	139748	7.5000e-004	6.4400e-003	2.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4575	7.4575	1.4000e-004	1.4000e-004	7.5018
Unrefrigerated Warehouse-No Rail	9209.2	5.0000e-005	4.5000e-004	3.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4914	0.4914	1.0000e-005	1.0000e-005	0.4944
Total		**2.2800e-003**	**0.0203**	**0.0144**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**	**0.0000**	**22.5716**	**22.5716**	**4.3000e-004**	**4.2000e-004**	**22.7057**

5.2 Energy by Land Use - NaturalGas

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 Light Industry	274019	1.4800e-003	0.0134	0.0113	8.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	14.6227	14.6227	2.8000e-004	2.7000e-004	14.7096
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
Single Family Housing	139748	7.5000e-004	6.4400e-003	2.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4575	7.4575	1.4000e-004	1.4000e-004	7.5018
Unrefrigerated Warehouse-No Rail	9209.2	5.0000e-005	4.5000e-004	3.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4914	0.4914	1.0000e-005	1.0000e-005	0.4944
Total		**2.2800e-003**	**0.0203**	**0.0144**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**	**0.0000**	**22.5716**	**22.5716**	**4.3000e-004**	**4.2000e-004**	**22.7057**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	172682	42.2081	2.5800e-003	3.1000e-004	42.3661
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	34218	8.3638	5.1000e-004	6.0000e-005	8.3951
Unrefrigerated Warehouse-No Rail	42706.4	10.4386	6.4000e-004	8.0000e-005	10.4777
Total		**61.0105**	**3.7300e-003**	**4.5000e-004**	**61.2389**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	172682	42.2081	2.5800e-003	3.1000e-004	42.3661
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	34218	8.3638	5.1000e-004	6.0000e-005	8.3951
Unrefrigerated Warehouse-No Rail	42706.4	10.4386	6.4000e-004	8.0000e-005	10.4777
Total		**61.0105**	**3.7300e-003**	**4.5000e-004**	**61.2389**

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	0.1344	1.5300e-003	0.0679	7.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8856	1.3105	1.3400e-003	3.0000e-005	1.3526
Unmitigated	0.1344	1.5300e-003	0.0679	7.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8856	1.3105	1.3400e-003	3.0000e-005	1.3526

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	0.0143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0131	1.0400e-003	0.0254	6.0000e-005		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.4249	0.8165	1.2413	1.2700e-003	3.0000e-005	1.2816
Landscaping	1.3700e-003	4.9000e-004	0.0425	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	0.0691	0.0691	7.0000e-005	0.0000	0.0709
Total	**0.1344**	**1.5300e-003**	**0.0679**	**6.0000e-005**		**4.0500e-003**	**4.0500e-003**		**4.0500e-003**	**4.0500e-003**	**0.4249**	**0.8856**	**1.3105**	**1.3400e-003**	**3.0000e-005**	**1.3525**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0131	1.0400e-003	0.0254	6.0000e-005		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.4249	0.8165	1.2413	1.2700e-003	3.0000e-005	1.2816
Landscaping	1.3700e-003	4.9000e-004	0.0425	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	0.0691	0.0691	7.0000e-005	0.0000	0.0709
Total	**0.1344**	**1.5300e-003**	**0.0679**	**6.0000e-005**		**4.0500e-003**	**4.0500e-003**		**4.0500e-003**	**4.0500e-003**	**0.4249**	**0.8856**	**1.3105**	**1.3400e-003**	**3.0000e-005**	**1.3525**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	21.3334	0.1957	4.7400e-003	27.6360
Unmitigated	21.3334	0.1957	4.7400e-003	27.6360

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.367 / 0	11.7843	0.1104	2.6700e-003	15.3393
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.260616 / 0.164301	1.3583	8.5700e-003	2.1000e-004	1.6352
Unrefrigerated Warehouse-No Rail	2.34025 / 0	8.1907	0.0767	1.8600e-003	10.6616
Total		**21.3334**	**0.1957**	**4.7400e-003**	**27.6360**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.367 / 0	11.7843	0.1104	2.6700e-003	15.3393
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.260616 / 0.164301	1.3583	8.5700e-003	2.1000e-004	1.6352
Unrefrigerated Warehouse-No Rail	2.34025 / 0	8.1907	0.0767	1.8600e-003	10.6616
Total		**21.3334**	**0.1957**	**4.7400e-003**	**27.6360**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5099	0.3847	0.0000	16.1281
Unmitigated	6.5099	0.3847	0.0000	16.1281

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.05	3.6640	0.2165	0.0000	9.0774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.51	0.9155	0.0541	0.0000	2.2681
Unrefrigerated Warehouse-No Rail	9.51	1.9304	0.1141	0.0000	4.7826
Total		**6.5099**	**0.3847**	**0.0000**	**16.1281**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.05	3.6640	0.2165	0.0000	9.0774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.51	0.9155	0.0541	0.0000	2.2681
Unrefrigerated Warehouse-No Rail	9.51	1.9304	0.1141	0.0000	4.7826
Total		**6.5099**	**0.3847**	**0.0000**	**16.1281**

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

Project Emissions Estimates:
Alexan Foothills Specific Plan (2022 and 2035)

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Alexan Specific Plan (Project Emissions 2022)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - Construction phasing and schedule provided by applicant.

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Grading - net material import from Draft EIR Appendix M, Scheet C2.0. Acres graded modified to reflect project specific conditions.

Demolition - Building square footage to be demolished based on Alexan SP area only.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403, control efficiencies from SCAQMD Rule 403 and Countess Environmental, 2006 (WRAP Fugitive Dust Handbook).

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	69
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	69
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	230.00	467.00
tblConstructionPhase	NumDays	20.00	41.00

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	3/23/2021	6/29/2022
tblConstructionPhase	PhaseEndDate	1/26/2021	3/7/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	2/26/2020
tblConstructionPhase	PhaseEndDate	3/10/2020	5/21/2020
tblConstructionPhase	PhaseEndDate	2/23/2021	5/3/2022
tblConstructionPhase	PhaseEndDate	2/11/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	2/24/2021	5/3/2022
tblConstructionPhase	PhaseStartDate	3/11/2020	5/22/2020
tblConstructionPhase	PhaseStartDate	2/12/2020	3/26/2020
tblConstructionPhase	PhaseStartDate	1/27/2021	3/8/2022
tblConstructionPhase	PhaseStartDate	1/29/2020	2/27/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00

tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblGrading	AcresOfGrading	20.50	20.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	MaterialImported	0.00	3,200.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003

tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.8980	53.1613	40.1626	0.1093	18.7977	2.4942	21.2919	10.0413	2.2946	12.3359	0.0000	10,958.4497	10,958.4497	1.4958	0.0000	10,982.8115
2021	4.2164	29.0937	37.9946	0.1073	5.8762	1.0217	6.8979	1.5738	0.9601	2.5339	0.0000	10,762.3784	10,762.3784	0.9437	0.0000	10,785.9708
2022	82.5494	26.6402	36.1885	0.1052	5.8762	0.8681	6.7443	1.5738	0.8162	2.3901	0.0000	10,551.6963	10,551.6963	0.9187	0.0000	10,574.6640
Maximum	**82.5494**	**53.1613**	**40.1626**	**0.1093**	**18.7977**	**2.4942**	**21.2919**	**10.0413**	**2.2946**	**12.3359**	**0.0000**	**10,958.4497**	**10,958.4497**	**1.4958**	**0.0000**	**10,982.8115**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.8980	53.1613	40.1626	0.1093	5.8762	2.4942	7.5955	2.6852	2.2946	4.9798	0.0000	10,958.4497	10,958.4497	1.4958	0.0000	10,982.8115
2021	4.2164	29.0937	37.9946	0.1073	5.8762	1.0217	6.8979	1.5738	0.9601	2.5339	0.0000	10,762.3784	10,762.3784	0.9437	0.0000	10,785.9708
2022	82.5494	26.6402	36.1885	0.1052	5.8762	0.8681	6.7443	1.5738	0.8162	2.3901	0.0000	10,551.6963	10,551.6963	0.9187	0.0000	10,574.6640
Maximum	**82.5494**	**53.1613**	**40.1626**	**0.1093**	**5.8762**	**2.4942**	**7.5955**	**2.6852**	**2.2946**	**4.9798**	**0.0000**	**10,958.4497**	**10,958.4497**	**1.4958**	**0.0000**	**10,982.8115**

	ROG	NOx	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**	**42.30**	**0.00**	**39.21**	**55.77**	**0.00**	**42.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.2742**	**15.2509**	**94.1411**	**0.2335**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4331**	**0.0000**	**28,322.8705**	**28,322.8705**	**0.8009**	**0.1869**	**28,398.5768**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.2742**	**15.2509**	**94.1411**	**0.2335**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4331**	**0.0000**	**28,322.8705**	**28,322.8705**	**0.8009**	**0.1869**	**28,398.5768**

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

3.0 Construction Detail

Construction Phase

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/26/2020	5	41	
2	Site Preparation	Site Preparation	2/27/2020	3/25/2020	5	20	
3	Grading	Grading	3/26/2020	5/21/2020	5	41	
4	Building Construction	Building Construction	5/22/2020	3/7/2022	5	467	
5	Paving	Paving	3/8/2022	5/3/2022	5	41	
6	Architectural Coating	Architectural Coating	5/3/2022	6/29/2022	5	42	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 20

Acres of Paving: 2.59

Residential Indoor: 1,059,075; Residential Outdoor: 353,025; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 21,590 (Architectural Coating – sqft)

OffRoad Equipment

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	3	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	316.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	465.00	106.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	93.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5651	0.0000	1.5651	0.2370	0.0000	0.2370			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.5651**	**1.6587**	**3.2238**	**0.2370**	**1.5419**	**1.7788**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0633	2.0829	0.4616	5.7200e-003	0.1267	6.6500e-003	0.1333	0.0347	6.3600e-003	0.0411		619.9562	619.9562	0.0422		621.0112
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1323**	**2.1320**	**1.1183**	**7.4900e-003**	**0.2943**	**8.0500e-003**	**0.3024**	**0.0792**	**7.6500e-003**	**0.0868**		**796.3732**	**796.3732**	**0.0478**		**797.5672**

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					0.4124	0.0000	0.4124	0.0624	0.0000	0.0624			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.4124**	**1.6587**	**2.0711**	**0.0624**	**1.5419**	**1.6043**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0633	2.0829	0.4616	5.7200e-003	0.1267	6.6500e-003	0.1333	0.0347	6.3600e-003	0.0411		619.9562	619.9562	0.0422		621.0112
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1323**	**2.1320**	**1.1183**	**7.4900e-003**	**0.2943**	**8.0500e-003**	**0.3024**	**0.0792**	**7.6500e-003**	**0.0868**		**796.3732**	**796.3732**	**0.0478**		**797.5672**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931		4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**18.5965**	**2.4925**	**21.0890**	**9.9879**	**2.2931**	**12.2810**		**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

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					4.9002	0.0000	4.9002	2.6318	0.0000	2.6318			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931	0.0000	4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**4.9002**	**2.4925**	**7.3927**	**2.6318**	**2.2931**	**4.9249**	**0.0000**	**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5394	0.0000	6.5394	3.3661	0.0000	3.3661			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5394**	**1.2734**	**7.8128**	**3.3661**	**1.1716**	**4.5376**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0673	2.2162	0.4911	6.0900e-003	0.1348	7.0700e-003	0.1418	0.0369	6.7700e-003	0.0437		659.6167	659.6167	0.0449		660.7392
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1364**	**2.2653**	**1.1479**	**7.8600e-003**	**0.3024**	**8.4700e-003**	**0.3109**	**0.0814**	**8.0600e-003**	**0.0895**		**836.0337**	**836.0337**	**0.0505**		**837.2951**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7231	0.0000	1.7231	0.8870	0.0000	0.8870			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**1.7231**	**1.2734**	**2.9966**	**0.8870**	**1.1716**	**2.0585**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0673	2.2162	0.4911	6.0900e-003	0.1348	7.0700e-003	0.1418	0.0369	6.7700e-003	0.0437		659.6167	659.6167	0.0449		660.7392
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1364**	**2.2653**	**1.1479**	**7.8600e-003**	**0.3024**	**8.4700e-003**	**0.3109**	**0.0814**	**8.0600e-003**	**0.0895**		**836.0337**	**836.0337**	**0.0505**		**837.2951**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3770	11.2755	2.9543	0.0275	0.6786	0.0531	0.7317	0.1954	0.0508	0.2462		2,936.4618	2,936.4618	0.1792		2,940.9416
Worker	2.1399	1.5224	20.3598	0.0549	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,468.9249	5,468.9249	0.1724		5,473.2354
Total	**2.5169**	**12.7978**	**23.3141**	**0.0824**	**5.8762**	**0.0965**	**5.9727**	**1.5738**	**0.0908**	**1.6646**		**8,405.3866**	**8,405.3866**	**0.3516**		**8,414.1770**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3770	11.2755	2.9543	0.0275	0.6786	0.0531	0.7317	0.1954	0.0508	0.2462		2,936.4618	2,936.4618	0.1792		2,940.9416
Worker	2.1399	1.5224	20.3598	0.0549	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,468.9249	5,468.9249	0.1724		5,473.2354
Total	**2.5169**	**12.7978**	**23.3141**	**0.0824**	**5.8762**	**0.0965**	**5.9727**	**1.5738**	**0.0908**	**1.6646**		**8,405.3866**	**8,405.3866**	**0.3516**		**8,414.1770**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

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

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3222	10.2915	2.6905	0.0273	0.6786	0.0211	0.6997	0.1954	0.0201	0.2155		2,913.7347	2,913.7347	0.1717		2,918.0261
Worker	1.9933	1.3701	18.7290	0.0532	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		5,295.2798	5,295.2798	0.1560		5,299.1804
Total	**2.3155**	**11.6616**	**21.4194**	**0.0804**	**5.8762**	**0.0631**	**5.9393**	**1.5738**	**0.0588**	**1.6326**		**8,209.0145**	**8,209.0145**	**0.3277**		**8,217.2065**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3222	10.2915	2.6905	0.0273	0.6786	0.0211	0.6997	0.1954	0.0201	0.2155		2,913.7347	2,913.7347	0.1717		2,918.0261
Worker	1.9933	1.3701	18.7290	0.0532	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		5,295.2798	5,295.2798	0.1560		5,299.1804
Total	**2.3155**	**11.6616**	**21.4194**	**0.0804**	**5.8762**	**0.0631**	**5.9393**	**1.5738**	**0.0588**	**1.6326**		**8,209.0145**	**8,209.0145**	**0.3277**		**8,217.2065**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3024	9.7870	2.5456	0.0270	0.6786	0.0184	0.6970	0.1954	0.0176	0.2130		2,888.3504	2,888.3504	0.1658		2,892.4942
Worker	1.8671	1.2376	17.2795	0.0513	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		5,109.0123	5,109.0123	0.1410		5,112.5376
Total	**2.1695**	**11.0246**	**19.8251**	**0.0783**	**5.8762**	**0.0591**	**5.9353**	**1.5738**	**0.0551**	**1.6289**		**7,997.3627**	**7,997.3627**	**0.3068**		**8,005.0318**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3024	9.7870	2.5456	0.0270	0.6786	0.0184	0.6970	0.1954	0.0176	0.2130		2,888.3504	2,888.3504	0.1658		2,892.4942
Worker	1.8671	1.2376	17.2795	0.0513	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		5,109.0123	5,109.0123	0.1410		5,112.5376
Total	**2.1695**	**11.0246**	**19.8251**	**0.0783**	**5.8762**	**0.0591**	**5.9353**	**1.5738**	**0.0551**	**1.6289**		**7,997.3627**	**7,997.3627**	**0.3068**		**8,005.0318**

3.6 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.7 Architectural Coating - 2022

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	80.3003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452		844.3442	844.3442	0.0550		845.7185
Total	**80.9139**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**		**844.3442**	**844.3442**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.3734	0.2475	3.4559	0.0103	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		1,021.8025	1,021.8025	0.0282		1,022.5075
Total	**0.3734**	**0.2475**	**3.4559**	**0.0103**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**1,021.8025**	**1,021.8025**	**0.0282**		**1,022.5075**

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	80.3003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452	0.0000	844.3441	844.3441	0.0550		845.7185
Total	**80.9139**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**	**0.0000**	**844.3441**	**844.3441**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.3734	0.2475	3.4559	0.0103	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		1,021.8025	1,021.8025	0.0282		1,022.5075
Total	**0.3734**	**0.2475**	**3.4559**	**0.0103**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**1,021.8025**	**1,021.8025**	**0.0282**		**1,022.5075**

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	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566
Unmitigated	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking with Elevator	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
NaturalGas Unmitigated	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756

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					
Apartments Mid Rise	16002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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					
Apartments Mid Rise	16.002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Unmitigated	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446

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	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

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
Emergency Generator	1	0	0	50	0.73	Diesel
Fire Pump	1	0	0	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan Specific Plan (Project Emissions 2022)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - Construction phasing and schedule provided by applicant.

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Grading - net material import from Draft EIR Appendix M, Scheet C2.0. Acres graded modified to reflect project specific conditions.

Demolition - Building square footage to be demolished based on Alexan SP area only.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403, control efficiencies from SCAQMD Rule 403 and Countess Environmental, 2006 (WRAP Fugitive Dust Handbook).

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	69
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	69
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	230.00	467.00
tblConstructionPhase	NumDays	20.00	41.00

tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	3/23/2021	6/29/2022
tblConstructionPhase	PhaseEndDate	1/26/2021	3/7/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	2/26/2020
tblConstructionPhase	PhaseEndDate	3/10/2020	5/21/2020
tblConstructionPhase	PhaseEndDate	2/23/2021	5/3/2022
tblConstructionPhase	PhaseEndDate	2/11/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	2/24/2021	5/3/2022
tblConstructionPhase	PhaseStartDate	3/11/2020	5/22/2020
tblConstructionPhase	PhaseStartDate	2/12/2020	3/26/2020
tblConstructionPhase	PhaseStartDate	1/27/2021	3/8/2022
tblConstructionPhase	PhaseStartDate	1/29/2020	2/27/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00

tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblGrading	AcresOfGrading	20.50	20.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	MaterialImported	0.00	3,200.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003

tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.9072	53.1676	38.7538	0.1054	18.7977	2.4942	21.2919	10.0413	2.2946	12.3359	0.0000	10,558.7279	10,558.7279	1.4954	0.0000	10,583.1318
2021	4.4564	29.2189	36.6752	0.1035	5.8762	1.0223	6.8986	1.5738	0.9607	2.5346	0.0000	10,373.1940	10,373.1940	0.9457	0.0000	10,396.8360
2022	82.5994	26.7457	34.9523	0.1015	5.8762	0.8687	6.7449	1.5738	0.8168	2.3906	0.0000	10,173.7665	10,173.7665	0.9209	0.0000	10,196.7897
Maximum	**82.5994**	**53.1676**	**38.7538**	**0.1054**	**18.7977**	**2.4942**	**21.2919**	**10.0413**	**2.2946**	**12.3359**	**0.0000**	**10,558.7279**	**10,558.7279**	**1.4954**	**0.0000**	**10,583.1318**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.9072	53.1676	38.7538	0.1054	5.8762	2.4942	7.5955	2.6852	2.2946	4.9798	0.0000	10,558.7279	10,558.7279	1.4954	0.0000	10,583.1318
2021	4.4564	29.2189	36.6752	0.1035	5.8762	1.0223	6.8986	1.5738	0.9607	2.5346	0.0000	10,373.1940	10,373.1940	0.9457	0.0000	10,396.8360
2022	82.5994	26.7457	34.9523	0.1015	5.8762	0.8687	6.7449	1.5738	0.8168	2.3906	0.0000	10,173.7665	10,173.7665	0.9209	0.0000	10,196.7897
Maximum	**82.5994**	**53.1676**	**38.7538**	**0.1054**	**5.8762**	**2.4942**	**7.5955**	**2.6852**	**2.2946**	**4.9798**	**0.0000**	**10,558.7279**	**10,558.7279**	**1.4954**	**0.0000**	**10,583.1318**

	ROG	NOx	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**	**42.30**	**0.00**	**39.20**	**55.77**	**0.00**	**42.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.1334**	**15.7347**	**90.7186**	**0.2240**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4332**	**0.0000**	**27,376.6289**	**27,376.6289**	**0.7831**	**0.1869**	**27,451.8909**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.1334**	**15.7347**	**90.7186**	**0.2240**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4332**	**0.0000**	**27,376.6289**	**27,376.6289**	**0.7831**	**0.1869**	**27,451.8909**

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

3.0 Construction Detail

Construction Phase

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/26/2020	5	41	
2	Site Preparation	Site Preparation	2/27/2020	3/25/2020	5	20	
3	Grading	Grading	3/26/2020	5/21/2020	5	41	
4	Building Construction	Building Construction	5/22/2020	3/7/2022	5	467	
5	Paving	Paving	3/8/2022	5/3/2022	5	41	
6	Architectural Coating	Architectural Coating	5/3/2022	6/29/2022	5	42	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 20

Acres of Paving: 2.59

Residential Indoor: 1,059,075; Residential Outdoor: 353,025; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 21,590 (Architectural Coating – sqft)

OffRoad Equipment

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	3	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	316.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	465.00	106.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	93.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5651	0.0000	1.5651	0.2370	0.0000	0.2370			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.5651**	**1.6587**	**3.2238**	**0.2370**	**1.5419**	**1.7788**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0648	2.1099	0.4905	5.6200e-003	0.1267	6.7500e-003	0.1334	0.0347	6.4600e-003	0.0412		609.2803	609.2803	0.0437		610.3737
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1415**	**2.1643**	**1.0920**	**7.2900e-003**	**0.2943**	**8.1500e-003**	**0.3025**	**0.0792**	**7.7500e-003**	**0.0869**		**775.3934**	**775.3934**	**0.0490**		**776.6176**

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					0.4124	0.0000	0.4124	0.0624	0.0000	0.0624			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.4124**	**1.6587**	**2.0711**	**0.0624**	**1.5419**	**1.6043**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0648	2.1099	0.4905	5.6200e-003	0.1267	6.7500e-003	0.1334	0.0347	6.4600e-003	0.0412		609.2803	609.2803	0.0437		610.3737
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1415**	**2.1643**	**1.0920**	**7.2900e-003**	**0.2943**	**8.1500e-003**	**0.3025**	**0.0792**	**7.7500e-003**	**0.0869**		**775.3934**	**775.3934**	**0.0490**		**776.6176**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931		4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**18.5965**	**2.4925**	**21.0890**	**9.9879**	**2.2931**	**12.2810**		**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9002	0.0000	4.9002	2.6318	0.0000	2.6318			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931	0.0000	4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**4.9002**	**2.4925**	**7.3927**	**2.6318**	**2.2931**	**4.9249**	**0.0000**	**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

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

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5394	0.0000	6.5394	3.3661	0.0000	3.3661			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5394**	**1.2734**	**7.8128**	**3.3661**	**1.1716**	**4.5376**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0690	2.2449	0.5219	5.9800e-003	0.1348	7.1800e-003	0.1419	0.0369	6.8700e-003	0.0438		648.2579	648.2579	0.0465		649.4211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1456**	**2.2992**	**1.1234**	**7.6500e-003**	**0.3024**	**8.5800e-003**	**0.3110**	**0.0814**	**8.1600e-003**	**0.0896**		**814.3709**	**814.3709**	**0.0518**		**815.6651**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7231	0.0000	1.7231	0.8870	0.0000	0.8870			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**1.7231**	**1.2734**	**2.9966**	**0.8870**	**1.1716**	**2.0585**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0690	2.2449	0.5219	5.9800e-003	0.1348	7.1800e-003	0.1419	0.0369	6.8700e-003	0.0438		648.2579	648.2579	0.0465		649.4211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1456**	**2.2992**	**1.1234**	**7.6500e-003**	**0.3024**	**8.5800e-003**	**0.3110**	**0.0814**	**8.1600e-003**	**0.0896**		**814.3709**	**814.3709**	**0.0518**		**815.6651**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3941	11.2732	3.2583	0.0268	0.6786	0.0539	0.7325	0.1954	0.0516	0.2470		2,856.1601	2,856.1601	0.1910		2,860.9348
Worker	2.3763	1.6855	18.6470	0.0517	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,149.5048	5,149.5048	0.1623		5,153.5625
Total	**2.7704**	**12.9586**	**21.9053**	**0.0785**	**5.8762**	**0.0974**	**5.9736**	**1.5738**	**0.0916**	**1.6654**		**8,005.6649**	**8,005.6649**	**0.3533**		**8,014.4973**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3941	11.2732	3.2583	0.0268	0.6786	0.0539	0.7325	0.1954	0.0516	0.2470		2,856.1601	2,856.1601	0.1910		2,860.9348
Worker	2.3763	1.6855	18.6470	0.0517	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,149.5048	5,149.5048	0.1623		5,153.5625
Total	**2.7704**	**12.9586**	**21.9053**	**0.0785**	**5.8762**	**0.0974**	**5.9736**	**1.5738**	**0.0916**	**1.6654**		**8,005.6649**	**8,005.6649**	**0.3533**		**8,014.4973**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

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

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3383	10.2702	2.9762	0.0265	0.6786	0.0217	0.7004	0.1954	0.0208	0.2162		2,833.8626	2,833.8626	0.1829		2,838.4362
Worker	2.2172	1.5166	17.1239	0.0500	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		4,985.9676	4,985.9676	0.1467		4,989.6355
Total	**2.5555**	**11.7868**	**20.1000**	**0.0766**	**5.8762**	**0.0637**	**5.9400**	**1.5738**	**0.0595**	**1.6333**		**7,819.8301**	**7,819.8301**	**0.3297**		**7,828.0717**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3383	10.2702	2.9762	0.0265	0.6786	0.0217	0.7004	0.1954	0.0208	0.2162		2,833.8626	2,833.8626	0.1829		2,838.4362
Worker	2.2172	1.5166	17.1239	0.0500	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		4,985.9676	4,985.9676	0.1467		4,989.6355
Total	**2.5555**	**11.7868**	**20.1000**	**0.0766**	**5.8762**	**0.0637**	**5.9400**	**1.5738**	**0.0595**	**1.6333**		**7,819.8301**	**7,819.8301**	**0.3297**		**7,828.0717**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3175	9.7604	2.8172	0.0263	0.6786	0.0190	0.6976	0.1954	0.0182	0.2136		2,808.6850	2,808.6850	0.1765		2,813.0979
Worker	2.0825	1.3696	15.7717	0.0483	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		4,810.7480	4,810.7480	0.1325		4,814.0596
Total	**2.4000**	**11.1300**	**18.5889**	**0.0745**	**5.8762**	**0.0597**	**5.9359**	**1.5738**	**0.0556**	**1.6295**		**7,619.4329**	**7,619.4329**	**0.3090**		**7,627.1575**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3175	9.7604	2.8172	0.0263	0.6786	0.0190	0.6976	0.1954	0.0182	0.2136		2,808.6850	2,808.6850	0.1765		2,813.0979
Worker	2.0825	1.3696	15.7717	0.0483	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		4,810.7480	4,810.7480	0.1325		4,814.0596
Total	**2.4000**	**11.1300**	**18.5889**	**0.0745**	**5.8762**	**0.0597**	**5.9359**	**1.5738**	**0.0556**	**1.6295**		**7,619.4329**	**7,619.4329**	**0.3090**		**7,627.1575**

3.6 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

3.7 Architectural Coating - 2022

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	80.3003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452		844.3442	844.3442	0.0550		845.7185
Total	**80.9139**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**		**844.3442**	**844.3442**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.4165	0.2739	3.1543	9.6500e-003	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		962.1496	962.1496	0.0265		962.8119
Total	**0.4165**	**0.2739**	**3.1543**	**9.6500e-003**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**962.1496**	**962.1496**	**0.0265**		**962.8119**

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	80.3003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452	0.0000	844.3441	844.3441	0.0550		845.7185
Total	**80.9139**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**	**0.0000**	**844.3441**	**844.3441**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.4165	0.2739	3.1543	9.6500e-003	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		962.1496	962.1496	0.0265		962.8119
Total	**0.4165**	**0.2739**	**3.1543**	**9.6500e-003**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**962.1496**	**962.1496**	**0.0265**		**962.8119**

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	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707
Unmitigated	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking with Elevator	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
NaturalGas Unmitigated	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756

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					
Apartments Mid Rise	16002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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					
Apartments Mid Rise	16.002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Unmitigated	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446

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	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

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
Emergency Generator	1	0	0	50	0.73	Diesel
Fire Pump	1	0	0	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan Specific Plan (Project Emissions 2022)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - Construction phasing and schedule provided by applicant.

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Grading - net material import from Draft EIR Appendix M, Scheet C2.0. Acres graded modified to reflect project specific conditions.

Demolition - Building square footage to be demolished based on Alexan SP area only.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403, control efficiencies from SCAQMD Rule 403 and Countess Environmental, 2006 (WRAP Fugitive Dust Handbook).

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	69
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	69
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	230.00	467.00
tblConstructionPhase	NumDays	20.00	41.00

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tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	3/23/2021	6/29/2022
tblConstructionPhase	PhaseEndDate	1/26/2021	3/7/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	2/26/2020
tblConstructionPhase	PhaseEndDate	3/10/2020	5/21/2020
tblConstructionPhase	PhaseEndDate	2/23/2021	5/3/2022
tblConstructionPhase	PhaseEndDate	2/11/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	2/24/2021	5/3/2022
tblConstructionPhase	PhaseStartDate	3/11/2020	5/22/2020
tblConstructionPhase	PhaseStartDate	2/12/2020	3/26/2020
tblConstructionPhase	PhaseStartDate	1/27/2021	3/8/2022
tblConstructionPhase	PhaseStartDate	1/29/2020	2/27/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00

tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblGrading	AcresOfGrading	20.50	20.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	MaterialImported	0.00	3,200.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003

tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5443	4.4388	4.1753	0.0107	0.8271	0.1825	1.0096	0.3012	0.1702	0.4714	0.0000	972.5275	972.5275	0.1229	0.0000	975.6006
2021	0.5521	3.8433	4.8280	0.0137	0.7521	0.1334	0.8855	0.2018	0.1253	0.3271	0.0000	1,243.3649	1,243.3649	0.1115	0.0000	1,246.1525
2022	1.8225	0.9437	1.3026	3.2600e-003	0.1573	0.0370	0.1943	0.0421	0.0348	0.0770	0.0000	293.6224	293.6224	0.0341	0.0000	294.4738
Maximum	**1.8225**	**4.4388**	**4.8280**	**0.0137**	**0.8271**	**0.1825**	**1.0096**	**0.3012**	**0.1702**	**0.4714**	**0.0000**	**1,243.3649**	**1,243.3649**	**0.1229**	**0.0000**	**1,246.1525**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5443	4.4388	4.1753	0.0107	0.5678	0.1825	0.7503	0.1732	0.1702	0.3434	0.0000	972.5271	972.5271	0.1229	0.0000	975.6002
2021	0.5521	3.8433	4.8279	0.0137	0.7521	0.1334	0.8855	0.2018	0.1253	0.3271	0.0000	1,243.3646	1,243.3646	0.1115	0.0000	1,246.1522
2022	1.8225	0.9437	1.3026	3.2600e-003	0.1573	0.0370	0.1943	0.0421	0.0348	0.0770	0.0000	293.6222	293.6222	0.0341	0.0000	294.4736
Maximum	**1.8225**	**4.4388**	**4.8279**	**0.0137**	**0.7521**	**0.1825**	**0.8855**	**0.2018**	**0.1702**	**0.3434**	**0.0000**	**1,243.3646**	**1,243.3646**	**0.1229**	**0.0000**	**1,246.1522**

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

	ROG	NOx	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**	**14.93**	**0.00**	**12.41**	**23.48**	**0.00**	**14.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	1.4380	1.4380
2	**4-1-2020**	**6-30-2020**	1.0917	1.0917
3	**7-1-2020**	**9-30-2020**	1.2033	1.2033
4	**10-1-2020**	**12-31-2020**	1.2169	1.2169
5	**1-1-2021**	**3-31-2021**	1.0824	1.0824
6	**4-1-2021**	**6-30-2021**	1.0826	1.0826
7	**7-1-2021**	**9-30-2021**	1.0945	1.0945
8	**10-1-2021**	**12-31-2021**	1.1065	1.1065
9	**1-1-2022**	**3-31-2022**	0.8338	0.8338
10	**4-1-2022**	**6-30-2022**	1.9229	1.9229
		Highest	1.9229	1.9229

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	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327
Energy	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	753.4478	753.4478	0.0401	9.8500e-003	757.3862
Mobile	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	40.7119	0.0000	40.7119	2.4060	0.0000	100.8619
Water						0.0000	0.0000		0.0000	0.0000	5.9995	49.5967	55.5961	0.6200	0.0150	75.5713
Total	**2.9021**	**1.7311**	**13.9491**	**0.0333**	**2.9250**	**0.0765**	**3.0015**	**0.7803**	**0.0748**	**0.8551**	**46.7114**	**3,704.7451**	**3,751.4564**	**3.1605**	**0.0266**	**3,838.3936**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327
Energy	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	753.4478	753.4478	0.0401	9.8500e-003	757.3862
Mobile	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	40.7119	0.0000	40.7119	2.4060	0.0000	100.8619
Water						0.0000	0.0000		0.0000	0.0000	5.9995	49.5967	55.5961	0.6200	0.0150	75.5713
Total	**2.9021**	**1.7311**	**13.9491**	**0.0333**	**2.9250**	**0.0765**	**3.0015**	**0.7803**	**0.0748**	**0.8551**	**46.7114**	**3,704.7451**	**3,751.4564**	**3.1605**	**0.0266**	**3,838.3936**

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

3.0 Construction Detail

Construction Phase

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/26/2020	5	41	
2	Site Preparation	Site Preparation	2/27/2020	3/25/2020	5	20	
3	Grading	Grading	3/26/2020	5/21/2020	5	41	
4	Building Construction	Building Construction	5/22/2020	3/7/2022	5	467	
5	Paving	Paving	3/8/2022	5/3/2022	5	41	
6	Architectural Coating	Architectural Coating	5/3/2022	6/29/2022	5	42	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 20

Acres of Paving: 2.59

Residential Indoor: 1,059,075; Residential Outdoor: 353,025; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 21,590 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	3	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	316.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	465.00	106.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	93.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0321	0.0000	0.0321	4.8600e-003	0.0000	4.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0679	0.6806	0.4459	8.0000e-004		0.0340	0.0340		0.0316	0.0316	0.0000	69.6971	69.6971	0.0197	0.0000	70.1890
Total	**0.0679**	**0.6806**	**0.4459**	**8.0000e-004**	**0.0321**	**0.0340**	**0.0661**	**4.8600e-003**	**0.0316**	**0.0365**	**0.0000**	**69.6971**	**69.6971**	**0.0197**	**0.0000**	**70.1890**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3100e-003	0.0441	9.7200e-003	1.2000e-004	2.5500e-003	1.4000e-004	2.6900e-003	7.0000e-004	1.3000e-004	8.3000e-004	0.0000	11.4461	11.4461	8.0000e-004	0.0000	11.4661
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.7300e-003**	**0.0452**	**0.0224**	**1.5000e-004**	**5.9200e-003**	**1.7000e-004**	**6.0900e-003**	**1.5900e-003**	**1.6000e-004**	**1.7500e-003**	**0.0000**	**14.5868**	**14.5868**	**9.0000e-004**	**0.0000**	**14.6092**

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					8.4500e-003	0.0000	8.4500e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0679	0.6806	0.4459	8.0000e-004		0.0340	0.0340		0.0316	0.0316	0.0000	69.6971	69.6971	0.0197	0.0000	70.1889
Total	**0.0679**	**0.6806**	**0.4459**	**8.0000e-004**	**8.4500e-003**	**0.0340**	**0.0425**	**1.2800e-003**	**0.0316**	**0.0329**	**0.0000**	**69.6971**	**69.6971**	**0.0197**	**0.0000**	**70.1889**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3100e-003	0.0441	9.7200e-003	1.2000e-004	2.5500e-003	1.4000e-004	2.6900e-003	7.0000e-004	1.3000e-004	8.3000e-004	0.0000	11.4461	11.4461	8.0000e-004	0.0000	11.4661
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.7300e-003**	**0.0452**	**0.0224**	**1.5000e-004**	**5.9200e-003**	**1.7000e-004**	**6.0900e-003**	**1.5900e-003**	**1.6000e-004**	**1.7500e-003**	**0.0000**	**14.5868**	**14.5868**	**9.0000e-004**	**0.0000**	**14.6092**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1860	0.0000	0.1860	0.0999	0.0000	0.0999	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0482	0.5310	0.2195	4.7000e-004		0.0249	0.0249		0.0229	0.0229	0.0000	41.7699	41.7699	0.0135	0.0000	42.1076
Total	**0.0482**	**0.5310**	**0.2195**	**4.7000e-004**	**0.1860**	**0.0249**	**0.2109**	**0.0999**	**0.0229**	**0.1228**	**0.0000**	**41.7699**	**41.7699**	**0.0135**	**0.0000**	**42.1076**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399
Total	**8.3000e-004**	**6.7000e-004**	**7.4100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**1.8384**	**1.8384**	**6.0000e-005**	**0.0000**	**1.8399**

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					0.0490	0.0000	0.0490	0.0263	0.0000	0.0263	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0482	0.5310	0.2195	4.7000e-004		0.0249	0.0249		0.0229	0.0229	0.0000	41.7698	41.7698	0.0135	0.0000	42.1076
Total	**0.0482**	**0.5310**	**0.2195**	**4.7000e-004**	**0.0490**	**0.0249**	**0.0739**	**0.0263**	**0.0229**	**0.0493**	**0.0000**	**41.7698**	**41.7698**	**0.0135**	**0.0000**	**42.1076**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399
Total	**8.3000e-004**	**6.7000e-004**	**7.4100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**1.8384**	**1.8384**	**6.0000e-005**	**0.0000**	**1.8399**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1341	0.0000	0.1341	0.0690	0.0000	0.0690	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5409	0.3291	6.1000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	53.4204	53.4204	0.0173	0.0000	53.8524
Total	**0.0498**	**0.5409**	**0.3291**	**6.1000e-004**	**0.1341**	**0.0261**	**0.1602**	**0.0690**	**0.0240**	**0.0930**	**0.0000**	**53.4204**	**53.4204**	**0.0173**	**0.0000**	**53.8524**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0469	0.0103	1.2000e-004	2.7200e-003	1.5000e-004	2.8600e-003	7.5000e-004	1.4000e-004	8.9000e-004	0.0000	12.1784	12.1784	8.5000e-004	0.0000	12.1996
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.8100e-003**	**0.0481**	**0.0230**	**1.5000e-004**	**6.0900e-003**	**1.8000e-004**	**6.2600e-003**	**1.6400e-003**	**1.7000e-004**	**1.8100e-003**	**0.0000**	**15.3190**	**15.3190**	**9.5000e-004**	**0.0000**	**15.3427**

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					0.0353	0.0000	0.0353	0.0182	0.0000	0.0182	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5409	0.3291	6.1000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	53.4204	53.4204	0.0173	0.0000	53.8523
Total	**0.0498**	**0.5409**	**0.3291**	**6.1000e-004**	**0.0353**	**0.0261**	**0.0614**	**0.0182**	**0.0240**	**0.0422**	**0.0000**	**53.4204**	**53.4204**	**0.0173**	**0.0000**	**53.8523**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0469	0.0103	1.2000e-004	2.7200e-003	1.5000e-004	2.8600e-003	7.5000e-004	1.4000e-004	8.9000e-004	0.0000	12.1784	12.1784	8.5000e-004	0.0000	12.1996
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.8100e-003**	**0.0481**	**0.0230**	**1.5000e-004**	**6.0900e-003**	**1.8000e-004**	**6.2600e-003**	**1.6400e-003**	**1.7000e-004**	**1.8100e-003**	**0.0000**	**15.3190**	**15.3190**	**9.5000e-004**	**0.0000**	**15.3427**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1696	1.5349	1.3479	2.1500e-003		0.0894	0.0894		0.0840	0.0840	0.0000	185.2880	185.2880	0.0452	0.0000	186.4181
Total	**0.1696**	**1.5349**	**1.3479**	**2.1500e-003**		**0.0894**	**0.0894**		**0.0840**	**0.0840**	**0.0000**	**185.2880**	**185.2880**	**0.0452**	**0.0000**	**186.4181**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.9189	0.2488	2.1700e-003	0.0534	4.2700e-003	0.0577	0.0154	4.0900e-003	0.0195	0.0000	210.6654	210.6654	0.0134	0.0000	211.0001
Worker	0.1717	0.1385	1.5313	4.2100e-003	0.4076	3.4800e-003	0.4111	0.1083	3.2000e-003	0.1115	0.0000	379.9424	379.9424	0.0120	0.0000	380.2417
Total	**0.2025**	**1.0574**	**1.7800**	**6.3800e-003**	**0.4611**	**7.7500e-003**	**0.4688**	**0.1237**	**7.2900e-003**	**0.1310**	**0.0000**	**590.6078**	**590.6078**	**0.0254**	**0.0000**	**591.2418**

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	0.1696	1.5349	1.3479	2.1500e-003		0.0894	0.0894		0.0840	0.0840	0.0000	185.2878	185.2878	0.0452	0.0000	186.4179
Total	**0.1696**	**1.5349**	**1.3479**	**2.1500e-003**		**0.0894**	**0.0894**		**0.0840**	**0.0840**	**0.0000**	**185.2878**	**185.2878**	**0.0452**	**0.0000**	**186.4179**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.9189	0.2488	2.1700e-003	0.0534	4.2700e-003	0.0577	0.0154	4.0900e-003	0.0195	0.0000	210.6654	210.6654	0.0134	0.0000	211.0001
Worker	0.1717	0.1385	1.5313	4.2100e-003	0.4076	3.4800e-003	0.4111	0.1083	3.2000e-003	0.1115	0.0000	379.9424	379.9424	0.0120	0.0000	380.2417
Total	**0.2025**	**1.0574**	**1.7800**	**6.3800e-003**	**0.4611**	**7.7500e-003**	**0.4688**	**0.1237**	**7.2900e-003**	**0.1310**	**0.0000**	**590.6078**	**590.6078**	**0.0254**	**0.0000**	**591.2418**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0430	1.3652	0.3701	3.5200e-003	0.0871	2.7800e-003	0.0899	0.0252	2.6600e-003	0.0278	0.0000	340.9787	340.9787	0.0209	0.0000	341.5016
Worker	0.2611	0.2033	2.2948	6.6400e-003	0.6650	5.4800e-003	0.6704	0.1766	5.0500e-003	0.1817	0.0000	600.0996	600.0996	0.0177	0.0000	600.5411
Total	**0.3041**	**1.5684**	**2.6649**	**0.0102**	**0.7521**	**8.2600e-003**	**0.7604**	**0.2018**	**7.7100e-003**	**0.2095**	**0.0000**	**941.0783**	**941.0783**	**0.0386**	**0.0000**	**942.0427**

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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2863**	**302.2863**	**0.0729**	**0.0000**	**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0430	1.3652	0.3701	3.5200e-003	0.0871	2.7800e-003	0.0899	0.0252	2.6600e-003	0.0278	0.0000	340.9787	340.9787	0.0209	0.0000	341.5016
Worker	0.2611	0.2033	2.2948	6.6400e-003	0.6650	5.4800e-003	0.6704	0.1766	5.0500e-003	0.1817	0.0000	600.0996	600.0996	0.0177	0.0000	600.5411
Total	**0.3041**	**1.5684**	**2.6649**	**0.0102**	**0.7521**	**8.2600e-003**	**0.7604**	**0.2018**	**7.7100e-003**	**0.2095**	**0.0000**	**941.0783**	**941.0783**	**0.0386**	**0.0000**	**942.0427**

3.5 Building Construction - 2022

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	0.0392	0.3592	0.3764	6.2000e-004		0.0186	0.0186		0.0175	0.0175	0.0000	53.2968	53.2968	0.0128	0.0000	53.6160
Total	**0.0392**	**0.3592**	**0.3764**	**6.2000e-004**		**0.0186**	**0.0186**		**0.0175**	**0.0175**	**0.0000**	**53.2968**	**53.2968**	**0.0128**	**0.0000**	**53.6160**

3.5 Building Construction - 2022

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	7.1100e-003	0.2286	0.0617	6.1000e-004	0.0154	4.3000e-004	0.0158	4.4300e-003	4.1000e-004	4.8400e-003	0.0000	59.5680	59.5680	3.5600e-003	0.0000	59.6570
Worker	0.0432	0.0324	0.3727	1.1300e-003	0.1172	9.4000e-004	0.1181	0.0311	8.6000e-004	0.0320	0.0000	102.0469	102.0469	2.8100e-003	0.0000	102.1171
Total	**0.0503**	**0.2610**	**0.4344**	**1.7400e-003**	**0.1326**	**1.3700e-003**	**0.1339**	**0.0356**	**1.2700e-003**	**0.0368**	**0.0000**	**161.6149**	**161.6149**	**6.3700e-003**	**0.0000**	**161.7741**

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	0.0392	0.3592	0.3764	6.2000e-004		0.0186	0.0186		0.0175	0.0175	0.0000	53.2967	53.2967	0.0128	0.0000	53.6160
Total	**0.0392**	**0.3592**	**0.3764**	**6.2000e-004**		**0.0186**	**0.0186**		**0.0175**	**0.0175**	**0.0000**	**53.2967**	**53.2967**	**0.0128**	**0.0000**	**53.6160**

3.5 Building Construction - 2022

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	7.1100e-003	0.2286	0.0617	6.1000e-004	0.0154	4.3000e-004	0.0158	4.4300e-003	4.1000e-004	4.8400e-003	0.0000	59.5680	59.5680	3.5600e-003	0.0000	59.6570
Worker	0.0432	0.0324	0.3727	1.1300e-003	0.1172	9.4000e-004	0.1181	0.0311	8.6000e-004	0.0320	0.0000	102.0469	102.0469	2.8100e-003	0.0000	102.1171
Total	**0.0503**	**0.2610**	**0.4344**	**1.7400e-003**	**0.1326**	**1.3700e-003**	**0.1339**	**0.0356**	**1.2700e-003**	**0.0368**	**0.0000**	**161.6149**	**161.6149**	**6.3700e-003**	**0.0000**	**161.7741**

3.6 Paving - 2022

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	0.0226	0.2281	0.2989	4.7000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	41.0565	41.0565	0.0133	0.0000	41.3885
Paving	2.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.2281**	**0.2989**	**4.7000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**41.0565**	**41.0565**	**0.0133**	**0.0000**	**41.3885**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.3000e-004	0.0107	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	2.0000e-005	9.2000e-004	0.0000	2.9340	2.9340	8.0000e-005	0.0000	2.9361
Total	**1.2400e-003**	**9.3000e-004**	**0.0107**	**3.0000e-005**	**3.3700e-003**	**3.0000e-005**	**3.4000e-003**	**8.9000e-004**	**2.0000e-005**	**9.2000e-004**	**0.0000**	**2.9340**	**2.9340**	**8.0000e-005**	**0.0000**	**2.9361**

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	0.0226	0.2281	0.2989	4.7000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	41.0564	41.0564	0.0133	0.0000	41.3884
Paving	2.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.2281**	**0.2989**	**4.7000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**41.0564**	**41.0564**	**0.0133**	**0.0000**	**41.3884**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.3000e-004	0.0107	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	2.0000e-005	9.2000e-004	0.0000	2.9340	2.9340	8.0000e-005	0.0000	2.9361
Total	**1.2400e-003**	**9.3000e-004**	**0.0107**	**3.0000e-005**	**3.3700e-003**	**3.0000e-005**	**3.4000e-003**	**8.9000e-004**	**2.0000e-005**	**9.2000e-004**	**0.0000**	**2.9340**	**2.9340**	**8.0000e-005**	**0.0000**	**2.9361**

3.7 Architectural Coating - 2022

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	1.6863					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0887	0.1143	1.9000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	16.0855	16.0855	1.0500e-003	0.0000	16.1117
Total	**1.6992**	**0.0887**	**0.1143**	**1.9000e-004**		**5.1500e-003**	**5.1500e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**16.0855**	**16.0855**	**1.0500e-003**	**0.0000**	**16.1117**

3.7 Architectural Coating - 2022

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	7.8800e-003	5.9100e-003	0.0681	2.1000e-004	0.0214	1.7000e-004	0.0216	5.6800e-003	1.6000e-004	5.8400e-003	0.0000	18.6346	18.6346	5.1000e-004	0.0000	18.6475
Total	**7.8800e-003**	**5.9100e-003**	**0.0681**	**2.1000e-004**	**0.0214**	**1.7000e-004**	**0.0216**	**5.6800e-003**	**1.6000e-004**	**5.8400e-003**	**0.0000**	**18.6346**	**18.6346**	**5.1000e-004**	**0.0000**	**18.6475**

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	1.6863					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0887	0.1143	1.9000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	16.0855	16.0855	1.0500e-003	0.0000	16.1117
Total	**1.6992**	**0.0887**	**0.1143**	**1.9000e-004**		**5.1500e-003**	**5.1500e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**16.0855**	**16.0855**	**1.0500e-003**	**0.0000**	**16.1117**

3.7 Architectural Coating - 2022

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	7.8800e-003	5.9100e-003	0.0681	2.1000e-004	0.0214	1.7000e-004	0.0216	5.6800e-003	1.6000e-004	5.8400e-003	0.0000	18.6346	18.6346	5.1000e-004	0.0000	18.6475
Total	**7.8800e-003**	**5.9100e-003**	**0.0681**	**2.1000e-004**	**0.0214**	**1.7000e-004**	**0.0216**	**5.6800e-003**	**1.6000e-004**	**5.8400e-003**	**0.0000**	**18.6346**	**18.6346**	**5.1000e-004**	**0.0000**	**18.6475**

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	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414
Unmitigated	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking with Elevator	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	441.7642	441.7642	0.0341	4.1400e-003	443.8504
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	441.7642	441.7642	0.0341	4.1400e-003	443.8504
NaturalGas Mitigated	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
NaturalGas Unmitigated	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358

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					
Apartments Mid Rise	5.84073e+006	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0315**	**0.2691**	**0.1145**	**1.7200e-003**		**0.0218**	**0.0218**		**0.0218**	**0.0218**	**0.0000**	**311.6836**	**311.6836**	**5.9700e-003**	**5.7100e-003**	**313.5358**

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					
Apartments Mid Rise	5.84073e+006	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0315**	**0.2691**	**0.1145**	**1.7200e-003**		**0.0218**	**0.0218**		**0.0218**	**0.0218**	**0.0000**	**311.6836**	**311.6836**	**5.9700e-003**	**5.7100e-003**	**313.5358**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.71323e+006	331.9031	0.0256	3.1100e-003	333.4706
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	567085	109.8610	8.4900e-003	1.0300e-003	110.3799
Total		**441.7642**	**0.0341**	**4.1400e-003**	**443.8504**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.71323e+006	331.9031	0.0256	3.1100e-003	333.4706
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	567085	109.8610	8.4900e-003	1.0300e-003	110.3799
Total		**441.7642**	**0.0341**	**4.1400e-003**	**443.8504**

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	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327
Unmitigated	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327

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	0.1686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.5200e-003	0.0814	0.0346	5.2000e-004		6.5800e-003	6.5800e-003		6.5800e-003	6.5800e-003	0.0000	94.2298	94.2298	1.8100e-003	1.7300e-003	94.7898
Landscaping	0.1369	0.0520	4.5114	2.4000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	7.3645	7.3645	7.1400e-003	0.0000	7.5430
Total	**2.2282**	**0.1334**	**4.5460**	**7.6000e-004**		**0.0315**	**0.0315**		**0.0315**	**0.0315**	**0.0000**	**101.5943**	**101.5943**	**8.9500e-003**	**1.7300e-003**	**102.3327**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.5200e-003	0.0814	0.0346	5.2000e-004		6.5800e-003	6.5800e-003		6.5800e-003	6.5800e-003	0.0000	94.2298	94.2298	1.8100e-003	1.7300e-003	94.7898
Landscaping	0.1369	0.0520	4.5114	2.4000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	7.3645	7.3645	7.1400e-003	0.0000	7.5430
Total	**2.2282**	**0.1334**	**4.5460**	**7.6000e-004**		**0.0315**	**0.0315**		**0.0315**	**0.0315**	**0.0000**	**101.5943**	**101.5943**	**8.9500e-003**	**1.7300e-003**	**102.3327**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	55.5961	0.6200	0.0150	75.5713
Unmitigated	55.5961	0.6200	0.0150	75.5713

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.9107 / 0.879798	55.5961	0.6200	0.0150	75.5713
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**55.5961**	**0.6200**	**0.0150**	**75.5713**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.9107 / 0.879798	55.5961	0.6200	0.0150	75.5713
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**55.5961**	**0.6200**	**0.0150**	**75.5713**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	40.7119	2.4060	0.0000	100.8619
Unmitigated	40.7119	2.4060	0.0000	100.8619

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	200.56	40.7119	2.4060	0.0000	100.8619
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**40.7119**	**2.4060**	**0.0000**	**100.8619**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	200.56	40.7119	2.4060	0.0000	100.8619
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**40.7119**	**2.4060**	**0.0000**	**100.8619**

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
Emergency Generator	1	0	0	50	0.73	Diesel
Fire Pump	1	0	0	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

11.0 Vegetation

Alexan Specific Plan (Project Emissions 2022)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - Construction phasing and schedule provided by applicant.

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Grading - net material import from Draft EIR Appendix M, Scheet C2.0. Acres graded modified to reflect project specific conditions.

Demolition - Building square footage to be demolished based on Alexan SP area only.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403, control efficiencies from SCAQMD Rule 403 and Countess Environmental, 2006 (WRAP Fugitive Dust Handbook).

Off-road Equipment -

Architectural Coating - Super compliant VOC content coatings applied to all residentia, non-residential, and parking applications (10 g/l VOC content).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	69
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	69
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	230.00	467.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	3/23/2021	6/29/2022
tblConstructionPhase	PhaseEndDate	1/26/2021	3/7/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	2/26/2020
tblConstructionPhase	PhaseEndDate	3/10/2020	5/21/2020
tblConstructionPhase	PhaseEndDate	2/23/2021	5/3/2022
tblConstructionPhase	PhaseEndDate	2/11/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	2/24/2021	5/3/2022
tblConstructionPhase	PhaseStartDate	3/11/2020	5/22/2020
tblConstructionPhase	PhaseStartDate	2/12/2020	3/26/2020
tblConstructionPhase	PhaseStartDate	1/27/2021	3/8/2022
tblConstructionPhase	PhaseStartDate	1/29/2020	2/27/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58

tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblGrading	AcresOfGrading	20.50	20.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	MaterialImported	0.00	3,200.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.8980	53.1613	40.1626	0.1093	18.7977	2.4942	21.2919	10.0413	2.2946	12.3359	0.0000	10,958.4497	10,958.4497	1.4958	0.0000	10,982.8115
2021	4.2164	29.0937	37.9946	0.1073	5.8762	1.0217	6.8979	1.5738	0.9601	2.5339	0.0000	10,762.3784	10,762.3784	0.9437	0.0000	10,785.9708
2022	18.0709	26.6402	36.1885	0.1052	5.8762	0.8681	6.7443	1.5738	0.8162	2.3901	0.0000	10,551.6963	10,551.6963	0.9187	0.0000	10,574.6640
Maximum	**18.0709**	**53.1613**	**40.1626**	**0.1093**	**18.7977**	**2.4942**	**21.2919**	**10.0413**	**2.2946**	**12.3359**	**0.0000**	**10,958.4497**	**10,958.4497**	**1.4958**	**0.0000**	**10,982.8115**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.8980	53.1613	40.1626	0.1093	5.8762	2.4942	7.5955	2.6852	2.2946	4.9798	0.0000	10,958.4497	10,958.4497	1.4958	0.0000	10,982.8115
2021	4.2164	29.0937	37.9946	0.1073	5.8762	1.0217	6.8979	1.5738	0.9601	2.5339	0.0000	10,762.3784	10,762.3784	0.9437	0.0000	10,785.9708
2022	18.0709	26.6402	36.1885	0.1052	5.8762	0.8681	6.7443	1.5738	0.8162	2.3901	0.0000	10,551.6963	10,551.6963	0.9187	0.0000	10,574.6640
Maximum	**18.0709**	**53.1613**	**40.1626**	**0.1093**	**5.8762**	**2.4942**	**7.5955**	**2.6852**	**2.2946**	**4.9798**	**0.0000**	**10,958.4497**	**10,958.4497**	**1.4958**	**0.0000**	**10,982.8115**

	ROG	NOx	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**	**42.30**	**0.00**	**39.21**	**55.77**	**0.00**	**42.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.2742**	**15.2509**	**94.1411**	**0.2335**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4331**	**0.0000**	**28,322.8705**	**28,322.8705**	**0.8009**	**0.1869**	**28,398.5768**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.2742**	**15.2509**	**94.1411**	**0.2335**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4331**	**0.0000**	**28,322.8705**	**28,322.8705**	**0.8009**	**0.1869**	**28,398.5768**

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

3.0 Construction Detail

Construction Phase

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/26/2020	5	41	
2	Site Preparation	Site Preparation	2/27/2020	3/25/2020	5	20	
3	Grading	Grading	3/26/2020	5/21/2020	5	41	
4	Building Construction	Building Construction	5/22/2020	3/7/2022	5	467	
5	Paving	Paving	3/8/2022	5/3/2022	5	41	
6	Architectural Coating	Architectural Coating	5/3/2022	6/29/2022	5	42	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 20

Acres of Paving: 2.59

Residential Indoor: 1,059,075; Residential Outdoor: 353,025; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 21,590 (Architectural Coating – sqft)

OffRoad Equipment

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	3	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	316.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	465.00	106.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	93.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5651	0.0000	1.5651	0.2370	0.0000	0.2370			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.5651**	**1.6587**	**3.2238**	**0.2370**	**1.5419**	**1.7788**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0633	2.0829	0.4616	5.7200e-003	0.1267	6.6500e-003	0.1333	0.0347	6.3600e-003	0.0411		619.9562	619.9562	0.0422		621.0112
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1323**	**2.1320**	**1.1183**	**7.4900e-003**	**0.2943**	**8.0500e-003**	**0.3024**	**0.0792**	**7.6500e-003**	**0.0868**		**796.3732**	**796.3732**	**0.0478**		**797.5672**

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					0.4124	0.0000	0.4124	0.0624	0.0000	0.0624			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.4124**	**1.6587**	**2.0711**	**0.0624**	**1.5419**	**1.6043**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0633	2.0829	0.4616	5.7200e-003	0.1267	6.6500e-003	0.1333	0.0347	6.3600e-003	0.0411		619.9562	619.9562	0.0422		621.0112
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1323**	**2.1320**	**1.1183**	**7.4900e-003**	**0.2943**	**8.0500e-003**	**0.3024**	**0.0792**	**7.6500e-003**	**0.0868**		**796.3732**	**796.3732**	**0.0478**		**797.5672**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931		4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**18.5965**	**2.4925**	**21.0890**	**9.9879**	**2.2931**	**12.2810**		**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

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					4.9002	0.0000	4.9002	2.6318	0.0000	2.6318			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931	0.0000	4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**4.9002**	**2.4925**	**7.3927**	**2.6318**	**2.2931**	**4.9249**	**0.0000**	**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5394	0.0000	6.5394	3.3661	0.0000	3.3661			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5394**	**1.2734**	**7.8128**	**3.3661**	**1.1716**	**4.5376**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0673	2.2162	0.4911	6.0900e-003	0.1348	7.0700e-003	0.1418	0.0369	6.7700e-003	0.0437		659.6167	659.6167	0.0449		660.7392
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1364**	**2.2653**	**1.1479**	**7.8600e-003**	**0.3024**	**8.4700e-003**	**0.3109**	**0.0814**	**8.0600e-003**	**0.0895**		**836.0337**	**836.0337**	**0.0505**		**837.2951**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7231	0.0000	1.7231	0.8870	0.0000	0.8870			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**1.7231**	**1.2734**	**2.9966**	**0.8870**	**1.1716**	**2.0585**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0673	2.2162	0.4911	6.0900e-003	0.1348	7.0700e-003	0.1418	0.0369	6.7700e-003	0.0437		659.6167	659.6167	0.0449		660.7392
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.1364**	**2.2653**	**1.1479**	**7.8600e-003**	**0.3024**	**8.4700e-003**	**0.3109**	**0.0814**	**8.0600e-003**	**0.0895**		**836.0337**	**836.0337**	**0.0505**		**837.2951**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3770	11.2755	2.9543	0.0275	0.6786	0.0531	0.7317	0.1954	0.0508	0.2462		2,936.4618	2,936.4618	0.1792		2,940.9416
Worker	2.1399	1.5224	20.3598	0.0549	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,468.9249	5,468.9249	0.1724		5,473.2354
Total	**2.5169**	**12.7978**	**23.3141**	**0.0824**	**5.8762**	**0.0965**	**5.9727**	**1.5738**	**0.0908**	**1.6646**		**8,405.3866**	**8,405.3866**	**0.3516**		**8,414.1770**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3770	11.2755	2.9543	0.0275	0.6786	0.0531	0.7317	0.1954	0.0508	0.2462		2,936.4618	2,936.4618	0.1792		2,940.9416
Worker	2.1399	1.5224	20.3598	0.0549	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,468.9249	5,468.9249	0.1724		5,473.2354
Total	**2.5169**	**12.7978**	**23.3141**	**0.0824**	**5.8762**	**0.0965**	**5.9727**	**1.5738**	**0.0908**	**1.6646**		**8,405.3866**	**8,405.3866**	**0.3516**		**8,414.1770**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

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

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3222	10.2915	2.6905	0.0273	0.6786	0.0211	0.6997	0.1954	0.0201	0.2155		2,913.7347	2,913.7347	0.1717		2,918.0261
Worker	1.9933	1.3701	18.7290	0.0532	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		5,295.2798	5,295.2798	0.1560		5,299.1804
Total	**2.3155**	**11.6616**	**21.4194**	**0.0804**	**5.8762**	**0.0631**	**5.9393**	**1.5738**	**0.0588**	**1.6326**		**8,209.0145**	**8,209.0145**	**0.3277**		**8,217.2065**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3222	10.2915	2.6905	0.0273	0.6786	0.0211	0.6997	0.1954	0.0201	0.2155		2,913.7347	2,913.7347	0.1717		2,918.0261
Worker	1.9933	1.3701	18.7290	0.0532	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		5,295.2798	5,295.2798	0.1560		5,299.1804
Total	**2.3155**	**11.6616**	**21.4194**	**0.0804**	**5.8762**	**0.0631**	**5.9393**	**1.5738**	**0.0588**	**1.6326**		**8,209.0145**	**8,209.0145**	**0.3277**		**8,217.2065**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3024	9.7870	2.5456	0.0270	0.6786	0.0184	0.6970	0.1954	0.0176	0.2130		2,888.3504	2,888.3504	0.1658		2,892.4942
Worker	1.8671	1.2376	17.2795	0.0513	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		5,109.0123	5,109.0123	0.1410		5,112.5376
Total	**2.1695**	**11.0246**	**19.8251**	**0.0783**	**5.8762**	**0.0591**	**5.9353**	**1.5738**	**0.0551**	**1.6289**		**7,997.3627**	**7,997.3627**	**0.3068**		**8,005.0318**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3024	9.7870	2.5456	0.0270	0.6786	0.0184	0.6970	0.1954	0.0176	0.2130		2,888.3504	2,888.3504	0.1658		2,892.4942
Worker	1.8671	1.2376	17.2795	0.0513	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		5,109.0123	5,109.0123	0.1410		5,112.5376
Total	**2.1695**	**11.0246**	**19.8251**	**0.0783**	**5.8762**	**0.0591**	**5.9353**	**1.5738**	**0.0551**	**1.6289**		**7,997.3627**	**7,997.3627**	**0.3068**		**8,005.0318**

3.6 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.7 Architectural Coating - 2022

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	15.8218					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452		844.3442	844.3442	0.0550		845.7185
Total	**16.4354**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**		**844.3442**	**844.3442**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.3734	0.2475	3.4559	0.0103	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		1,021.8025	1,021.8025	0.0282		1,022.5075
Total	**0.3734**	**0.2475**	**3.4559**	**0.0103**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**1,021.8025**	**1,021.8025**	**0.0282**		**1,022.5075**

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	15.8218					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452	0.0000	844.3441	844.3441	0.0550		845.7185
Total	**16.4354**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**	**0.0000**	**844.3441**	**844.3441**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.3734	0.2475	3.4559	0.0103	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		1,021.8025	1,021.8025	0.0282		1,022.5075
Total	**0.3734**	**0.2475**	**3.4559**	**0.0103**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**1,021.8025**	**1,021.8025**	**0.0282**		**1,022.5075**

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	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566
Unmitigated	3.8378	6.8509	54.6527	0.1806	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		18,065.6913	18,065.6913	0.5426		18,079.2566

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking with Elevator	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
NaturalGas Unmitigated	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756

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					
Apartments Mid Rise	16002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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					
Apartments Mid Rise	16.002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Unmitigated	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446

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	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

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
Emergency Generator	1	0	0	50	0.73	Diesel
Fire Pump	1	0	0	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan Specific Plan (Project Emissions 2022)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - Construction phasing and schedule provided by applicant.

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Grading - net material import from Draft EIR Appendix M, Scheet C2.0. Acres graded modified to reflect project specific conditions.

Demolition - Building square footage to be demolished based on Alexan SP area only.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403, control efficiencies from SCAQMD Rule 403 and Countess Environmental, 2006 (WRAP Fugitive Dust Handbook).

Off-road Equipment -

Architectural Coating - Super compliant VOC content coatings applied to all residentia, non-residential, and parking applications (10 g/l VOC content).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	69
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	69
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	230.00	467.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	3/23/2021	6/29/2022
tblConstructionPhase	PhaseEndDate	1/26/2021	3/7/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	2/26/2020
tblConstructionPhase	PhaseEndDate	3/10/2020	5/21/2020
tblConstructionPhase	PhaseEndDate	2/23/2021	5/3/2022
tblConstructionPhase	PhaseEndDate	2/11/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	2/24/2021	5/3/2022
tblConstructionPhase	PhaseStartDate	3/11/2020	5/22/2020
tblConstructionPhase	PhaseStartDate	2/12/2020	3/26/2020
tblConstructionPhase	PhaseStartDate	1/27/2021	3/8/2022
tblConstructionPhase	PhaseStartDate	1/29/2020	2/27/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58

tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblGrading	AcresOfGrading	20.50	20.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	MaterialImported	0.00	3,200.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.9072	53.1676	38.7538	0.1054	18.7977	2.4942	21.2919	10.0413	2.2946	12.3359	0.0000	10,558.7279	10,558.7279	1.4954	0.0000	10,583.1318
2021	4.4564	29.2189	36.6752	0.1035	5.8762	1.0223	6.8986	1.5738	0.9607	2.5346	0.0000	10,373.1940	10,373.1940	0.9457	0.0000	10,396.8360
2022	18.1209	26.7457	34.9523	0.1015	5.8762	0.8687	6.7449	1.5738	0.8168	2.3906	0.0000	10,173.7665	10,173.7665	0.9209	0.0000	10,196.7897
Maximum	**18.1209**	**53.1676**	**38.7538**	**0.1054**	**18.7977**	**2.4942**	**21.2919**	**10.0413**	**2.2946**	**12.3359**	**0.0000**	**10,558.7279**	**10,558.7279**	**1.4954**	**0.0000**	**10,583.1318**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.9072	53.1676	38.7538	0.1054	5.8762	2.4942	7.5955	2.6852	2.2946	4.9798	0.0000	10,558.7279	10,558.7279	1.4954	0.0000	10,583.1318
2021	4.4564	29.2189	36.6752	0.1035	5.8762	1.0223	6.8986	1.5738	0.9607	2.5346	0.0000	10,373.1940	10,373.1940	0.9457	0.0000	10,396.8360
2022	18.1209	26.7457	34.9523	0.1015	5.8762	0.8687	6.7449	1.5738	0.8168	2.3906	0.0000	10,173.7665	10,173.7665	0.9209	0.0000	10,196.7897
Maximum	**18.1209**	**53.1676**	**38.7538**	**0.1054**	**5.8762**	**2.4942**	**7.5955**	**2.6852**	**2.2946**	**4.9798**	**0.0000**	**10,558.7279**	**10,558.7279**	**1.4954**	**0.0000**	**10,583.1318**

	ROG	NOx	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**	**42.30**	**0.00**	**39.20**	**55.77**	**0.00**	**42.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.1334**	**15.7347**	**90.7186**	**0.2240**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4332**	**0.0000**	**27,376.6289**	**27,376.6289**	**0.7831**	**0.1869**	**27,451.8909**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Energy	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
Mobile	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**17.1334**	**15.7347**	**90.7186**	**0.2240**	**16.7720**	**0.9756**	**17.7476**	**4.4673**	**0.9658**	**5.4332**	**0.0000**	**27,376.6289**	**27,376.6289**	**0.7831**	**0.1869**	**27,451.8909**

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

3.0 Construction Detail

Construction Phase

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/26/2020	5	41	
2	Site Preparation	Site Preparation	2/27/2020	3/25/2020	5	20	
3	Grading	Grading	3/26/2020	5/21/2020	5	41	
4	Building Construction	Building Construction	5/22/2020	3/7/2022	5	467	
5	Paving	Paving	3/8/2022	5/3/2022	5	41	
6	Architectural Coating	Architectural Coating	5/3/2022	6/29/2022	5	42	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 20

Acres of Paving: 2.59

Residential Indoor: 1,059,075; Residential Outdoor: 353,025; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 21,590 (Architectural Coating – sqft)

OffRoad Equipment

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	3	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	316.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	465.00	106.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	93.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5651	0.0000	1.5651	0.2370	0.0000	0.2370			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.5651**	**1.6587**	**3.2238**	**0.2370**	**1.5419**	**1.7788**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0648	2.1099	0.4905	5.6200e-003	0.1267	6.7500e-003	0.1334	0.0347	6.4600e-003	0.0412		609.2803	609.2803	0.0437		610.3737
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1415**	**2.1643**	**1.0920**	**7.2900e-003**	**0.2943**	**8.1500e-003**	**0.3025**	**0.0792**	**7.7500e-003**	**0.0869**		**775.3934**	**775.3934**	**0.0490**		**776.6176**

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					0.4124	0.0000	0.4124	0.0624	0.0000	0.0624			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.4124**	**1.6587**	**2.0711**	**0.0624**	**1.5419**	**1.6043**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0648	2.1099	0.4905	5.6200e-003	0.1267	6.7500e-003	0.1334	0.0347	6.4600e-003	0.0412		609.2803	609.2803	0.0437		610.3737
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1415**	**2.1643**	**1.0920**	**7.2900e-003**	**0.2943**	**8.1500e-003**	**0.3025**	**0.0792**	**7.7500e-003**	**0.0869**		**775.3934**	**775.3934**	**0.0490**		**776.6176**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931		4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**18.5965**	**2.4925**	**21.0890**	**9.9879**	**2.2931**	**12.2810**		**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9002	0.0000	4.9002	2.6318	0.0000	2.6318			0.0000			0.0000
Off-Road	4.8152	53.1024	21.9542	0.0475		2.4925	2.4925		2.2931	2.2931	0.0000	4,604.3414	4,604.3414	1.4891		4,641.5698
Total	**4.8152**	**53.1024**	**21.9542**	**0.0475**	**4.9002**	**2.4925**	**7.3927**	**2.6318**	**2.2931**	**4.9249**	**0.0000**	**4,604.3414**	**4,604.3414**	**1.4891**		**4,641.5698**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

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

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5394	0.0000	6.5394	3.3661	0.0000	3.3661			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5394**	**1.2734**	**7.8128**	**3.3661**	**1.1716**	**4.5376**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0690	2.2449	0.5219	5.9800e-003	0.1348	7.1800e-003	0.1419	0.0369	6.8700e-003	0.0438		648.2579	648.2579	0.0465		649.4211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1456**	**2.2992**	**1.1234**	**7.6500e-003**	**0.3024**	**8.5800e-003**	**0.3110**	**0.0814**	**8.1600e-003**	**0.0896**		**814.3709**	**814.3709**	**0.0518**		**815.6651**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7231	0.0000	1.7231	0.8870	0.0000	0.8870			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**1.7231**	**1.2734**	**2.9966**	**0.8870**	**1.1716**	**2.0585**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0690	2.2449	0.5219	5.9800e-003	0.1348	7.1800e-003	0.1419	0.0369	6.8700e-003	0.0438		648.2579	648.2579	0.0465		649.4211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.1456**	**2.2992**	**1.1234**	**7.6500e-003**	**0.3024**	**8.5800e-003**	**0.3110**	**0.0814**	**8.1600e-003**	**0.0896**		**814.3709**	**814.3709**	**0.0518**		**815.6651**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3941	11.2732	3.2583	0.0268	0.6786	0.0539	0.7325	0.1954	0.0516	0.2470		2,856.1601	2,856.1601	0.1910		2,860.9348
Worker	2.3763	1.6855	18.6470	0.0517	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,149.5048	5,149.5048	0.1623		5,153.5625
Total	**2.7704**	**12.9586**	**21.9053**	**0.0785**	**5.8762**	**0.0974**	**5.9736**	**1.5738**	**0.0916**	**1.6654**		**8,005.6649**	**8,005.6649**	**0.3533**		**8,014.4973**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3941	11.2732	3.2583	0.0268	0.6786	0.0539	0.7325	0.1954	0.0516	0.2470		2,856.1601	2,856.1601	0.1910		2,860.9348
Worker	2.3763	1.6855	18.6470	0.0517	5.1976	0.0435	5.2411	1.3784	0.0400	1.4185		5,149.5048	5,149.5048	0.1623		5,153.5625
Total	**2.7704**	**12.9586**	**21.9053**	**0.0785**	**5.8762**	**0.0974**	**5.9736**	**1.5738**	**0.0916**	**1.6654**		**8,005.6649**	**8,005.6649**	**0.3533**		**8,014.4973**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

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

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3383	10.2702	2.9762	0.0265	0.6786	0.0217	0.7004	0.1954	0.0208	0.2162		2,833.8626	2,833.8626	0.1829		2,838.4362
Worker	2.2172	1.5166	17.1239	0.0500	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		4,985.9676	4,985.9676	0.1467		4,989.6355
Total	**2.5555**	**11.7868**	**20.1000**	**0.0766**	**5.8762**	**0.0637**	**5.9400**	**1.5738**	**0.0595**	**1.6333**		**7,819.8301**	**7,819.8301**	**0.3297**		**7,828.0717**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3383	10.2702	2.9762	0.0265	0.6786	0.0217	0.7004	0.1954	0.0208	0.2162		2,833.8626	2,833.8626	0.1829		2,838.4362
Worker	2.2172	1.5166	17.1239	0.0500	5.1976	0.0420	5.2396	1.3784	0.0387	1.4171		4,985.9676	4,985.9676	0.1467		4,989.6355
Total	**2.5555**	**11.7868**	**20.1000**	**0.0766**	**5.8762**	**0.0637**	**5.9400**	**1.5738**	**0.0595**	**1.6333**		**7,819.8301**	**7,819.8301**	**0.3297**		**7,828.0717**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3175	9.7604	2.8172	0.0263	0.6786	0.0190	0.6976	0.1954	0.0182	0.2136		2,808.6850	2,808.6850	0.1765		2,813.0979
Worker	2.0825	1.3696	15.7717	0.0483	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		4,810.7480	4,810.7480	0.1325		4,814.0596
Total	**2.4000**	**11.1300**	**18.5889**	**0.0745**	**5.8762**	**0.0597**	**5.9359**	**1.5738**	**0.0556**	**1.6295**		**7,619.4329**	**7,619.4329**	**0.3090**		**7,627.1575**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.3175	9.7604	2.8172	0.0263	0.6786	0.0190	0.6976	0.1954	0.0182	0.2136		2,808.6850	2,808.6850	0.1765		2,813.0979
Worker	2.0825	1.3696	15.7717	0.0483	5.1976	0.0407	5.2383	1.3784	0.0375	1.4159		4,810.7480	4,810.7480	0.1325		4,814.0596
Total	**2.4000**	**11.1300**	**18.5889**	**0.0745**	**5.8762**	**0.0597**	**5.9359**	**1.5738**	**0.0556**	**1.6295**		**7,619.4329**	**7,619.4329**	**0.3090**		**7,627.1575**

3.6 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2019**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

3.7 Architectural Coating - 2022

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	15.8218					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452		844.3442	844.3442	0.0550		845.7185
Total	**16.4354**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**		**844.3442**	**844.3442**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.4165	0.2739	3.1543	9.6500e-003	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		962.1496	962.1496	0.0265		962.8119
Total	**0.4165**	**0.2739**	**3.1543**	**9.6500e-003**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**962.1496**	**962.1496**	**0.0265**		**962.8119**

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	15.8218					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6136	4.2254	5.4408	8.9100e-003		0.2452	0.2452		0.2452	0.2452	0.0000	844.3441	844.3441	0.0550		845.7185
Total	**16.4354**	**4.2254**	**5.4408**	**8.9100e-003**		**0.2452**	**0.2452**		**0.2452**	**0.2452**	**0.0000**	**844.3441**	**844.3441**	**0.0550**		**845.7185**

3.7 Architectural Coating - 2022

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	0.4165	0.2739	3.1543	9.6500e-003	1.0395	8.1400e-003	1.0477	0.2757	7.4900e-003	0.2832		962.1496	962.1496	0.0265		962.8119
Total	**0.4165**	**0.2739**	**3.1543**	**9.6500e-003**	**1.0395**	**8.1400e-003**	**1.0477**	**0.2757**	**7.4900e-003**	**0.2832**		**962.1496**	**962.1496**	**0.0265**		**962.8119**

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	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707
Unmitigated	3.6970	7.3347	51.2302	0.1711	16.7720	0.1309	16.9029	4.4673	0.1211	4.5884		17,119.4497	17,119.4497	0.5248		17,132.5707

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking with Elevator	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
NaturalGas Unmitigated	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756

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					
Apartments Mid Rise	16002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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					
Apartments Mid Rise	16.002	0.1726	1.4747	0.6275	9.4100e-003		0.1192	0.1192		0.1192	0.1192		1,882.5883	1,882.5883	0.0361	0.0345	1,893.7756
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1726**	**1.4747**	**0.6275**	**9.4100e-003**		**0.1192**	**0.1192**		**0.1192**	**0.1192**		**1,882.5883**	**1,882.5883**	**0.0361**	**0.0345**	**1,893.7756**

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	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446
Unmitigated	13.2638	6.9253	38.8609	0.0435		0.7255	0.7255		0.7255	0.7255	0.0000	8,374.5909	8,374.5909	0.2222	0.1523	8,425.5446

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	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9240					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7617	6.5092	2.7699	0.0416		0.5263	0.5263		0.5263	0.5263	0.0000	8,309.6471	8,309.6471	0.1593	0.1523	8,359.0271
Landscaping	1.0952	0.4160	36.0910	1.9100e-003		0.1993	0.1993		0.1993	0.1993		64.9438	64.9438	0.0630		66.5175
Total	**13.2638**	**6.9253**	**38.8609**	**0.0435**		**0.7255**	**0.7255**		**0.7255**	**0.7255**	**0.0000**	**8,374.5909**	**8,374.5909**	**0.2222**	**0.1523**	**8,425.5446**

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
Emergency Generator	1	0	0	50	0.73	Diesel
Fire Pump	1	0	0	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan Specific Plan (Project Emissions 2022)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - Construction phasing and schedule provided by applicant.

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - construction equipment modified to reflect project specific conditions.

Grading - net material import from Draft EIR Appendix M, Scheet C2.0. Acres graded modified to reflect project specific conditions.

Demolition - Building square footage to be demolished based on Alexan SP area only.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403, control efficiencies from SCAQMD Rule 403 and Countess Environmental, 2006 (WRAP Fugitive Dust Handbook).

Off-road Equipment -

Architectural Coating - Super compliant VOC content coatings applied to all residentia, non-residential, and parking applications (10 g/l VOC content).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00

tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	69
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	69
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	230.00	467.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	3/23/2021	6/29/2022
tblConstructionPhase	PhaseEndDate	1/26/2021	3/7/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	2/26/2020
tblConstructionPhase	PhaseEndDate	3/10/2020	5/21/2020
tblConstructionPhase	PhaseEndDate	2/23/2021	5/3/2022
tblConstructionPhase	PhaseEndDate	2/11/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	2/24/2021	5/3/2022
tblConstructionPhase	PhaseStartDate	3/11/2020	5/22/2020
tblConstructionPhase	PhaseStartDate	2/12/2020	3/26/2020
tblConstructionPhase	PhaseStartDate	1/27/2021	3/8/2022
tblConstructionPhase	PhaseStartDate	1/29/2020	2/27/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58

tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblGrading	AcresOfGrading	20.50	20.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	MaterialImported	0.00	3,200.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5443	4.4388	4.1753	0.0107	0.8271	0.1825	1.0096	0.3012	0.1702	0.4714	0.0000	972.5275	972.5275	0.1229	0.0000	975.6006
2021	0.5521	3.8433	4.8280	0.0137	0.7521	0.1334	0.8855	0.2018	0.1253	0.3271	0.0000	1,243.3649	1,243.3649	0.1115	0.0000	1,246.1525
2022	0.4684	0.9437	1.3026	3.2600e-003	0.1573	0.0370	0.1943	0.0421	0.0348	0.0770	0.0000	293.6224	293.6224	0.0341	0.0000	294.4738
Maximum	**0.5521**	**4.4388**	**4.8280**	**0.0137**	**0.8271**	**0.1825**	**1.0096**	**0.3012**	**0.1702**	**0.4714**	**0.0000**	**1,243.3649**	**1,243.3649**	**0.1229**	**0.0000**	**1,246.1525**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5443	4.4388	4.1753	0.0107	0.5678	0.1825	0.7503	0.1732	0.1702	0.3434	0.0000	972.5271	972.5271	0.1229	0.0000	975.6002
2021	0.5521	3.8433	4.8279	0.0137	0.7521	0.1334	0.8855	0.2018	0.1253	0.3271	0.0000	1,243.3646	1,243.3646	0.1115	0.0000	1,246.1522
2022	0.4684	0.9437	1.3026	3.2600e-003	0.1573	0.0370	0.1943	0.0421	0.0348	0.0770	0.0000	293.6222	293.6222	0.0341	0.0000	294.4736
Maximum	**0.5521**	**4.4388**	**4.8279**	**0.0137**	**0.7521**	**0.1825**	**0.8855**	**0.2018**	**0.1702**	**0.3434**	**0.0000**	**1,243.3646**	**1,243.3646**	**0.1229**	**0.0000**	**1,246.1522**

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

	ROG	NOx	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**	**14.93**	**0.00**	**12.41**	**23.48**	**0.00**	**14.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	1.4380	1.4380
2	**4-1-2020**	**6-30-2020**	1.0917	1.0917
3	**7-1-2020**	**9-30-2020**	1.2033	1.2033
4	**10-1-2020**	**12-31-2020**	1.2169	1.2169
5	**1-1-2021**	**3-31-2021**	1.0824	1.0824
6	**4-1-2021**	**6-30-2021**	1.0826	1.0826
7	**7-1-2021**	**9-30-2021**	1.0945	1.0945
8	**10-1-2021**	**12-31-2021**	1.1065	1.1065
9	**1-1-2022**	**3-31-2022**	0.8338	0.8338
10	**4-1-2022**	**6-30-2022**	0.5873	0.5873
		Highest	1.4380	1.4380

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	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327
Energy	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	753.4478	753.4478	0.0401	9.8500e-003	757.3862
Mobile	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	40.7119	0.0000	40.7119	2.4060	0.0000	100.8619
Water						0.0000	0.0000		0.0000	0.0000	5.9995	49.5967	55.5961	0.6200	0.0150	75.5713
Total	**2.9021**	**1.7311**	**13.9491**	**0.0333**	**2.9250**	**0.0765**	**3.0015**	**0.7803**	**0.0748**	**0.8551**	**46.7114**	**3,704.7451**	**3,751.4564**	**3.1605**	**0.0266**	**3,838.3936**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327
Energy	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	753.4478	753.4478	0.0401	9.8500e-003	757.3862
Mobile	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	40.7119	0.0000	40.7119	2.4060	0.0000	100.8619
Water						0.0000	0.0000		0.0000	0.0000	5.9995	49.5967	55.5961	0.6200	0.0150	75.5713
Total	**2.9021**	**1.7311**	**13.9491**	**0.0333**	**2.9250**	**0.0765**	**3.0015**	**0.7803**	**0.0748**	**0.8551**	**46.7114**	**3,704.7451**	**3,751.4564**	**3.1605**	**0.0266**	**3,838.3936**

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

3.0 Construction Detail

Construction Phase

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/26/2020	5	41	
2	Site Preparation	Site Preparation	2/27/2020	3/25/2020	5	20	
3	Grading	Grading	3/26/2020	5/21/2020	5	41	
4	Building Construction	Building Construction	5/22/2020	3/7/2022	5	467	
5	Paving	Paving	3/8/2022	5/3/2022	5	41	
6	Architectural Coating	Architectural Coating	5/3/2022	6/29/2022	5	42	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 20

Acres of Paving: 2.59

Residential Indoor: 1,059,075; Residential Outdoor: 353,025; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 21,590 (Architectural Coating – sqft)

OffRoad Equipment

Alexan Specific Plan (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	3	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	316.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	465.00	106.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	93.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0321	0.0000	0.0321	4.8600e-003	0.0000	4.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0679	0.6806	0.4459	8.0000e-004		0.0340	0.0340		0.0316	0.0316	0.0000	69.6971	69.6971	0.0197	0.0000	70.1890
Total	**0.0679**	**0.6806**	**0.4459**	**8.0000e-004**	**0.0321**	**0.0340**	**0.0661**	**4.8600e-003**	**0.0316**	**0.0365**	**0.0000**	**69.6971**	**69.6971**	**0.0197**	**0.0000**	**70.1890**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3100e-003	0.0441	9.7200e-003	1.2000e-004	2.5500e-003	1.4000e-004	2.6900e-003	7.0000e-004	1.3000e-004	8.3000e-004	0.0000	11.4461	11.4461	8.0000e-004	0.0000	11.4661
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.7300e-003**	**0.0452**	**0.0224**	**1.5000e-004**	**5.9200e-003**	**1.7000e-004**	**6.0900e-003**	**1.5900e-003**	**1.6000e-004**	**1.7500e-003**	**0.0000**	**14.5868**	**14.5868**	**9.0000e-004**	**0.0000**	**14.6092**

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					8.4500e-003	0.0000	8.4500e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0679	0.6806	0.4459	8.0000e-004		0.0340	0.0340		0.0316	0.0316	0.0000	69.6971	69.6971	0.0197	0.0000	70.1889
Total	**0.0679**	**0.6806**	**0.4459**	**8.0000e-004**	**8.4500e-003**	**0.0340**	**0.0425**	**1.2800e-003**	**0.0316**	**0.0329**	**0.0000**	**69.6971**	**69.6971**	**0.0197**	**0.0000**	**70.1889**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3100e-003	0.0441	9.7200e-003	1.2000e-004	2.5500e-003	1.4000e-004	2.6900e-003	7.0000e-004	1.3000e-004	8.3000e-004	0.0000	11.4461	11.4461	8.0000e-004	0.0000	11.4661
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.7300e-003**	**0.0452**	**0.0224**	**1.5000e-004**	**5.9200e-003**	**1.7000e-004**	**6.0900e-003**	**1.5900e-003**	**1.6000e-004**	**1.7500e-003**	**0.0000**	**14.5868**	**14.5868**	**9.0000e-004**	**0.0000**	**14.6092**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1860	0.0000	0.1860	0.0999	0.0000	0.0999	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0482	0.5310	0.2195	4.7000e-004		0.0249	0.0249		0.0229	0.0229	0.0000	41.7699	41.7699	0.0135	0.0000	42.1076
Total	**0.0482**	**0.5310**	**0.2195**	**4.7000e-004**	**0.1860**	**0.0249**	**0.2109**	**0.0999**	**0.0229**	**0.1228**	**0.0000**	**41.7699**	**41.7699**	**0.0135**	**0.0000**	**42.1076**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399
Total	**8.3000e-004**	**6.7000e-004**	**7.4100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**1.8384**	**1.8384**	**6.0000e-005**	**0.0000**	**1.8399**

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					0.0490	0.0000	0.0490	0.0263	0.0000	0.0263	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0482	0.5310	0.2195	4.7000e-004		0.0249	0.0249		0.0229	0.0229	0.0000	41.7698	41.7698	0.0135	0.0000	42.1076
Total	**0.0482**	**0.5310**	**0.2195**	**4.7000e-004**	**0.0490**	**0.0249**	**0.0739**	**0.0263**	**0.0229**	**0.0493**	**0.0000**	**41.7698**	**41.7698**	**0.0135**	**0.0000**	**42.1076**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399
Total	**8.3000e-004**	**6.7000e-004**	**7.4100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**1.8384**	**1.8384**	**6.0000e-005**	**0.0000**	**1.8399**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1341	0.0000	0.1341	0.0690	0.0000	0.0690	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5409	0.3291	6.1000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	53.4204	53.4204	0.0173	0.0000	53.8524
Total	**0.0498**	**0.5409**	**0.3291**	**6.1000e-004**	**0.1341**	**0.0261**	**0.1602**	**0.0690**	**0.0240**	**0.0930**	**0.0000**	**53.4204**	**53.4204**	**0.0173**	**0.0000**	**53.8524**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0469	0.0103	1.2000e-004	2.7200e-003	1.5000e-004	2.8600e-003	7.5000e-004	1.4000e-004	8.9000e-004	0.0000	12.1784	12.1784	8.5000e-004	0.0000	12.1996
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.8100e-003**	**0.0481**	**0.0230**	**1.5000e-004**	**6.0900e-003**	**1.8000e-004**	**6.2600e-003**	**1.6400e-003**	**1.7000e-004**	**1.8100e-003**	**0.0000**	**15.3190**	**15.3190**	**9.5000e-004**	**0.0000**	**15.3427**

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					0.0353	0.0000	0.0353	0.0182	0.0000	0.0182	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5409	0.3291	6.1000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	53.4204	53.4204	0.0173	0.0000	53.8523
Total	**0.0498**	**0.5409**	**0.3291**	**6.1000e-004**	**0.0353**	**0.0261**	**0.0614**	**0.0182**	**0.0240**	**0.0422**	**0.0000**	**53.4204**	**53.4204**	**0.0173**	**0.0000**	**53.8523**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0469	0.0103	1.2000e-004	2.7200e-003	1.5000e-004	2.8600e-003	7.5000e-004	1.4000e-004	8.9000e-004	0.0000	12.1784	12.1784	8.5000e-004	0.0000	12.1996
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	1.1400e-003	0.0127	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	3.1407	3.1407	1.0000e-004	0.0000	3.1431
Total	**2.8100e-003**	**0.0481**	**0.0230**	**1.5000e-004**	**6.0900e-003**	**1.8000e-004**	**6.2600e-003**	**1.6400e-003**	**1.7000e-004**	**1.8100e-003**	**0.0000**	**15.3190**	**15.3190**	**9.5000e-004**	**0.0000**	**15.3427**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1696	1.5349	1.3479	2.1500e-003		0.0894	0.0894		0.0840	0.0840	0.0000	185.2880	185.2880	0.0452	0.0000	186.4181
Total	**0.1696**	**1.5349**	**1.3479**	**2.1500e-003**		**0.0894**	**0.0894**		**0.0840**	**0.0840**	**0.0000**	**185.2880**	**185.2880**	**0.0452**	**0.0000**	**186.4181**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.9189	0.2488	2.1700e-003	0.0534	4.2700e-003	0.0577	0.0154	4.0900e-003	0.0195	0.0000	210.6654	210.6654	0.0134	0.0000	211.0001
Worker	0.1717	0.1385	1.5313	4.2100e-003	0.4076	3.4800e-003	0.4111	0.1083	3.2000e-003	0.1115	0.0000	379.9424	379.9424	0.0120	0.0000	380.2417
Total	**0.2025**	**1.0574**	**1.7800**	**6.3800e-003**	**0.4611**	**7.7500e-003**	**0.4688**	**0.1237**	**7.2900e-003**	**0.1310**	**0.0000**	**590.6078**	**590.6078**	**0.0254**	**0.0000**	**591.2418**

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	0.1696	1.5349	1.3479	2.1500e-003		0.0894	0.0894		0.0840	0.0840	0.0000	185.2878	185.2878	0.0452	0.0000	186.4179
Total	**0.1696**	**1.5349**	**1.3479**	**2.1500e-003**		**0.0894**	**0.0894**		**0.0840**	**0.0840**	**0.0000**	**185.2878**	**185.2878**	**0.0452**	**0.0000**	**186.4179**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.9189	0.2488	2.1700e-003	0.0534	4.2700e-003	0.0577	0.0154	4.0900e-003	0.0195	0.0000	210.6654	210.6654	0.0134	0.0000	211.0001
Worker	0.1717	0.1385	1.5313	4.2100e-003	0.4076	3.4800e-003	0.4111	0.1083	3.2000e-003	0.1115	0.0000	379.9424	379.9424	0.0120	0.0000	380.2417
Total	**0.2025**	**1.0574**	**1.7800**	**6.3800e-003**	**0.4611**	**7.7500e-003**	**0.4688**	**0.1237**	**7.2900e-003**	**0.1310**	**0.0000**	**590.6078**	**590.6078**	**0.0254**	**0.0000**	**591.2418**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0430	1.3652	0.3701	3.5200e-003	0.0871	2.7800e-003	0.0899	0.0252	2.6600e-003	0.0278	0.0000	340.9787	340.9787	0.0209	0.0000	341.5016
Worker	0.2611	0.2033	2.2948	6.6400e-003	0.6650	5.4800e-003	0.6704	0.1766	5.0500e-003	0.1817	0.0000	600.0996	600.0996	0.0177	0.0000	600.5411
Total	**0.3041**	**1.5684**	**2.6649**	**0.0102**	**0.7521**	**8.2600e-003**	**0.7604**	**0.2018**	**7.7100e-003**	**0.2095**	**0.0000**	**941.0783**	**941.0783**	**0.0386**	**0.0000**	**942.0427**

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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2863**	**302.2863**	**0.0729**	**0.0000**	**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0430	1.3652	0.3701	3.5200e-003	0.0871	2.7800e-003	0.0899	0.0252	2.6600e-003	0.0278	0.0000	340.9787	340.9787	0.0209	0.0000	341.5016
Worker	0.2611	0.2033	2.2948	6.6400e-003	0.6650	5.4800e-003	0.6704	0.1766	5.0500e-003	0.1817	0.0000	600.0996	600.0996	0.0177	0.0000	600.5411
Total	**0.3041**	**1.5684**	**2.6649**	**0.0102**	**0.7521**	**8.2600e-003**	**0.7604**	**0.2018**	**7.7100e-003**	**0.2095**	**0.0000**	**941.0783**	**941.0783**	**0.0386**	**0.0000**	**942.0427**

3.5 Building Construction - 2022

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	0.0392	0.3592	0.3764	6.2000e-004		0.0186	0.0186		0.0175	0.0175	0.0000	53.2968	53.2968	0.0128	0.0000	53.6160
Total	**0.0392**	**0.3592**	**0.3764**	**6.2000e-004**		**0.0186**	**0.0186**		**0.0175**	**0.0175**	**0.0000**	**53.2968**	**53.2968**	**0.0128**	**0.0000**	**53.6160**

3.5 Building Construction - 2022

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	7.1100e-003	0.2286	0.0617	6.1000e-004	0.0154	4.3000e-004	0.0158	4.4300e-003	4.1000e-004	4.8400e-003	0.0000	59.5680	59.5680	3.5600e-003	0.0000	59.6570
Worker	0.0432	0.0324	0.3727	1.1300e-003	0.1172	9.4000e-004	0.1181	0.0311	8.6000e-004	0.0320	0.0000	102.0469	102.0469	2.8100e-003	0.0000	102.1171
Total	**0.0503**	**0.2610**	**0.4344**	**1.7400e-003**	**0.1326**	**1.3700e-003**	**0.1339**	**0.0356**	**1.2700e-003**	**0.0368**	**0.0000**	**161.6149**	**161.6149**	**6.3700e-003**	**0.0000**	**161.7741**

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	0.0392	0.3592	0.3764	6.2000e-004		0.0186	0.0186		0.0175	0.0175	0.0000	53.2967	53.2967	0.0128	0.0000	53.6160
Total	**0.0392**	**0.3592**	**0.3764**	**6.2000e-004**		**0.0186**	**0.0186**		**0.0175**	**0.0175**	**0.0000**	**53.2967**	**53.2967**	**0.0128**	**0.0000**	**53.6160**

3.5 Building Construction - 2022

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	7.1100e-003	0.2286	0.0617	6.1000e-004	0.0154	4.3000e-004	0.0158	4.4300e-003	4.1000e-004	4.8400e-003	0.0000	59.5680	59.5680	3.5600e-003	0.0000	59.6570
Worker	0.0432	0.0324	0.3727	1.1300e-003	0.1172	9.4000e-004	0.1181	0.0311	8.6000e-004	0.0320	0.0000	102.0469	102.0469	2.8100e-003	0.0000	102.1171
Total	**0.0503**	**0.2610**	**0.4344**	**1.7400e-003**	**0.1326**	**1.3700e-003**	**0.1339**	**0.0356**	**1.2700e-003**	**0.0368**	**0.0000**	**161.6149**	**161.6149**	**6.3700e-003**	**0.0000**	**161.7741**

3.6 Paving - 2022

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	0.0226	0.2281	0.2989	4.7000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	41.0565	41.0565	0.0133	0.0000	41.3885
Paving	2.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.2281**	**0.2989**	**4.7000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**41.0565**	**41.0565**	**0.0133**	**0.0000**	**41.3885**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.3000e-004	0.0107	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	2.0000e-005	9.2000e-004	0.0000	2.9340	2.9340	8.0000e-005	0.0000	2.9361
Total	**1.2400e-003**	**9.3000e-004**	**0.0107**	**3.0000e-005**	**3.3700e-003**	**3.0000e-005**	**3.4000e-003**	**8.9000e-004**	**2.0000e-005**	**9.2000e-004**	**0.0000**	**2.9340**	**2.9340**	**8.0000e-005**	**0.0000**	**2.9361**

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	0.0226	0.2281	0.2989	4.7000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	41.0564	41.0564	0.0133	0.0000	41.3884
Paving	2.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.2281**	**0.2989**	**4.7000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**41.0564**	**41.0564**	**0.0133**	**0.0000**	**41.3884**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.3000e-004	0.0107	3.0000e-005	3.3700e-003	3.0000e-005	3.4000e-003	8.9000e-004	2.0000e-005	9.2000e-004	0.0000	2.9340	2.9340	8.0000e-005	0.0000	2.9361
Total	**1.2400e-003**	**9.3000e-004**	**0.0107**	**3.0000e-005**	**3.3700e-003**	**3.0000e-005**	**3.4000e-003**	**8.9000e-004**	**2.0000e-005**	**9.2000e-004**	**0.0000**	**2.9340**	**2.9340**	**8.0000e-005**	**0.0000**	**2.9361**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3323					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0887	0.1143	1.9000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	16.0855	16.0855	1.0500e-003	0.0000	16.1117
Total	**0.3452**	**0.0887**	**0.1143**	**1.9000e-004**		**5.1500e-003**	**5.1500e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**16.0855**	**16.0855**	**1.0500e-003**	**0.0000**	**16.1117**

3.7 Architectural Coating - 2022

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	7.8800e-003	5.9100e-003	0.0681	2.1000e-004	0.0214	1.7000e-004	0.0216	5.6800e-003	1.6000e-004	5.8400e-003	0.0000	18.6346	18.6346	5.1000e-004	0.0000	18.6475
Total	**7.8800e-003**	**5.9100e-003**	**0.0681**	**2.1000e-004**	**0.0214**	**1.7000e-004**	**0.0216**	**5.6800e-003**	**1.6000e-004**	**5.8400e-003**	**0.0000**	**18.6346**	**18.6346**	**5.1000e-004**	**0.0000**	**18.6475**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3323					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0887	0.1143	1.9000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	16.0855	16.0855	1.0500e-003	0.0000	16.1117
Total	**0.3452**	**0.0887**	**0.1143**	**1.9000e-004**		**5.1500e-003**	**5.1500e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**16.0855**	**16.0855**	**1.0500e-003**	**0.0000**	**16.1117**

3.7 Architectural Coating - 2022

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	7.8800e-003	5.9100e-003	0.0681	2.1000e-004	0.0214	1.7000e-004	0.0216	5.6800e-003	1.6000e-004	5.8400e-003	0.0000	18.6346	18.6346	5.1000e-004	0.0000	18.6475
Total	**7.8800e-003**	**5.9100e-003**	**0.0681**	**2.1000e-004**	**0.0214**	**1.7000e-004**	**0.0216**	**5.6800e-003**	**1.6000e-004**	**5.8400e-003**	**0.0000**	**18.6346**	**18.6346**	**5.1000e-004**	**0.0000**	**18.6475**

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	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414
Unmitigated	0.6424	1.3286	9.2886	0.0309	2.9250	0.0233	2.9483	0.7803	0.0215	0.8018	0.0000	2,800.1063	2,800.1063	0.0854	0.0000	2,802.2414

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking with Elevator	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	441.7642	441.7642	0.0341	4.1400e-003	443.8504
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	441.7642	441.7642	0.0341	4.1400e-003	443.8504
NaturalGas Mitigated	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
NaturalGas Unmitigated	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358

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					
Apartments Mid Rise	5.84073e+006	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0315**	**0.2691**	**0.1145**	**1.7200e-003**		**0.0218**	**0.0218**		**0.0218**	**0.0218**	**0.0000**	**311.6836**	**311.6836**	**5.9700e-003**	**5.7100e-003**	**313.5358**

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					
Apartments Mid Rise	5.84073e+006	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0315**	**0.2691**	**0.1145**	**1.7200e-003**		**0.0218**	**0.0218**		**0.0218**	**0.0218**	**0.0000**	**311.6836**	**311.6836**	**5.9700e-003**	**5.7100e-003**	**313.5358**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.71323e+006	331.9031	0.0256	3.1100e-003	333.4706
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	567085	109.8610	8.4900e-003	1.0300e-003	110.3799
Total		**441.7642**	**0.0341**	**4.1400e-003**	**443.8504**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.71323e+006	331.9031	0.0256	3.1100e-003	333.4706
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	567085	109.8610	8.4900e-003	1.0300e-003	110.3799
Total		**441.7642**	**0.0341**	**4.1400e-003**	**443.8504**

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	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327
Unmitigated	2.2282	0.1334	4.5460	7.6000e-004		0.0315	0.0315		0.0315	0.0315	0.0000	101.5943	101.5943	8.9400e-003	1.7300e-003	102.3327

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	0.1686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.5200e-003	0.0814	0.0346	5.2000e-004		6.5800e-003	6.5800e-003		6.5800e-003	6.5800e-003	0.0000	94.2298	94.2298	1.8100e-003	1.7300e-003	94.7898
Landscaping	0.1369	0.0520	4.5114	2.4000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	7.3645	7.3645	7.1400e-003	0.0000	7.5430
Total	**2.2282**	**0.1334**	**4.5460**	**7.6000e-004**		**0.0315**	**0.0315**		**0.0315**	**0.0315**	**0.0000**	**101.5943**	**101.5943**	**8.9500e-003**	**1.7300e-003**	**102.3327**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.5200e-003	0.0814	0.0346	5.2000e-004		6.5800e-003	6.5800e-003		6.5800e-003	6.5800e-003	0.0000	94.2298	94.2298	1.8100e-003	1.7300e-003	94.7898
Landscaping	0.1369	0.0520	4.5114	2.4000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	7.3645	7.3645	7.1400e-003	0.0000	7.5430
Total	**2.2282**	**0.1334**	**4.5460**	**7.6000e-004**		**0.0315**	**0.0315**		**0.0315**	**0.0315**	**0.0000**	**101.5943**	**101.5943**	**8.9500e-003**	**1.7300e-003**	**102.3327**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	55.5961	0.6200	0.0150	75.5713
Unmitigated	55.5961	0.6200	0.0150	75.5713

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.9107 / 0.879798	55.5961	0.6200	0.0150	75.5713
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**55.5961**	**0.6200**	**0.0150**	**75.5713**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.9107 / 0.879798	55.5961	0.6200	0.0150	75.5713
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**55.5961**	**0.6200**	**0.0150**	**75.5713**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	40.7119	2.4060	0.0000	100.8619
Unmitigated	40.7119	2.4060	0.0000	100.8619

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	200.56	40.7119	2.4060	0.0000	100.8619
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**40.7119**	**2.4060**	**0.0000**	**100.8619**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	200.56	40.7119	2.4060	0.0000	100.8619
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**40.7119**	**2.4060**	**0.0000**	**100.8619**

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
Emergency Generator	1	0	0	50	0.73	Diesel
Fire Pump	1	0	0	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

11.0 Vegetation

Alexan Specific Plan (Project Emissions 2035)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	798.00	Space	1.04	292,312.00	0
Other Asphalt Surfaces	1.55	Acre	1.55	67,518.00	0
Apartments Mid Rise	436.00	Dwelling Unit	4.18	523,000.00	942

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.58	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan Specific Plan (Project Emissions 2035) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2035 RPS mix. SCE CH4 and N2O factor from USEPA EGRID database.

Land Use - Land use inputs based on Specific Plan and Draft EIR Appendix M. Population from Draft EIR Table 17-1.

Construction Phase - 2035 emissions information run. No construction emissions needed.

Off-road Equipment - 2035 emissions information run. No construction emissions needed.

Trips and VMT - 2035 emissions information run. No construction emissions needed.

Vehicle Trips - Weekday trip rate modified to match Project TIA. Weekend rate modified to maintain weekend trip reduction percentage shown in CalEEMod User's Guide Appendix D, Table 4.3.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Project water use based on 55 gallons per capita per day (indoor) per project water supply assessment (Draft EIR Appendix K). Outdoor water use from Project WSA.

Solid Waste - All landfilled emissions assume methane capture and flaring.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	2.00
tblConstructionPhase	PhaseEndDate	1/28/2020	1/2/2020
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	370.60	392.40
tblFireplaces	NumberWood	21.80	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.58

tblFleetMix	MH	8.0700e-004	0.00
tblFleetMix	MH	8.0700e-004	0.00
tblFleetMix	MH	8.0700e-004	0.00
tblFleetMix	OBUS	2.7030e-003	0.00
tblFleetMix	OBUS	2.7030e-003	0.00
tblFleetMix	OBUS	2.7030e-003	0.00
tblFleetMix	SBUS	7.3200e-004	0.00
tblFleetMix	SBUS	7.3200e-004	0.00
tblFleetMix	SBUS	7.3200e-004	0.00
tblFleetMix	UBUS	1.6290e-003	0.00
tblFleetMix	UBUS	1.6290e-003	0.00
tblFleetMix	UBUS	1.6290e-003	0.00
tblLandUse	LandUseSquareFeet	319,200.00	292,312.00
tblLandUse	LandUseSquareFeet	436,000.00	523,000.00
tblLandUse	LotAcreage	7.18	1.04
tblLandUse	LotAcreage	11.47	4.18
tblLandUse	Population	1,247.00	942.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.58
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblSolidWaste	LandfillCaptureGasFlare	94.00	100.00

tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	5.14
tblVehicleTrips	SU_TR	5.86	4.71
tblVehicleTrips	WD_TR	6.65	5.35
tblWater	IndoorWaterUseRate	28,407,155.17	18,910,650.00
tblWater	OutdoorWaterUseRate	17,908,858.69	879,798.00
tblWoodstoves	NumberCatalytic	21.80	0.00
tblWoodstoves	NumberNoncatalytic	21.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	2.2262	0.1332	4.5253	7.6000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	101.5943	101.5943	8.8500e-003	1.7300e-003	102.3304
Energy	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	367.1032	367.1032	0.0401	9.8500e-003	371.0417
Mobile	0.3528	0.6874	4.8343	0.0225	2.9259	0.0125	2.9384	0.7807	0.0115	0.7922	0.0000	2,043.1305	2,043.1305	0.0462	0.0000	2,044.2853
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	41.6490	0.0000	41.6490	2.0652	0.0000	93.2799
Water						0.0000	0.0000		0.0000	0.0000	5.9995	6.2219	12.2214	0.6200	0.0150	32.1966
Total	**2.6112**	**1.0921**	**9.4767**	**0.0249**	**2.9259**	**0.0659**	**2.9918**	**0.7807**	**0.0650**	**0.8457**	**47.6485**	**2,518.3927**	**2,566.0411**	**2.7805**	**0.0266**	**2,643.4777**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2262	0.1332	4.5253	7.6000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	101.5943	101.5943	8.8500e-003	1.7300e-003	102.3304
Energy	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	367.1032	367.1032	0.0401	9.8500e-003	371.0417
Mobile	0.3528	0.6874	4.8343	0.0225	2.9259	0.0125	2.9384	0.7807	0.0115	0.7922	0.0000	2,043.1305	2,043.1305	0.0462	0.0000	2,044.2853
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	41.6490	0.0000	41.6490	2.0652	0.0000	93.2799
Water						0.0000	0.0000		0.0000	0.0000	5.9995	6.2219	12.2214	0.6200	0.0150	32.1966
Total	**2.6112**	**1.0921**	**9.4767**	**0.0249**	**2.9259**	**0.0659**	**2.9918**	**0.7807**	**0.0650**	**0.8457**	**47.6485**	**2,518.3927**	**2,566.0411**	**2.7805**	**0.0266**	**2,643.4777**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/2/2020	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.59

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

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

Unmitigated 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2020

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 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	0.3528	0.6874	4.8343	0.0225	2.9259	0.0125	2.9384	0.7807	0.0115	0.7922	0.0000	2,043.1305	2,043.1305	0.0462	0.0000	2,044.2853
Unmitigated	0.3528	0.6874	4.8343	0.0225	2.9259	0.0125	2.9384	0.7807	0.0115	0.7922	0.0000	2,043.1305	2,043.1305	0.0462	0.0000	2,044.2853

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,332.60	2,241.04	2053.56	7,789,935	7,789,935
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,332.60	2,241.04	2,053.56	7,789,935	7,789,935

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.582256	0.043743	0.210883	0.115969	0.013375	0.006440	0.022010	0.000000	0.000000	0.000000	0.005324	0.000000	0.000000
Other Asphalt Surfaces	0.582256	0.043743	0.210883	0.115969	0.013375	0.006440	0.022010	0.000000	0.000000	0.000000	0.005324	0.000000	0.000000
Unenclosed Parking with Elevator	0.582256	0.043743	0.210883	0.115969	0.013375	0.006440	0.022010	0.000000	0.000000	0.000000	0.005324	0.000000	0.000000

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	55.4196	55.4196	0.0341	4.1400e-003	57.5059
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	55.4196	55.4196	0.0341	4.1400e-003	57.5059
NaturalGas Mitigated	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
NaturalGas Unmitigated	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358

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					
Apartments Mid Rise	5.84073e+006	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0315**	**0.2691**	**0.1145**	**1.7200e-003**		**0.0218**	**0.0218**		**0.0218**	**0.0218**	**0.0000**	**311.6836**	**311.6836**	**5.9700e-003**	**5.7100e-003**	**313.5358**

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					
Apartments Mid Rise	5.84073e+006	0.0315	0.2691	0.1145	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.6836	311.6836	5.9700e-003	5.7100e-003	313.5358
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
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0315**	**0.2691**	**0.1145**	**1.7200e-003**		**0.0218**	**0.0218**		**0.0218**	**0.0218**	**0.0000**	**311.6836**	**311.6836**	**5.9700e-003**	**5.7100e-003**	**313.5358**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.71323e+006	41.6375	0.0256	3.1100e-003	43.2049
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	567085	13.7822	8.4900e-003	1.0300e-003	14.3010
Total		**55.4196**	**0.0341**	**4.1400e-003**	**57.5059**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.71323e+006	41.6375	0.0256	3.1100e-003	43.2049
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	567085	13.7822	8.4900e-003	1.0300e-003	14.3010
Total		**55.4196**	**0.0341**	**4.1400e-003**	**57.5059**

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	2.2262	0.1332	4.5253	7.6000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	101.5943	101.5943	8.8500e-003	1.7300e-003	102.3304
Unmitigated	2.2262	0.1332	4.5253	7.6000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	101.5943	101.5943	8.8500e-003	1.7300e-003	102.3304

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	0.1686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.5200e-003	0.0814	0.0346	5.2000e-004		6.5800e-003	6.5800e-003		6.5800e-003	6.5800e-003	0.0000	94.2298	94.2298	1.8100e-003	1.7300e-003	94.7898
Landscaping	0.1349	0.0518	4.4907	2.4000e-004		0.0250	0.0250		0.0250	0.0250	0.0000	7.3645	7.3645	7.0400e-003	0.0000	7.5406
Total	**2.2262**	**0.1332**	**4.5253**	**7.6000e-004**		**0.0316**	**0.0316**		**0.0316**	**0.0316**	**0.0000**	**101.5943**	**101.5943**	**8.8500e-003**	**1.7300e-003**	**102.3303**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.5200e-003	0.0814	0.0346	5.2000e-004		6.5800e-003	6.5800e-003		6.5800e-003	6.5800e-003	0.0000	94.2298	94.2298	1.8100e-003	1.7300e-003	94.7898
Landscaping	0.1349	0.0518	4.4907	2.4000e-004		0.0250	0.0250		0.0250	0.0250	0.0000	7.3645	7.3645	7.0400e-003	0.0000	7.5406
Total	**2.2262**	**0.1332**	**4.5253**	**7.6000e-004**		**0.0316**	**0.0316**		**0.0316**	**0.0316**	**0.0000**	**101.5943**	**101.5943**	**8.8500e-003**	**1.7300e-003**	**102.3303**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.2214	0.6200	0.0150	32.1966
Unmitigated	12.2214	0.6200	0.0150	32.1966

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.9107 / 0.879798	12.2214	0.6200	0.0150	32.1966
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**12.2214**	**0.6200**	**0.0150**	**32.1966**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.9107 / 0.879798	12.2214	0.6200	0.0150	32.1966
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**12.2214**	**0.6200**	**0.0150**	**32.1966**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	41.6490	2.0652	0.0000	93.2799
Unmitigated	41.6490	2.0652	0.0000	93.2799

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	200.56	41.6490	2.0652	0.0000	93.2799
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**41.6490**	**2.0652**	**0.0000**	**93.2799**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	200.56	41.6490	2.0652	0.0000	93.2799
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**41.6490**	**2.0652**	**0.0000**	**93.2799**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	4.9000e-004	1.6100e-003	1.7900e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2285	0.2285	3.0000e-005	0.0000	0.2293
Fire Pump - Diesel (50 - 75 HP)	2.5000e-004	8.0000e-004	8.9000e-004	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.1142	0.1142	2.0000e-005	0.0000	0.1146
Total	**7.4000e-004**	**2.4100e-003**	**2.6800e-003**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**0.3427**	**0.3427**	**5.0000e-005**	**0.0000**	**0.3439**

11.0 Vegetation

Project Emissions Estimates:
GP/CZA (2022 and 2035)

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Alexan GPCZA (Project Emissions 2022)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Demolition - building square footage to be demolished is for GP/CZA area only.

Architectural Coating - Arch coating assumes default VOC content.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Waer use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00

tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblLandUse	Population	235.00	227.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00
tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.3962	21.4651	17.8183	0.0369	6.6641	1.0474	7.5808	3.3971	0.9776	4.2405	0.0000	3,493.6827	3,493.6827	0.7701	0.0000	3,506.1115
2022	52.4184	16.0883	17.3650	0.0365	0.8944	0.7109	1.6053	0.2392	0.6812	0.9205	0.0000	3,461.8344	3,461.8344	0.5464	0.0000	3,473.9692
Maximum	**52.4184**	**21.4651**	**17.8183**	**0.0369**	**6.6641**	**1.0474**	**7.5808**	**3.3971**	**0.9776**	**4.2405**	**0.0000**	**3,493.6827**	**3,493.6827**	**0.7701**	**0.0000**	**3,506.1115**

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					
2021	2.3962	21.4651	17.8183	0.0369	3.0603	1.0474	3.9770	1.5450	0.9776	2.3883	0.0000	3,493.6827	3,493.6827	0.7701	0.0000	3,506.1115
2022	52.4184	16.0883	17.3650	0.0365	0.8944	0.7109	1.6053	0.2392	0.6812	0.9205	0.0000	3,461.8344	3,461.8344	0.5464	0.0000	3,473.9692
Maximum	**52.4184**	**21.4651**	**17.8183**	**0.0369**	**3.0603**	**1.0474**	**3.9770**	**1.5450**	**0.9776**	**2.3883**	**0.0000**	**3,493.6827**	**3,493.6827**	**0.7701**	**0.0000**	**3,506.1115**

	ROG	NOx	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**	**47.68**	**0.00**	**39.23**	**50.93**	**0.00**	**35.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0548**	**3.1812**	**20.1878**	**0.0522**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**6,152.3491**	**6,152.3491**	**0.1754**	**0.0351**	**6,167.2052**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0548**	**3.1812**	**20.1878**	**0.0522**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**6,152.3491**	**6,152.3491**	**0.1754**	**0.0351**	**6,167.2052**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	7/9/2021	5	20	
2	Site Preparation	Site Preparation	7/10/2021	7/14/2021	5	3	
3	Grading	Grading	7/15/2021	7/22/2021	5	6	
4	Building Construction	Building Construction	7/23/2021	5/26/2022	5	220	
5	Paving	Paving	5/27/2022	6/9/2022	5	10	
6	Architectural Coating	Architectural Coating	6/10/2022	6/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.7

Residential Indoor: 166,050; Residential Outdoor: 55,350; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,830 (Architectural Coating – sqft)

OffRoad Equipment

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	72.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	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 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3978	0.0000	1.3978	0.2116	0.0000	0.2116			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**1.3978**	**1.0409**	**2.4387**	**0.2116**	**0.9715**	**1.1831**		**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0538	1.7302	0.4057	5.0300e-003	0.1128	5.3100e-003	0.1181	0.0309	5.0800e-003	0.0360		545.9578	545.9578	0.0371		546.8841
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	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	**0.1095**	**1.7685**	**0.9293**	**6.5200e-003**	**0.2581**	**6.4800e-003**	**0.2646**	**0.0695**	**6.1600e-003**	**0.0756**		**693.9979**	**693.9979**	**0.0414**		**695.0332**

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					0.6290	0.0000	0.6290	0.0952	0.0000	0.0952			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**0.6290**	**1.0409**	**1.6699**	**0.0952**	**0.9715**	**1.0667**	**0.0000**	**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0538	1.7302	0.4057	5.0300e-003	0.1128	5.3100e-003	0.1181	0.0309	5.0800e-003	0.0360		545.9578	545.9578	0.0371		546.8841
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	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	**0.1095**	**1.7685**	**0.9293**	**6.5200e-003**	**0.2581**	**6.4800e-003**	**0.2646**	**0.0695**	**6.1600e-003**	**0.0756**		**693.9979**	**693.9979**	**0.0414**		**695.0332**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**1.5908**	**0.7019**	**2.2926**	**0.1718**	**0.6457**	**0.8175**		**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.0343**	**0.0236**	**0.3222**	**9.1000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**91.1016**	**91.1016**	**2.6800e-003**		**91.1687**

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					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.7158**	**0.7019**	**1.4177**	**0.0773**	**0.6457**	**0.7230**	**0.0000**	**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.0343**	**0.0236**	**0.3222**	**9.1000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**91.1016**	**91.1016**	**2.6800e-003**		**91.1687**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**6.5523**	**0.9158**	**7.4681**	**3.3675**	**0.8425**	**4.2100**		**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609
Total	**0.0429**	**0.0295**	**0.4028**	**1.1400e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**113.8770**	**113.8770**	**3.3600e-003**		**113.9609**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**2.9486**	**0.9158**	**3.8643**	**1.5154**	**0.8425**	**2.3579**	**0.0000**	**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609
Total	**0.0429**	**0.0295**	**0.4028**	**1.1400e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**113.8770**	**113.8770**	**3.3600e-003**		**113.9609**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0426	1.3593	0.3553	3.6000e-003	0.0896	2.7800e-003	0.0924	0.0258	2.6600e-003	0.0285		384.8329	384.8329	0.0227		385.3997
Worker	0.3086	0.2121	2.9000	8.2300e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		819.9143	819.9143	0.0242		820.5183
Total	**0.3512**	**1.5714**	**3.2553**	**0.0118**	**0.8944**	**9.2800e-003**	**0.9037**	**0.2392**	**8.6500e-003**	**0.2479**		**1,204.7472**	**1,204.7472**	**0.0468**		**1,205.9179**

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	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0426	1.3593	0.3553	3.6000e-003	0.0896	2.7800e-003	0.0924	0.0258	2.6600e-003	0.0285		384.8329	384.8329	0.0227		385.3997
Worker	0.3086	0.2121	2.9000	8.2300e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		819.9143	819.9143	0.0242		820.5183
Total	**0.3512**	**1.5714**	**3.2553**	**0.0118**	**0.8944**	**9.2800e-003**	**0.9037**	**0.2392**	**8.6500e-003**	**0.2479**		**1,204.7472**	**1,204.7472**	**0.0468**		**1,205.9179**

3.5 Building Construction - 2022

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**		**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0399	1.2926	0.3362	3.5700e-003	0.0896	2.4300e-003	0.0921	0.0258	2.3200e-003	0.0281		381.4802	381.4802	0.0219		382.0275
Worker	0.2891	0.1916	2.6755	7.9400e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		791.0729	791.0729	0.0218		791.6187
Total	**0.3290**	**1.4842**	**3.0118**	**0.0115**	**0.8944**	**8.7300e-003**	**0.9032**	**0.2392**	**8.1200e-003**	**0.2474**		**1,172.5531**	**1,172.5531**	**0.0437**		**1,173.6463**

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**	**0.0000**	**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0399	1.2926	0.3362	3.5700e-003	0.0896	2.4300e-003	0.0921	0.0258	2.3200e-003	0.0281		381.4802	381.4802	0.0219		382.0275
Worker	0.2891	0.1916	2.6755	7.9400e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		791.0729	791.0729	0.0218		791.6187
Total	**0.3290**	**1.4842**	**3.0118**	**0.0115**	**0.8944**	**8.7300e-003**	**0.9032**	**0.2392**	**8.1200e-003**	**0.2474**		**1,172.5531**	**1,172.5531**	**0.0437**		**1,173.6463**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.7 Architectural Coating - 2022

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	52.1577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**52.3622**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0562	0.0373	0.5202	1.5400e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		153.8197	153.8197	4.2500e-003		153.9259
Total	**0.0562**	**0.0373**	**0.5202**	**1.5400e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**153.8197**	**153.8197**	**4.2500e-003**		**153.9259**

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	52.1577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**52.3622**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0562	0.0373	0.5202	1.5400e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		153.8197	153.8197	4.2500e-003		153.9259
Total	**0.0562**	**0.0373**	**0.5202**	**1.5400e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**153.8197**	**153.8197**	**4.2500e-003**		**153.9259**

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	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506
Unmitigated	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking Structure	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
NaturalGas Unmitigated	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688

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					
Apartments Mid Rise	3009.55	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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					
Apartments Mid Rise	3.00955	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Unmitigated	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859

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	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan GPCZA (Project Emissions 2022)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Demolition - building square footage to be demolished is for GP/CZA area only.

Architectural Coating - Arch coating assumes default VOC content.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Waer use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblLandUse	Population	235.00	227.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00
tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.4330	21.4904	17.6075	0.0363	6.6641	1.0475	7.5808	3.3971	0.9777	4.2405	0.0000	3,435.2401	3,435.2401	0.7700	0.0000	3,447.6701
2022	52.4249	16.1052	17.1674	0.0360	0.8944	0.7110	1.6054	0.2392	0.6813	0.9206	0.0000	3,405.1297	3,405.1297	0.5461	0.0000	3,417.2670
Maximum	**52.4249**	**21.4904**	**17.6075**	**0.0363**	**6.6641**	**1.0475**	**7.5808**	**3.3971**	**0.9777**	**4.2405**	**0.0000**	**3,435.2401**	**3,435.2401**	**0.7700**	**0.0000**	**3,447.6701**

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					
2021	2.4330	21.4904	17.6075	0.0363	3.0603	1.0475	3.9770	1.5450	0.9777	2.3883	0.0000	3,435.2401	3,435.2401	0.7700	0.0000	3,447.6701
2022	52.4249	16.1052	17.1674	0.0360	0.8944	0.7110	1.6054	0.2392	0.6813	0.9206	0.0000	3,405.1297	3,405.1297	0.5461	0.0000	3,417.2670
Maximum	**52.4249**	**21.4904**	**17.6075**	**0.0363**	**3.0603**	**1.0475**	**3.9770**	**1.5450**	**0.9777**	**2.3883**	**0.0000**	**3,435.2401**	**3,435.2401**	**0.7700**	**0.0000**	**3,447.6701**

	ROG	NOx	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**	**47.68**	**0.00**	**39.23**	**50.93**	**0.00**	**35.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0218**	**3.2943**	**19.3877**	**0.0500**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**5,931.1429**	**5,931.1429**	**0.1712**	**0.0351**	**5,945.8952**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0218**	**3.2943**	**19.3877**	**0.0500**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**5,931.1429**	**5,931.1429**	**0.1712**	**0.0351**	**5,945.8952**

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

3.0 Construction Detail

Construction Phase

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	7/9/2021	5	20	
2	Site Preparation	Site Preparation	7/10/2021	7/14/2021	5	3	
3	Grading	Grading	7/15/2021	7/22/2021	5	6	
4	Building Construction	Building Construction	7/23/2021	5/26/2022	5	220	
5	Paving	Paving	5/27/2022	6/9/2022	5	10	
6	Architectural Coating	Architectural Coating	6/10/2022	6/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.7

Residential Indoor: 166,050; Residential Outdoor: 55,350; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,830 (Architectural Coating – sqft)

OffRoad Equipment

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	72.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	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 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3978	0.0000	1.3978	0.2116	0.0000	0.2116			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**1.3978**	**1.0409**	**2.4387**	**0.2116**	**0.9715**	**1.1831**		**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0551	1.7514	0.4302	4.9400e-003	0.1128	5.3900e-003	0.1182	0.0309	5.1600e-003	0.0361		536.5001	536.5001	0.0384		537.4590
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	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	**0.1171**	**1.7938**	**0.9089**	**6.3400e-003**	**0.2581**	**6.5600e-003**	**0.2647**	**0.0695**	**6.2400e-003**	**0.0757**		**675.8927**	**675.8927**	**0.0425**		**676.9542**

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					0.6290	0.0000	0.6290	0.0952	0.0000	0.0952			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**0.6290**	**1.0409**	**1.6699**	**0.0952**	**0.9715**	**1.0667**	**0.0000**	**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0551	1.7514	0.4302	4.9400e-003	0.1128	5.3900e-003	0.1182	0.0309	5.1600e-003	0.0361		536.5001	536.5001	0.0384		537.4590
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	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	**0.1171**	**1.7938**	**0.9089**	**6.3400e-003**	**0.2581**	**6.5600e-003**	**0.2647**	**0.0695**	**6.2400e-003**	**0.0757**		**675.8927**	**675.8927**	**0.0425**		**676.9542**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**1.5908**	**0.7019**	**2.2926**	**0.1718**	**0.6457**	**0.8175**		**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.0382**	**0.0261**	**0.2946**	**8.6000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**85.7801**	**85.7801**	**2.5200e-003**		**85.8432**

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					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.7158**	**0.7019**	**1.4177**	**0.0773**	**0.6457**	**0.7230**	**0.0000**	**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.0382**	**0.0261**	**0.2946**	**8.6000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**85.7801**	**85.7801**	**2.5200e-003**		**85.8432**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**6.5523**	**0.9158**	**7.4681**	**3.3675**	**0.8425**	**4.2100**		**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040
Total	**0.0477**	**0.0326**	**0.3683**	**1.0800e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2251**	**107.2251**	**3.1600e-003**		**107.3040**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**2.9486**	**0.9158**	**3.8643**	**1.5154**	**0.8425**	**2.3579**	**0.0000**	**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040
Total	**0.0477**	**0.0326**	**0.3683**	**1.0800e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2251**	**107.2251**	**3.1600e-003**		**107.3040**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0447	1.3564	0.3931	3.5000e-003	0.0896	2.8700e-003	0.0925	0.0258	2.7400e-003	0.0286		374.2837	374.2837	0.0242		374.8878
Worker	0.3433	0.2348	2.6514	7.7500e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		772.0208	772.0208	0.0227		772.5887
Total	**0.3880**	**1.5913**	**3.0445**	**0.0113**	**0.8944**	**9.3700e-003**	**0.9038**	**0.2392**	**8.7300e-003**	**0.2480**		**1,146.3045**	**1,146.3045**	**0.0469**		**1,147.4765**

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	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0447	1.3564	0.3931	3.5000e-003	0.0896	2.8700e-003	0.0925	0.0258	2.7400e-003	0.0286		374.2837	374.2837	0.0242		374.8878
Worker	0.3433	0.2348	2.6514	7.7500e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		772.0208	772.0208	0.0227		772.5887
Total	**0.3880**	**1.5913**	**3.0445**	**0.0113**	**0.8944**	**9.3700e-003**	**0.9038**	**0.2392**	**8.7300e-003**	**0.2480**		**1,146.3045**	**1,146.3045**	**0.0469**		**1,147.4765**

3.5 Building Construction - 2022

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**		**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0419	1.2891	0.3721	3.4700e-003	0.0896	2.5100e-003	0.0921	0.0258	2.4000e-003	0.0282		370.9584	370.9584	0.0233		371.5412
Worker	0.3225	0.2121	2.4421	7.4700e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		744.8900	744.8900	0.0205		745.4028
Total	**0.3644**	**1.5012**	**2.8142**	**0.0109**	**0.8944**	**8.8100e-003**	**0.9032**	**0.2392**	**8.2000e-003**	**0.2475**		**1,115.8484**	**1,115.8484**	**0.0438**		**1,116.9440**

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**	**0.0000**	**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0419	1.2891	0.3721	3.4700e-003	0.0896	2.5100e-003	0.0921	0.0258	2.4000e-003	0.0282		370.9584	370.9584	0.0233		371.5412
Worker	0.3225	0.2121	2.4421	7.4700e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		744.8900	744.8900	0.0205		745.4028
Total	**0.3644**	**1.5012**	**2.8142**	**0.0109**	**0.8944**	**8.8100e-003**	**0.9032**	**0.2392**	**8.2000e-003**	**0.2475**		**1,115.8484**	**1,115.8484**	**0.0438**		**1,116.9440**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

3.7 Architectural Coating - 2022

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	52.1577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**52.3622**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0627	0.0412	0.4749	1.4500e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.8397	144.8397	3.9900e-003		144.9394
Total	**0.0627**	**0.0412**	**0.4749**	**1.4500e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**144.8397**	**144.8397**	**3.9900e-003**		**144.9394**

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	52.1577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**52.3622**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0627	0.0412	0.4749	1.4500e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.8397	144.8397	3.9900e-003		144.9394
Total	**0.0627**	**0.0412**	**0.4749**	**1.4500e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**144.8397**	**144.8397**	**3.9900e-003**		**144.9394**

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	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405
Unmitigated	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking Structure	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
NaturalGas Unmitigated	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688

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					
Apartments Mid Rise	3009.55	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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					
Apartments Mid Rise	3.00955	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Unmitigated	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859

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	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan GPCZA (Project Emissions 2022)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Demolition - building square footage to be demolished is for GP/CZA area only.

Architectural Coating - Arch coating assumes default VOC content.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Waer use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00

tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblLandUse	Population	235.00	227.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00
tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1681	1.3272	1.2253	2.5200e-003	0.0899	0.0622	0.1521	0.0269	0.0592	0.0861	0.0000	218.0982	218.0982	0.0347	0.0000	218.9661
2022	0.3812	0.8931	0.9679	2.0000e-003	0.0472	0.0398	0.0870	0.0126	0.0381	0.0507	0.0000	171.9197	171.9197	0.0255	0.0000	172.5562
Maximum	**0.3812**	**1.3272**	**1.2253**	**2.5200e-003**	**0.0899**	**0.0622**	**0.1521**	**0.0269**	**0.0592**	**0.0861**	**0.0000**	**218.0982**	**218.0982**	**0.0347**	**0.0000**	**218.9661**

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					
2021	0.1681	1.3272	1.2253	2.5200e-003	0.0701	0.0622	0.1323	0.0201	0.0592	0.0793	0.0000	218.0980	218.0980	0.0347	0.0000	218.9659
2022	0.3812	0.8931	0.9679	2.0000e-003	0.0472	0.0398	0.0870	0.0126	0.0381	0.0507	0.0000	171.9196	171.9196	0.0255	0.0000	172.5561
Maximum	**0.3812**	**1.3272**	**1.2253**	**2.5200e-003**	**0.0701**	**0.0622**	**0.1323**	**0.0201**	**0.0592**	**0.0793**	**0.0000**	**218.0980**	**218.0980**	**0.0347**	**0.0000**	**218.9659**

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Annual

	ROG	NOx	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**	**14.45**	**0.00**	**8.28**	**17.35**	**0.00**	**5.01**	**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	**6-14-2021**	**9-13-2021**	0.6960	0.6960
2	**9-14-2021**	**12-13-2021**	0.6513	0.6513
3	**12-14-2021**	**3-13-2022**	0.6001	0.6001
4	**3-14-2022**	**6-13-2022**	0.6125	0.6125
5	**6-14-2022**	**9-13-2022**	0.1924	0.1924
		Highest	0.6960	0.6960

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	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421
Energy	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	126.8011	126.8011	6.3900e-003	1.7100e-003	127.4714
Mobile	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water						0.0000	0.0000		0.0000	0.0000	1.4457	11.9516	13.3974	0.1494	3.6200e-003	18.2109
Total	**0.5086**	**0.3887**	**3.0490**	**7.6700e-003**	**0.6839**	**0.0156**	**0.6995**	**0.1824**	**0.0152**	**0.1976**	**9.1026**	**812.8836**	**821.9862**	**0.6300**	**5.6500e-003**	**839.4217**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421
Energy	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	126.8011	126.8011	6.3900e-003	1.7100e-003	127.4714
Mobile	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water						0.0000	0.0000		0.0000	0.0000	1.4457	11.9516	13.3974	0.1494	3.6200e-003	18.2109
Total	**0.5086**	**0.3887**	**3.0490**	**7.6700e-003**	**0.6839**	**0.0156**	**0.6995**	**0.1824**	**0.0152**	**0.1976**	**9.1026**	**812.8836**	**821.9862**	**0.6300**	**5.6500e-003**	**839.4217**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	7/9/2021	5	20	
2	Site Preparation	Site Preparation	7/10/2021	7/14/2021	5	3	
3	Grading	Grading	7/15/2021	7/22/2021	5	6	
4	Building Construction	Building Construction	7/23/2021	5/26/2022	5	220	
5	Paving	Paving	5/27/2022	6/9/2022	5	10	
6	Architectural Coating	Architectural Coating	6/10/2022	6/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.7

Residential Indoor: 166,050; Residential Outdoor: 55,350; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,830 (Architectural Coating – sqft)

OffRoad Equipment

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	72.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	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 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0140	0.0000	0.0140	2.1200e-003	0.0000	2.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**0.0140**	**0.0104**	**0.0244**	**2.1200e-003**	**9.7100e-003**	**0.0118**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0179	4.1600e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.0000e-004	5.0000e-005	3.6000e-004	0.0000	4.9168	4.9168	3.4000e-004	0.0000	4.9253
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	5.6000e-004	4.4000e-004	4.9200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2856	1.2856	4.0000e-005	0.0000	1.2865
Total	**1.1000e-003**	**0.0183**	**9.0800e-003**	**6.0000e-005**	**2.5300e-003**	**6.0000e-005**	**2.6000e-003**	**6.8000e-004**	**6.0000e-005**	**7.5000e-004**	**0.0000**	**6.2024**	**6.2024**	**3.8000e-004**	**0.0000**	**6.2119**

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					6.2900e-003	0.0000	6.2900e-003	9.5000e-004	0.0000	9.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**6.2900e-003**	**0.0104**	**0.0167**	**9.5000e-004**	**9.7100e-003**	**0.0107**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0179	4.1600e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.0000e-004	5.0000e-005	3.6000e-004	0.0000	4.9168	4.9168	3.4000e-004	0.0000	4.9253
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	5.6000e-004	4.4000e-004	4.9200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2856	1.2856	4.0000e-005	0.0000	1.2865
Total	**1.1000e-003**	**0.0183**	**9.0800e-003**	**6.0000e-005**	**2.5300e-003**	**6.0000e-005**	**2.6000e-003**	**6.8000e-004**	**6.0000e-005**	**7.5000e-004**	**0.0000**	**6.2024**	**6.2024**	**3.8000e-004**	**0.0000**	**6.2119**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.3200e-003**	**0.0274**	**0.0161**	**4.0000e-005**	**2.3900e-003**	**1.0500e-003**	**3.4400e-003**	**2.6000e-004**	**9.7000e-004**	**1.2300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	4.5000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1187	0.1187	0.0000	0.0000	0.1188
Total	**5.0000e-005**	**4.0000e-005**	**4.5000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1187**	**0.1187**	**0.0000**	**0.0000**	**0.1188**

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					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.3200e-003**	**0.0274**	**0.0161**	**4.0000e-005**	**1.0700e-003**	**1.0500e-003**	**2.1200e-003**	**1.2000e-004**	**9.7000e-004**	**1.0900e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	4.5000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1187	0.1187	0.0000	0.0000	0.1188
Total	**5.0000e-005**	**4.0000e-005**	**4.5000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1187**	**0.1187**	**0.0000**	**0.0000**	**0.1188**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0606	0.0293	6.0000e-005		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**5.4800e-003**	**0.0606**	**0.0293**	**6.0000e-005**	**0.0197**	**2.7500e-003**	**0.0224**	**0.0101**	**2.5300e-003**	**0.0126**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.0000e-004	1.1300e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2967	0.2967	1.0000e-005	0.0000	0.2969
Total	**1.3000e-004**	**1.0000e-004**	**1.1300e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2967**	**0.2967**	**1.0000e-005**	**0.0000**	**0.2969**

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					8.8500e-003	0.0000	8.8500e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0606	0.0293	6.0000e-005		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**5.4800e-003**	**0.0606**	**0.0293**	**6.0000e-005**	**8.8500e-003**	**2.7500e-003**	**0.0116**	**4.5500e-003**	**2.5300e-003**	**7.0800e-003**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.0000e-004	1.1300e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2967	0.2967	1.0000e-005	0.0000	0.2969
Total	**1.3000e-004**	**1.0000e-004**	**1.1300e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2967**	**0.2967**	**1.0000e-005**	**0.0000**	**0.2969**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1186	0.9296	0.8447	1.4500e-003		0.0474	0.0474		0.0454	0.0454	0.0000	120.4363	120.4363	0.0237	0.0000	121.0286
Total	**0.1186**	**0.9296**	**0.8447**	**1.4500e-003**		**0.0474**	**0.0474**		**0.0454**	**0.0454**	**0.0000**	**120.4363**	**120.4363**	**0.0237**	**0.0000**	**121.0286**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0801	0.0217	2.1000e-004	5.1100e-003	1.6000e-004	5.2800e-003	1.4800e-003	1.6000e-004	1.6300e-003	0.0000	20.0155	20.0155	1.2300e-003	0.0000	20.0462
Worker	0.0180	0.0140	0.1579	4.6000e-004	0.0458	3.8000e-004	0.0461	0.0122	3.5000e-004	0.0125	0.0000	41.2972	41.2972	1.2200e-003	0.0000	41.3276
Total	**0.0205**	**0.0941**	**0.1797**	**6.7000e-004**	**0.0509**	**5.4000e-004**	**0.0514**	**0.0136**	**5.1000e-004**	**0.0141**	**0.0000**	**61.3127**	**61.3127**	**2.4500e-003**	**0.0000**	**61.3738**

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	0.1186	0.9296	0.8447	1.4500e-003		0.0474	0.0474		0.0454	0.0454	0.0000	120.4361	120.4361	0.0237	0.0000	121.0285
Total	**0.1186**	**0.9296**	**0.8447**	**1.4500e-003**		**0.0474**	**0.0474**		**0.0454**	**0.0454**	**0.0000**	**120.4361**	**120.4361**	**0.0237**	**0.0000**	**121.0285**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0801	0.0217	2.1000e-004	5.1100e-003	1.6000e-004	5.2800e-003	1.4800e-003	1.6000e-004	1.6300e-003	0.0000	20.0155	20.0155	1.2300e-003	0.0000	20.0462
Worker	0.0180	0.0140	0.1579	4.6000e-004	0.0458	3.8000e-004	0.0461	0.0122	3.5000e-004	0.0125	0.0000	41.2972	41.2972	1.2200e-003	0.0000	41.3276
Total	**0.0205**	**0.0941**	**0.1797**	**6.7000e-004**	**0.0509**	**5.4000e-004**	**0.0514**	**0.0136**	**5.1000e-004**	**0.0141**	**0.0000**	**61.3127**	**61.3127**	**2.4500e-003**	**0.0000**	**61.3738**

3.5 Building Construction - 2022

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	0.0965	0.7594	0.7464	1.3000e-003		0.0365	0.0365		0.0350	0.0350	0.0000	107.9937	107.9937	0.0208	0.0000	108.5145
Total	**0.0965**	**0.7594**	**0.7464**	**1.3000e-003**		**0.0365**	**0.0365**		**0.0350**	**0.0350**	**0.0000**	**107.9937**	**107.9937**	**0.0208**	**0.0000**	**108.5145**

3.5 Building Construction - 2022

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	2.1200e-003	0.0683	0.0184	1.8000e-004	4.5900e-003	1.3000e-004	4.7100e-003	1.3200e-003	1.2000e-004	1.4500e-003	0.0000	17.7873	17.7873	1.0600e-003	0.0000	17.8139
Worker	0.0151	0.0113	0.1305	4.0000e-004	0.0410	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112	0.0000	35.7236	35.7236	9.8000e-004	0.0000	35.7482
Total	**0.0172**	**0.0796**	**0.1489**	**5.8000e-004**	**0.0456**	**4.6000e-004**	**0.0461**	**0.0122**	**4.2000e-004**	**0.0127**	**0.0000**	**53.5109**	**53.5109**	**2.0400e-003**	**0.0000**	**53.5621**

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	0.0965	0.7594	0.7464	1.3000e-003		0.0365	0.0365		0.0350	0.0350	0.0000	107.9935	107.9935	0.0208	0.0000	108.5144
Total	**0.0965**	**0.7594**	**0.7464**	**1.3000e-003**		**0.0365**	**0.0365**		**0.0350**	**0.0350**	**0.0000**	**107.9935**	**107.9935**	**0.0208**	**0.0000**	**108.5144**

3.5 Building Construction - 2022

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	2.1200e-003	0.0683	0.0184	1.8000e-004	4.5900e-003	1.3000e-004	4.7100e-003	1.3200e-003	1.2000e-004	1.4500e-003	0.0000	17.7873	17.7873	1.0600e-003	0.0000	17.8139
Worker	0.0151	0.0113	0.1305	4.0000e-004	0.0410	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112	0.0000	35.7236	35.7236	9.8000e-004	0.0000	35.7482
Total	**0.0172**	**0.0796**	**0.1489**	**5.8000e-004**	**0.0456**	**4.6000e-004**	**0.0461**	**0.0122**	**4.2000e-004**	**0.0127**	**0.0000**	**53.5109**	**53.5109**	**2.0400e-003**	**0.0000**	**53.5621**

3.6 Paving - 2022

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1200e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.6100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7156	0.7156	2.0000e-005	0.0000	0.7161
Total	**3.0000e-004**	**2.3000e-004**	**2.6100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7156**	**0.7156**	**2.0000e-005**	**0.0000**	**0.7161**

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1200e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.6100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7156	0.7156	2.0000e-005	0.0000	0.7161
Total	**3.0000e-004**	**2.3000e-004**	**2.6100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7156**	**0.7156**	**2.0000e-005**	**0.0000**	**0.7161**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.2618**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.7 Architectural Coating - 2022

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	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.2618**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.7 Architectural Coating - 2022

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	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

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	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839
Unmitigated	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking Structure	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	68.1817	68.1817	5.2700e-003	6.4000e-004	68.5037
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	68.1817	68.1817	5.2700e-003	6.4000e-004	68.5037
NaturalGas Mitigated	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
NaturalGas Unmitigated	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677

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					
Apartments Mid Rise	1.09849e+006	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
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
Unenclosed Parking Structure	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
Total		**5.9200e-003**	**0.0506**	**0.0215**	**3.2000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**58.6194**	**58.6194**	**1.1200e-003**	**1.0700e-003**	**58.9677**

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					
Apartments Mid Rise	1.09849e+006	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
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
Unenclosed Parking Structure	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
Total		**5.9200e-003**	**0.0506**	**0.0215**	**3.2000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**58.6194**	**58.6194**	**1.1200e-003**	**1.0700e-003**	**58.9677**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	322213	62.4222	4.8200e-003	5.8000e-004	62.7169
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	29729.7	5.7595	4.5000e-004	5.0000e-005	5.7867
Total		**68.1817**	**5.2700e-003**	**6.3000e-004**	**68.5037**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	322213	62.4222	4.8200e-003	5.8000e-004	62.7169
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	29729.7	5.7595	4.5000e-004	5.0000e-005	5.7867
Total		**68.1817**	**5.2700e-003**	**6.3000e-004**	**68.5037**

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	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421
Unmitigated	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421

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	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2983					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7221	17.7221	3.4000e-004	3.2000e-004	17.8274
Landscaping	0.0256	9.7600e-003	0.8466	4.0000e-005		4.6800e-003	4.6800e-003		4.6800e-003	4.6800e-003	0.0000	1.3814	1.3814	1.3300e-003	0.0000	1.4147
Total	**0.3517**	**0.0251**	**0.8531**	**1.4000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**	**0.0000**	**19.1035**	**19.1035**	**1.6700e-003**	**3.2000e-004**	**19.2421**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2983					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7221	17.7221	3.4000e-004	3.2000e-004	17.8274
Landscaping	0.0256	9.7600e-003	0.8466	4.0000e-005		4.6800e-003	4.6800e-003		4.6800e-003	4.6800e-003	0.0000	1.3814	1.3814	1.3300e-003	0.0000	1.4147
Total	**0.3517**	**0.0251**	**0.8531**	**1.4000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**	**0.0000**	**19.1035**	**19.1035**	**1.6700e-003**	**3.2000e-004**	**19.2421**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.3974	0.1494	3.6200e-003	18.2109
Unmitigated	13.3974	0.1494	3.6200e-003	18.2109

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.55703 / 0.212011	13.3974	0.1494	3.6200e-003	18.2109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.3974**	**0.1494**	**3.6200e-003**	**18.2109**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.55703 / 0.212011	13.3974	0.1494	3.6200e-003	18.2109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.3974**	**0.1494**	**3.6200e-003**	**18.2109**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.6568	0.4525	0.0000	18.9695
Unmitigated	7.6568	0.4525	0.0000	18.9695

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	37.72	7.6568	0.4525	0.0000	18.9695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**7.6568**	**0.4525**	**0.0000**	**18.9695**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	37.72	7.6568	0.4525	0.0000	18.9695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**7.6568**	**0.4525**	**0.0000**	**18.9695**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	4.9000e-004	1.6100e-003	1.7900e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2285	0.2285	3.0000e-005	0.0000	0.2293
Fire Pump - Diesel (50 - 75 HP)	2.5000e-004	8.0000e-004	8.9000e-004	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.1142	0.1142	2.0000e-005	0.0000	0.1146
Total	**7.4000e-004**	**2.4100e-003**	**2.6800e-003**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**0.3427**	**0.3427**	**5.0000e-005**	**0.0000**	**0.3439**

11.0 Vegetation

Alexan GPCZA (Project Emissions 2022)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Demolition - building square footage to be demolished is for GP/CZA area only.

Architectural Coating - Super compliant VOC content coatings applied to all residentia, non-residential, and parking applications (10 g/l VOC content.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Waer use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58

tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblLandUse	Population	235.00	227.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00

tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.3962	21.4651	17.8183	0.0369	6.6641	1.0474	7.5808	3.3971	0.9776	4.2405	0.0000	3,493.6827	3,493.6827	0.7701	0.0000	3,506.1115
2022	10.6075	16.0883	17.3650	0.0365	0.8944	0.7109	1.6053	0.2392	0.6812	0.9205	0.0000	3,461.8344	3,461.8344	0.5464	0.0000	3,473.9692
Maximum	**10.6075**	**21.4651**	**17.8183**	**0.0369**	**6.6641**	**1.0474**	**7.5808**	**3.3971**	**0.9776**	**4.2405**	**0.0000**	**3,493.6827**	**3,493.6827**	**0.7701**	**0.0000**	**3,506.1115**

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					
2021	2.3962	21.4651	17.8183	0.0369	3.0603	1.0474	3.9770	1.5450	0.9776	2.3883	0.0000	3,493.6827	3,493.6827	0.7701	0.0000	3,506.1115
2022	10.6075	16.0883	17.3650	0.0365	0.8944	0.7109	1.6053	0.2392	0.6812	0.9205	0.0000	3,461.8344	3,461.8344	0.5464	0.0000	3,473.9692
Maximum	**10.6075**	**21.4651**	**17.8183**	**0.0369**	**3.0603**	**1.0474**	**3.9770**	**1.5450**	**0.9776**	**2.3883**	**0.0000**	**3,493.6827**	**3,493.6827**	**0.7701**	**0.0000**	**3,506.1115**

	ROG	NOx	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**	**47.68**	**0.00**	**39.23**	**50.93**	**0.00**	**35.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0548**	**3.1812**	**20.1878**	**0.0522**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**6,152.3491**	**6,152.3491**	**0.1754**	**0.0351**	**6,167.2052**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0548**	**3.1812**	**20.1878**	**0.0522**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**6,152.3491**	**6,152.3491**	**0.1754**	**0.0351**	**6,167.2052**

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

3.0 Construction Detail

Construction Phase

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	7/9/2021	5	20	
2	Site Preparation	Site Preparation	7/10/2021	7/14/2021	5	3	
3	Grading	Grading	7/15/2021	7/22/2021	5	6	
4	Building Construction	Building Construction	7/23/2021	5/26/2022	5	220	
5	Paving	Paving	5/27/2022	6/9/2022	5	10	
6	Architectural Coating	Architectural Coating	6/10/2022	6/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.7

Residential Indoor: 166,050; Residential Outdoor: 55,350; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,830 (Architectural Coating – sqft)

OffRoad Equipment

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	72.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	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 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3978	0.0000	1.3978	0.2116	0.0000	0.2116			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**1.3978**	**1.0409**	**2.4387**	**0.2116**	**0.9715**	**1.1831**		**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0538	1.7302	0.4057	5.0300e-003	0.1128	5.3100e-003	0.1181	0.0309	5.0800e-003	0.0360		545.9578	545.9578	0.0371		546.8841
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	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	**0.1095**	**1.7685**	**0.9293**	**6.5200e-003**	**0.2581**	**6.4800e-003**	**0.2646**	**0.0695**	**6.1600e-003**	**0.0756**		**693.9979**	**693.9979**	**0.0414**		**695.0332**

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					0.6290	0.0000	0.6290	0.0952	0.0000	0.0952			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**0.6290**	**1.0409**	**1.6699**	**0.0952**	**0.9715**	**1.0667**	**0.0000**	**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0538	1.7302	0.4057	5.0300e-003	0.1128	5.3100e-003	0.1181	0.0309	5.0800e-003	0.0360		545.9578	545.9578	0.0371		546.8841
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	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	**0.1095**	**1.7685**	**0.9293**	**6.5200e-003**	**0.2581**	**6.4800e-003**	**0.2646**	**0.0695**	**6.1600e-003**	**0.0756**		**693.9979**	**693.9979**	**0.0414**		**695.0332**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**1.5908**	**0.7019**	**2.2926**	**0.1718**	**0.6457**	**0.8175**		**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.0343**	**0.0236**	**0.3222**	**9.1000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**91.1016**	**91.1016**	**2.6800e-003**		**91.1687**

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					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.7158**	**0.7019**	**1.4177**	**0.0773**	**0.6457**	**0.7230**	**0.0000**	**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.0343**	**0.0236**	**0.3222**	**9.1000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**91.1016**	**91.1016**	**2.6800e-003**		**91.1687**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**6.5523**	**0.9158**	**7.4681**	**3.3675**	**0.8425**	**4.2100**		**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609
Total	**0.0429**	**0.0295**	**0.4028**	**1.1400e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**113.8770**	**113.8770**	**3.3600e-003**		**113.9609**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**2.9486**	**0.9158**	**3.8643**	**1.5154**	**0.8425**	**2.3579**	**0.0000**	**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609
Total	**0.0429**	**0.0295**	**0.4028**	**1.1400e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**113.8770**	**113.8770**	**3.3600e-003**		**113.9609**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0426	1.3593	0.3553	3.6000e-003	0.0896	2.7800e-003	0.0924	0.0258	2.6600e-003	0.0285		384.8329	384.8329	0.0227		385.3997
Worker	0.3086	0.2121	2.9000	8.2300e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		819.9143	819.9143	0.0242		820.5183
Total	**0.3512**	**1.5714**	**3.2553**	**0.0118**	**0.8944**	**9.2800e-003**	**0.9037**	**0.2392**	**8.6500e-003**	**0.2479**		**1,204.7472**	**1,204.7472**	**0.0468**		**1,205.9179**

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	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0426	1.3593	0.3553	3.6000e-003	0.0896	2.7800e-003	0.0924	0.0258	2.6600e-003	0.0285		384.8329	384.8329	0.0227		385.3997
Worker	0.3086	0.2121	2.9000	8.2300e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		819.9143	819.9143	0.0242		820.5183
Total	**0.3512**	**1.5714**	**3.2553**	**0.0118**	**0.8944**	**9.2800e-003**	**0.9037**	**0.2392**	**8.6500e-003**	**0.2479**		**1,204.7472**	**1,204.7472**	**0.0468**		**1,205.9179**

3.5 Building Construction - 2022

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**		**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0399	1.2926	0.3362	3.5700e-003	0.0896	2.4300e-003	0.0921	0.0258	2.3200e-003	0.0281		381.4802	381.4802	0.0219		382.0275
Worker	0.2891	0.1916	2.6755	7.9400e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		791.0729	791.0729	0.0218		791.6187
Total	**0.3290**	**1.4842**	**3.0118**	**0.0115**	**0.8944**	**8.7300e-003**	**0.9032**	**0.2392**	**8.1200e-003**	**0.2474**		**1,172.5531**	**1,172.5531**	**0.0437**		**1,173.6463**

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**	**0.0000**	**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0399	1.2926	0.3362	3.5700e-003	0.0896	2.4300e-003	0.0921	0.0258	2.3200e-003	0.0281		381.4802	381.4802	0.0219		382.0275
Worker	0.2891	0.1916	2.6755	7.9400e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		791.0729	791.0729	0.0218		791.6187
Total	**0.3290**	**1.4842**	**3.0118**	**0.0115**	**0.8944**	**8.7300e-003**	**0.9032**	**0.2392**	**8.1200e-003**	**0.2474**		**1,172.5531**	**1,172.5531**	**0.0437**		**1,173.6463**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.7 Architectural Coating - 2022

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	10.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**10.5513**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0562	0.0373	0.5202	1.5400e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		153.8197	153.8197	4.2500e-003		153.9259
Total	**0.0562**	**0.0373**	**0.5202**	**1.5400e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**153.8197**	**153.8197**	**4.2500e-003**		**153.9259**

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	10.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**10.5513**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0562	0.0373	0.5202	1.5400e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		153.8197	153.8197	4.2500e-003		153.9259
Total	**0.0562**	**0.0373**	**0.5202**	**1.5400e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**153.8197**	**153.8197**	**4.2500e-003**		**153.9259**

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	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506
Unmitigated	0.8972	1.6016	12.7764	0.0422	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,223.2794	4,223.2794	0.1269		4,226.4506

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking Structure	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
NaturalGas Unmitigated	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688

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					
Apartments Mid Rise	3009.55	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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					
Apartments Mid Rise	3.00955	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Unmitigated	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859

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	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan GPCZA (Project Emissions 2022)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Demolition - building square footage to be demolished is for GP/CZA area only.

Architectural Coating - Super compliant VOC content coatings applied to all residentia, non-residential, and parking applications (10 g/l VOC content.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Waer use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58

tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblLandUse	Population	235.00	227.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00

tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.4330	21.4904	17.6075	0.0363	6.6641	1.0475	7.5808	3.3971	0.9777	4.2405	0.0000	3,435.2401	3,435.2401	0.7700	0.0000	3,447.6701
2022	10.6140	16.1052	17.1674	0.0360	0.8944	0.7110	1.6054	0.2392	0.6813	0.9206	0.0000	3,405.1297	3,405.1297	0.5461	0.0000	3,417.2670
Maximum	**10.6140**	**21.4904**	**17.6075**	**0.0363**	**6.6641**	**1.0475**	**7.5808**	**3.3971**	**0.9777**	**4.2405**	**0.0000**	**3,435.2401**	**3,435.2401**	**0.7700**	**0.0000**	**3,447.6701**

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					
2021	2.4330	21.4904	17.6075	0.0363	3.0603	1.0475	3.9770	1.5450	0.9777	2.3883	0.0000	3,435.2401	3,435.2401	0.7700	0.0000	3,447.6701
2022	10.6140	16.1052	17.1674	0.0360	0.8944	0.7110	1.6054	0.2392	0.6813	0.9206	0.0000	3,405.1297	3,405.1297	0.5461	0.0000	3,417.2670
Maximum	**10.6140**	**21.4904**	**17.6075**	**0.0363**	**3.0603**	**1.0475**	**3.9770**	**1.5450**	**0.9777**	**2.3883**	**0.0000**	**3,435.2401**	**3,435.2401**	**0.7700**	**0.0000**	**3,447.6701**

	ROG	NOx	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**	**47.68**	**0.00**	**39.23**	**50.93**	**0.00**	**35.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0218**	**3.2943**	**19.3877**	**0.0500**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**5,931.1429**	**5,931.1429**	**0.1712**	**0.0351**	**5,945.8952**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Energy	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
Mobile	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0218**	**3.2943**	**19.3877**	**0.0500**	**3.9208**	**0.1894**	**4.1103**	**1.0443**	**0.1871**	**1.2315**	**0.0000**	**5,931.1429**	**5,931.1429**	**0.1712**	**0.0351**	**5,945.8952**

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

3.0 Construction Detail

Construction Phase

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	7/9/2021	5	20	
2	Site Preparation	Site Preparation	7/10/2021	7/14/2021	5	3	
3	Grading	Grading	7/15/2021	7/22/2021	5	6	
4	Building Construction	Building Construction	7/23/2021	5/26/2022	5	220	
5	Paving	Paving	5/27/2022	6/9/2022	5	10	
6	Architectural Coating	Architectural Coating	6/10/2022	6/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.7

Residential Indoor: 166,050; Residential Outdoor: 55,350; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,830 (Architectural Coating – sqft)

OffRoad Equipment

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	72.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	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 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3978	0.0000	1.3978	0.2116	0.0000	0.2116			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**1.3978**	**1.0409**	**2.4387**	**0.2116**	**0.9715**	**1.1831**		**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0551	1.7514	0.4302	4.9400e-003	0.1128	5.3900e-003	0.1182	0.0309	5.1600e-003	0.0361		536.5001	536.5001	0.0384		537.4590
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	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	**0.1171**	**1.7938**	**0.9089**	**6.3400e-003**	**0.2581**	**6.5600e-003**	**0.2647**	**0.0695**	**6.2400e-003**	**0.0757**		**675.8927**	**675.8927**	**0.0425**		**676.9542**

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					0.6290	0.0000	0.6290	0.0952	0.0000	0.0952			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	**1.9930**	**19.6966**	**14.4925**	**0.0241**	**0.6290**	**1.0409**	**1.6699**	**0.0952**	**0.9715**	**1.0667**	**0.0000**	**2,322.7171**	**2,322.7171**	**0.5940**		**2,337.5658**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0551	1.7514	0.4302	4.9400e-003	0.1128	5.3900e-003	0.1182	0.0309	5.1600e-003	0.0361		536.5001	536.5001	0.0384		537.4590
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	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	**0.1171**	**1.7938**	**0.9089**	**6.3400e-003**	**0.2581**	**6.5600e-003**	**0.2647**	**0.0695**	**6.2400e-003**	**0.0757**		**675.8927**	**675.8927**	**0.0425**		**676.9542**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**1.5908**	**0.7019**	**2.2926**	**0.1718**	**0.6457**	**0.8175**		**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.0382**	**0.0261**	**0.2946**	**8.6000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**85.7801**	**85.7801**	**2.5200e-003**		**85.8432**

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					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	**1.5463**	**18.2862**	**10.7496**	**0.0245**	**0.7158**	**0.7019**	**1.4177**	**0.0773**	**0.6457**	**0.7230**	**0.0000**	**2,372.8832**	**2,372.8832**	**0.7674**		**2,392.0692**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.0382**	**0.0261**	**0.2946**	**8.6000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.7000e-004**	**0.0244**		**85.7801**	**85.7801**	**2.5200e-003**		**85.8432**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**6.5523**	**0.9158**	**7.4681**	**3.3675**	**0.8425**	**4.2100**		**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040
Total	**0.0477**	**0.0326**	**0.3683**	**1.0800e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2251**	**107.2251**	**3.1600e-003**		**107.3040**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	**1.8271**	**20.2135**	**9.7604**	**0.0206**	**2.9486**	**0.9158**	**3.8643**	**1.5154**	**0.8425**	**2.3579**	**0.0000**	**1,995.6114**	**1,995.6114**	**0.6454**		**2,011.7470**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040
Total	**0.0477**	**0.0326**	**0.3683**	**1.0800e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2251**	**107.2251**	**3.1600e-003**		**107.3040**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0447	1.3564	0.3931	3.5000e-003	0.0896	2.8700e-003	0.0925	0.0258	2.7400e-003	0.0286		374.2837	374.2837	0.0242		374.8878
Worker	0.3433	0.2348	2.6514	7.7500e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		772.0208	772.0208	0.0227		772.5887
Total	**0.3880**	**1.5913**	**3.0445**	**0.0113**	**0.8944**	**9.3700e-003**	**0.9038**	**0.2392**	**8.7300e-003**	**0.2480**		**1,146.3045**	**1,146.3045**	**0.0469**		**1,147.4765**

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	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0447	1.3564	0.3931	3.5000e-003	0.0896	2.8700e-003	0.0925	0.0258	2.7400e-003	0.0286		374.2837	374.2837	0.0242		374.8878
Worker	0.3433	0.2348	2.6514	7.7500e-003	0.8048	6.5000e-003	0.8113	0.2134	5.9900e-003	0.2194		772.0208	772.0208	0.0227		772.5887
Total	**0.3880**	**1.5913**	**3.0445**	**0.0113**	**0.8944**	**9.3700e-003**	**0.9038**	**0.2392**	**8.7300e-003**	**0.2480**		**1,146.3045**	**1,146.3045**	**0.0469**		**1,147.4765**

3.5 Building Construction - 2022

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**		**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0419	1.2891	0.3721	3.4700e-003	0.0896	2.5100e-003	0.0921	0.0258	2.4000e-003	0.0282		370.9584	370.9584	0.0233		371.5412
Worker	0.3225	0.2121	2.4421	7.4700e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		744.8900	744.8900	0.0205		745.4028
Total	**0.3644**	**1.5012**	**2.8142**	**0.0109**	**0.8944**	**8.8100e-003**	**0.9032**	**0.2392**	**8.2000e-003**	**0.2475**		**1,115.8484**	**1,115.8484**	**0.0438**		**1,116.9440**

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	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	**1.8555**	**14.6040**	**14.3533**	**0.0250**		**0.7022**	**0.7022**		**0.6731**	**0.6731**	**0.0000**	**2,289.2813**	**2,289.2813**	**0.4417**		**2,300.3230**

3.5 Building Construction - 2022

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	0.0419	1.2891	0.3721	3.4700e-003	0.0896	2.5100e-003	0.0921	0.0258	2.4000e-003	0.0282		370.9584	370.9584	0.0233		371.5412
Worker	0.3225	0.2121	2.4421	7.4700e-003	0.8048	6.3000e-003	0.8111	0.2134	5.8000e-003	0.2192		744.8900	744.8900	0.0205		745.4028
Total	**0.3644**	**1.5012**	**2.8142**	**0.0109**	**0.8944**	**8.8100e-003**	**0.9032**	**0.2392**	**8.2000e-003**	**0.2475**		**1,115.8484**	**1,115.8484**	**0.0438**		**1,116.9440**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0224**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

3.6 Paving - 2022

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

3.7 Architectural Coating - 2022

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	10.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**10.5513**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0627	0.0412	0.4749	1.4500e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.8397	144.8397	3.9900e-003		144.9394
Total	**0.0627**	**0.0412**	**0.4749**	**1.4500e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**144.8397**	**144.8397**	**3.9900e-003**		**144.9394**

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	10.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**10.5513**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	0.0627	0.0412	0.4749	1.4500e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.8397	144.8397	3.9900e-003		144.9394
Total	**0.0627**	**0.0412**	**0.4749**	**1.4500e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**144.8397**	**144.8397**	**3.9900e-003**		**144.9394**

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	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405
Unmitigated	0.8643	1.7147	11.9763	0.0400	3.9208	0.0306	3.9514	1.0443	0.0283	1.0726		4,002.0732	4,002.0732	0.1227		4,005.1405

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking Structure	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
NaturalGas Unmitigated	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688

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					
Apartments Mid Rise	3009.55	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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					
Apartments Mid Rise	3.00955	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224		354.0648	354.0648	6.7900e-003	6.4900e-003	356.1688
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
Unenclosed Parking Structure	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
Total		**0.0325**	**0.2774**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**		**354.0648**	**354.0648**	**6.7900e-003**	**6.4900e-003**	**356.1688**

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	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859
Unmitigated	2.1251	1.3023	7.2934	8.1700e-003		0.1364	0.1364		0.1364	0.1364	0.0000	1,575.0050	1,575.0050	0.0417	0.0287	1,584.5859

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	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1433	1.2242	0.5209	7.8100e-003		0.0990	0.0990		0.0990	0.0990	0.0000	1,562.8235	1,562.8235	0.0300	0.0287	1,572.1106
Landscaping	0.2046	0.0781	6.7725	3.6000e-004		0.0374	0.0374		0.0374	0.0374		12.1815	12.1815	0.0118		12.4753
Total	**2.1251**	**1.3023**	**7.2934**	**8.1700e-003**		**0.1364**	**0.1364**		**0.1364**	**0.1364**	**0.0000**	**1,575.0050**	**1,575.0050**	**0.0417**	**0.0287**	**1,584.5859**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Alexan GPCZA (Project Emissions 2022)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	427.1	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2022 RPS mix. SCE Ch4 and N20 factors from USEPA EGRID, CAMX Subregion, WECC California.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Demolition - building square footage to be demolished is for GP/CZA area only.

Architectural Coating - Super compliant VOC content coatings applied to all residentia, non-residential, and parking applications (10 g/l VOC content.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Waer use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Fugitive dust controls applied per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.58

tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	MH	8.7600e-004	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	OBUS	2.5150e-003	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	SBUS	6.8700e-004	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblFleetMix	UBUS	2.2010e-003	0.00
tblLandUse	Population	235.00	227.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	427.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00

tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1681	1.3272	1.2253	2.5200e-003	0.0899	0.0622	0.1521	0.0269	0.0592	0.0861	0.0000	218.0982	218.0982	0.0347	0.0000	218.9661
2022	0.1722	0.8931	0.9679	2.0000e-003	0.0472	0.0398	0.0870	0.0126	0.0381	0.0507	0.0000	171.9197	171.9197	0.0255	0.0000	172.5562
Maximum	**0.1722**	**1.3272**	**1.2253**	**2.5200e-003**	**0.0899**	**0.0622**	**0.1521**	**0.0269**	**0.0592**	**0.0861**	**0.0000**	**218.0982**	**218.0982**	**0.0347**	**0.0000**	**218.9661**

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					
2021	0.1681	1.3272	1.2253	2.5200e-003	0.0701	0.0622	0.1323	0.0201	0.0592	0.0793	0.0000	218.0980	218.0980	0.0347	0.0000	218.9659
2022	0.1722	0.8931	0.9679	2.0000e-003	0.0472	0.0398	0.0870	0.0126	0.0381	0.0507	0.0000	171.9196	171.9196	0.0255	0.0000	172.5561
Maximum	**0.1722**	**1.3272**	**1.2253**	**2.5200e-003**	**0.0701**	**0.0622**	**0.1323**	**0.0201**	**0.0592**	**0.0793**	**0.0000**	**218.0980**	**218.0980**	**0.0347**	**0.0000**	**218.9659**

	ROG	NOx	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**	**14.45**	**0.00**	**8.28**	**17.35**	**0.00**	**5.01**	**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	6-14-2021	9-13-2021	0.6960	0.6960
2	9-14-2021	12-13-2021	0.6513	0.6513
3	12-14-2021	3-13-2022	0.6001	0.6001
4	3-14-2022	6-13-2022	0.5528	0.5528
5	6-14-2022	9-13-2022	0.0430	0.0430
		Highest	0.6960	0.6960

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	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421
Energy	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	126.8011	126.8011	6.3900e-003	1.7100e-003	127.4714
Mobile	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water						0.0000	0.0000		0.0000	0.0000	1.4457	11.9516	13.3974	0.1494	3.6200e-003	18.2109
Total	**0.5086**	**0.3887**	**3.0490**	**7.6700e-003**	**0.6839**	**0.0156**	**0.6995**	**0.1824**	**0.0152**	**0.1976**	**9.1026**	**812.8836**	**821.9862**	**0.6300**	**5.6500e-003**	**839.4217**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421
Energy	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	126.8011	126.8011	6.3900e-003	1.7100e-003	127.4714
Mobile	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water						0.0000	0.0000		0.0000	0.0000	1.4457	11.9516	13.3974	0.1494	3.6200e-003	18.2109
Total	**0.5086**	**0.3887**	**3.0490**	**7.6700e-003**	**0.6839**	**0.0156**	**0.6995**	**0.1824**	**0.0152**	**0.1976**	**9.1026**	**812.8836**	**821.9862**	**0.6300**	**5.6500e-003**	**839.4217**

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

3.0 Construction Detail

Construction Phase

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	7/9/2021	5	20	
2	Site Preparation	Site Preparation	7/10/2021	7/14/2021	5	3	
3	Grading	Grading	7/15/2021	7/22/2021	5	6	
4	Building Construction	Building Construction	7/23/2021	5/26/2022	5	220	
5	Paving	Paving	5/27/2022	6/9/2022	5	10	
6	Architectural Coating	Architectural Coating	6/10/2022	6/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.7

Residential Indoor: 166,050; Residential Outdoor: 55,350; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,830 (Architectural Coating – sqft)

OffRoad Equipment

Alexan GPCZA (Project Emissions 2022) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	72.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	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 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0140	0.0000	0.0140	2.1200e-003	0.0000	2.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**0.0140**	**0.0104**	**0.0244**	**2.1200e-003**	**9.7100e-003**	**0.0118**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0179	4.1600e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.0000e-004	5.0000e-005	3.6000e-004	0.0000	4.9168	4.9168	3.4000e-004	0.0000	4.9253
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	5.6000e-004	4.4000e-004	4.9200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2856	1.2856	4.0000e-005	0.0000	1.2865
Total	**1.1000e-003**	**0.0183**	**9.0800e-003**	**6.0000e-005**	**2.5300e-003**	**6.0000e-005**	**2.6000e-003**	**6.8000e-004**	**6.0000e-005**	**7.5000e-004**	**0.0000**	**6.2024**	**6.2024**	**3.8000e-004**	**0.0000**	**6.2119**

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					6.2900e-003	0.0000	6.2900e-003	9.5000e-004	0.0000	9.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**6.2900e-003**	**0.0104**	**0.0167**	**9.5000e-004**	**9.7100e-003**	**0.0107**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0179	4.1600e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.0000e-004	5.0000e-005	3.6000e-004	0.0000	4.9168	4.9168	3.4000e-004	0.0000	4.9253
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	5.6000e-004	4.4000e-004	4.9200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2856	1.2856	4.0000e-005	0.0000	1.2865
Total	**1.1000e-003**	**0.0183**	**9.0800e-003**	**6.0000e-005**	**2.5300e-003**	**6.0000e-005**	**2.6000e-003**	**6.8000e-004**	**6.0000e-005**	**7.5000e-004**	**0.0000**	**6.2024**	**6.2024**	**3.8000e-004**	**0.0000**	**6.2119**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.3200e-003**	**0.0274**	**0.0161**	**4.0000e-005**	**2.3900e-003**	**1.0500e-003**	**3.4400e-003**	**2.6000e-004**	**9.7000e-004**	**1.2300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	4.5000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1187	0.1187	0.0000	0.0000	0.1188
Total	**5.0000e-005**	**4.0000e-005**	**4.5000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1187**	**0.1187**	**0.0000**	**0.0000**	**0.1188**

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					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.3200e-003**	**0.0274**	**0.0161**	**4.0000e-005**	**1.0700e-003**	**1.0500e-003**	**2.1200e-003**	**1.2000e-004**	**9.7000e-004**	**1.0900e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	4.5000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1187	0.1187	0.0000	0.0000	0.1188
Total	**5.0000e-005**	**4.0000e-005**	**4.5000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1187**	**0.1187**	**0.0000**	**0.0000**	**0.1188**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0606	0.0293	6.0000e-005		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**5.4800e-003**	**0.0606**	**0.0293**	**6.0000e-005**	**0.0197**	**2.7500e-003**	**0.0224**	**0.0101**	**2.5300e-003**	**0.0126**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.0000e-004	1.1300e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2967	0.2967	1.0000e-005	0.0000	0.2969
Total	**1.3000e-004**	**1.0000e-004**	**1.1300e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2967**	**0.2967**	**1.0000e-005**	**0.0000**	**0.2969**

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					8.8500e-003	0.0000	8.8500e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0606	0.0293	6.0000e-005		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**5.4800e-003**	**0.0606**	**0.0293**	**6.0000e-005**	**8.8500e-003**	**2.7500e-003**	**0.0116**	**4.5500e-003**	**2.5300e-003**	**7.0800e-003**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.0000e-004	1.1300e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2967	0.2967	1.0000e-005	0.0000	0.2969
Total	**1.3000e-004**	**1.0000e-004**	**1.1300e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2967**	**0.2967**	**1.0000e-005**	**0.0000**	**0.2969**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1186	0.9296	0.8447	1.4500e-003		0.0474	0.0474		0.0454	0.0454	0.0000	120.4363	120.4363	0.0237	0.0000	121.0286
Total	**0.1186**	**0.9296**	**0.8447**	**1.4500e-003**		**0.0474**	**0.0474**		**0.0454**	**0.0454**	**0.0000**	**120.4363**	**120.4363**	**0.0237**	**0.0000**	**121.0286**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0801	0.0217	2.1000e-004	5.1100e-003	1.6000e-004	5.2800e-003	1.4800e-003	1.6000e-004	1.6300e-003	0.0000	20.0155	20.0155	1.2300e-003	0.0000	20.0462
Worker	0.0180	0.0140	0.1579	4.6000e-004	0.0458	3.8000e-004	0.0461	0.0122	3.5000e-004	0.0125	0.0000	41.2972	41.2972	1.2200e-003	0.0000	41.3276
Total	**0.0205**	**0.0941**	**0.1797**	**6.7000e-004**	**0.0509**	**5.4000e-004**	**0.0514**	**0.0136**	**5.1000e-004**	**0.0141**	**0.0000**	**61.3127**	**61.3127**	**2.4500e-003**	**0.0000**	**61.3738**

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	0.1186	0.9296	0.8447	1.4500e-003		0.0474	0.0474		0.0454	0.0454	0.0000	120.4361	120.4361	0.0237	0.0000	121.0285
Total	**0.1186**	**0.9296**	**0.8447**	**1.4500e-003**		**0.0474**	**0.0474**		**0.0454**	**0.0454**	**0.0000**	**120.4361**	**120.4361**	**0.0237**	**0.0000**	**121.0285**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0801	0.0217	2.1000e-004	5.1100e-003	1.6000e-004	5.2800e-003	1.4800e-003	1.6000e-004	1.6300e-003	0.0000	20.0155	20.0155	1.2300e-003	0.0000	20.0462
Worker	0.0180	0.0140	0.1579	4.6000e-004	0.0458	3.8000e-004	0.0461	0.0122	3.5000e-004	0.0125	0.0000	41.2972	41.2972	1.2200e-003	0.0000	41.3276
Total	**0.0205**	**0.0941**	**0.1797**	**6.7000e-004**	**0.0509**	**5.4000e-004**	**0.0514**	**0.0136**	**5.1000e-004**	**0.0141**	**0.0000**	**61.3127**	**61.3127**	**2.4500e-003**	**0.0000**	**61.3738**

3.5 Building Construction - 2022

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	0.0965	0.7594	0.7464	1.3000e-003		0.0365	0.0365		0.0350	0.0350	0.0000	107.9937	107.9937	0.0208	0.0000	108.5145
Total	**0.0965**	**0.7594**	**0.7464**	**1.3000e-003**		**0.0365**	**0.0365**		**0.0350**	**0.0350**	**0.0000**	**107.9937**	**107.9937**	**0.0208**	**0.0000**	**108.5145**

3.5 Building Construction - 2022

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	2.1200e-003	0.0683	0.0184	1.8000e-004	4.5900e-003	1.3000e-004	4.7100e-003	1.3200e-003	1.2000e-004	1.4500e-003	0.0000	17.7873	17.7873	1.0600e-003	0.0000	17.8139
Worker	0.0151	0.0113	0.1305	4.0000e-004	0.0410	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112	0.0000	35.7236	35.7236	9.8000e-004	0.0000	35.7482
Total	**0.0172**	**0.0796**	**0.1489**	**5.8000e-004**	**0.0456**	**4.6000e-004**	**0.0461**	**0.0122**	**4.2000e-004**	**0.0127**	**0.0000**	**53.5109**	**53.5109**	**2.0400e-003**	**0.0000**	**53.5621**

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	0.0965	0.7594	0.7464	1.3000e-003		0.0365	0.0365		0.0350	0.0350	0.0000	107.9935	107.9935	0.0208	0.0000	108.5144
Total	**0.0965**	**0.7594**	**0.7464**	**1.3000e-003**		**0.0365**	**0.0365**		**0.0350**	**0.0350**	**0.0000**	**107.9935**	**107.9935**	**0.0208**	**0.0000**	**108.5144**

3.5 Building Construction - 2022

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	2.1200e-003	0.0683	0.0184	1.8000e-004	4.5900e-003	1.3000e-004	4.7100e-003	1.3200e-003	1.2000e-004	1.4500e-003	0.0000	17.7873	17.7873	1.0600e-003	0.0000	17.8139
Worker	0.0151	0.0113	0.1305	4.0000e-004	0.0410	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112	0.0000	35.7236	35.7236	9.8000e-004	0.0000	35.7482
Total	**0.0172**	**0.0796**	**0.1489**	**5.8000e-004**	**0.0456**	**4.6000e-004**	**0.0461**	**0.0122**	**4.2000e-004**	**0.0127**	**0.0000**	**53.5109**	**53.5109**	**2.0400e-003**	**0.0000**	**53.5621**

3.6 Paving - 2022

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1200e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.6100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7156	0.7156	2.0000e-005	0.0000	0.7161
Total	**3.0000e-004**	**2.3000e-004**	**2.6100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7156**	**0.7156**	**2.0000e-005**	**0.0000**	**0.7161**

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1200e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.6100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7156	0.7156	2.0000e-005	0.0000	0.7161
Total	**3.0000e-004**	**2.3000e-004**	**2.6100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7156**	**0.7156**	**2.0000e-005**	**0.0000**	**0.7161**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0528**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.7 Architectural Coating - 2022

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	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0528**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.7 Architectural Coating - 2022

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	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

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	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839
Unmitigated	0.1502	0.3106	2.1717	7.2100e-003	0.6839	5.4400e-003	0.6893	0.1824	5.0300e-003	0.1875	0.0000	654.6847	654.6847	0.0200	0.0000	655.1839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Other Asphalt Surfaces	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000
Unenclosed Parking Structure	0.583459	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.000000	0.000000	0.000000	0.005142	0.000000	0.000000

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	68.1817	68.1817	5.2700e-003	6.4000e-004	68.5037
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	68.1817	68.1817	5.2700e-003	6.4000e-004	68.5037
NaturalGas Mitigated	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
NaturalGas Unmitigated	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677

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					
Apartments Mid Rise	1.09849e+006	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
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
Unenclosed Parking Structure	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
Total		**5.9200e-003**	**0.0506**	**0.0215**	**3.2000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**58.6194**	**58.6194**	**1.1200e-003**	**1.0700e-003**	**58.9677**

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					
Apartments Mid Rise	1.09849e+006	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
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
Unenclosed Parking Structure	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
Total		**5.9200e-003**	**0.0506**	**0.0215**	**3.2000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**58.6194**	**58.6194**	**1.1200e-003**	**1.0700e-003**	**58.9677**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	322213	62.4222	4.8200e-003	5.8000e-004	62.7169
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	29729.7	5.7595	4.5000e-004	5.0000e-005	5.7867
Total		**68.1817**	**5.2700e-003**	**6.3000e-004**	**68.5037**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	322213	62.4222	4.8200e-003	5.8000e-004	62.7169
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	29729.7	5.7595	4.5000e-004	5.0000e-005	5.7867
Total		**68.1817**	**5.2700e-003**	**6.3000e-004**	**68.5037**

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	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421
Unmitigated	0.3517	0.0251	0.8531	1.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	19.1035	19.1035	1.6700e-003	3.2000e-004	19.2421

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	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2983					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7221	17.7221	3.4000e-004	3.2000e-004	17.8274
Landscaping	0.0256	9.7600e-003	0.8466	4.0000e-005		4.6800e-003	4.6800e-003		4.6800e-003	4.6800e-003	0.0000	1.3814	1.3814	1.3300e-003	0.0000	1.4147
Total	**0.3517**	**0.0251**	**0.8531**	**1.4000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**	**0.0000**	**19.1035**	**19.1035**	**1.6700e-003**	**3.2000e-004**	**19.2421**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2983					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7221	17.7221	3.4000e-004	3.2000e-004	17.8274
Landscaping	0.0256	9.7600e-003	0.8466	4.0000e-005		4.6800e-003	4.6800e-003		4.6800e-003	4.6800e-003	0.0000	1.3814	1.3814	1.3300e-003	0.0000	1.4147
Total	**0.3517**	**0.0251**	**0.8531**	**1.4000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**	**0.0000**	**19.1035**	**19.1035**	**1.6700e-003**	**3.2000e-004**	**19.2421**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.3974	0.1494	3.6200e-003	18.2109
Unmitigated	13.3974	0.1494	3.6200e-003	18.2109

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.55703 / 0.212011	13.3974	0.1494	3.6200e-003	18.2109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.3974**	**0.1494**	**3.6200e-003**	**18.2109**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.55703 / 0.212011	13.3974	0.1494	3.6200e-003	18.2109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.3974**	**0.1494**	**3.6200e-003**	**18.2109**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.6568	0.4525	0.0000	18.9695
Unmitigated	7.6568	0.4525	0.0000	18.9695

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	37.72	7.6568	0.4525	0.0000	18.9695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**7.6568**	**0.4525**	**0.0000**	**18.9695**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	37.72	7.6568	0.4525	0.0000	18.9695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**7.6568**	**0.4525**	**0.0000**	**18.9695**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	4.9000e-004	1.6100e-003	1.7900e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2285	0.2285	3.0000e-005	0.0000	0.2293
Fire Pump - Diesel (50 - 75 HP)	2.5000e-004	8.0000e-004	8.9000e-004	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.1142	0.1142	2.0000e-005	0.0000	0.1146
Total	**7.4000e-004**	**2.4100e-003**	**2.6800e-003**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**0.3427**	**0.3427**	**5.0000e-005**	**0.0000**	**0.3439**

11.0 Vegetation

Alexan GPCZA (Project Emissions 2035)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.31	Acre	0.31	13,503.60	0
Unenclosed Parking Structure	0.39	Acre	0.39	16,988.40	0
Apartments Mid Rise	82.00	Dwelling Unit	2.16	82,000.00	227

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.58	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Alexan GPCZA (Project Emissions 2035) - Los Angeles-South Coast County, Annual

Project Characteristics - MIG Modeler: Chris Dugan. SCE CO2 factor from 2017 corporate sustainability report adjusted to estimated SCE 2035 RPS mix. SCE CH4 and N2O factor from USEPA EGRID database.

Land Use - Land use inputs reflect default values, other asphalt surfaces added to bring total lot acreage to 2.85 acres. Population from Draft EIR Table 17-1.

Construction Phase - 2035 emissions information run. No construction emissions estimates needed.

Off-road Equipment - 2035 emissions information run. No construction emissions estimates needed.

Trips and VMT - 2035 emissions information run. No construction emissions estimates needed.

Woodstoves - Wood stoves and fireplaces prohibited pursuant to SCAQMD Rule 445.

Energy Use - T24 residential electric energy intensity improved by 47% to reflect improvements achieved by 2019 energy code that goes into effect on 01/01/20.

Water And Wastewater - Water use estimates based on similar consumption patterns as the Alexan SP Water Supply Assessment.

Fleet Mix - Large trucks and buses removed from fleet mix because the project would not generate these vehicle trip types.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	2.00
tblEnergyUse	T24E	252.63	133.89
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	69.70	73.80
tblFireplaces	NumberWood	4.10	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.58
tblFleetMix	MH	8.0700e-004	0.00
tblFleetMix	MH	8.0700e-004	0.00
tblFleetMix	MH	8.0700e-004	0.00
tblFleetMix	OBUS	2.7030e-003	0.00

tblFleetMix	OBUS	2.7030e-003	0.00
tblFleetMix	OBUS	2.7030e-003	0.00
tblFleetMix	SBUS	7.3200e-004	0.00
tblFleetMix	SBUS	7.3200e-004	0.00
tblFleetMix	SBUS	7.3200e-004	0.00
tblFleetMix	UBUS	1.6290e-003	0.00
tblFleetMix	UBUS	1.6290e-003	0.00
tblFleetMix	UBUS	1.6290e-003	0.00
tblLandUse	Population	235.00	227.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.58
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblWater	IndoorWaterUseRate	5,342,630.10	4,557,025.00
tblWater	OutdoorWaterUseRate	3,368,179.85	212,011.00
tblWoodstoves	NumberCatalytic	4.10	0.00
tblWoodstoves	NumberNoncatalytic	4.10	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	0.3513	0.0250	0.8492	1.4000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	19.1035	19.1035	1.6500e-003	3.2000e-004	19.2417
Energy	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	67.1728	67.1728	6.3900e-003	1.7100e-003	67.8432
Mobile	0.0825	0.1607	1.1303	5.2500e-003	0.6841	2.9200e-003	0.6870	0.1825	2.7000e-003	0.1852	0.0000	477.6984	477.6984	0.0108	0.0000	477.9684
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water						0.0000	0.0000		0.0000	0.0000	1.4457	1.4993	2.9451	0.1494	3.6200e-003	7.7586
Total	**0.4405**	**0.2388**	**2.0037**	**5.7100e-003**	**0.6841**	**0.0131**	**0.6972**	**0.1825**	**0.0129**	**0.1954**	**9.1026**	**565.8168**	**574.9193**	**0.6208**	**5.6500e-003**	**592.1252**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3513	0.0250	0.8492	1.4000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	19.1035	19.1035	1.6500e-003	3.2000e-004	19.2417
Energy	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	67.1728	67.1728	6.3900e-003	1.7100e-003	67.8432
Mobile	0.0825	0.1607	1.1303	5.2500e-003	0.6841	2.9200e-003	0.6870	0.1825	2.7000e-003	0.1852	0.0000	477.6984	477.6984	0.0108	0.0000	477.9684
Stationary	7.4000e-004	2.4100e-003	2.6800e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439
Waste						0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water						0.0000	0.0000		0.0000	0.0000	1.4457	1.4993	2.9451	0.1494	3.6200e-003	7.7586
Total	**0.4405**	**0.2388**	**2.0037**	**5.7100e-003**	**0.6841**	**0.0131**	**0.6972**	**0.1825**	**0.0129**	**0.1954**	**9.1026**	**565.8168**	**574.9193**	**0.6208**	**5.6500e-003**	**592.1252**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/14/2021	6/15/2021	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.7

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition		0			
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

Unmitigated 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 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	0.0825	0.1607	1.1303	5.2500e-003	0.6841	2.9200e-003	0.6870	0.1825	2.7000e-003	0.1852	0.0000	477.6984	477.6984	0.0108	0.0000	477.9684
Unmitigated	0.0825	0.1607	1.1303	5.2500e-003	0.6841	2.9200e-003	0.6870	0.1825	2.7000e-003	0.1852	0.0000	477.6984	477.6984	0.0108	0.0000	477.9684

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	545.30	523.98	480.52	1,821,342	1,821,342
Other Asphalt Surfaces	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	545.30	523.98	480.52	1,821,342	1,821,342

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.582256	0.043743	0.210883	0.115969	0.013375	0.006440	0.022010	0.000000	0.000000	0.000000	0.005324	0.000000	0.000000
Other Asphalt Surfaces	0.582256	0.043743	0.210883	0.115969	0.013375	0.006440	0.022010	0.000000	0.000000	0.000000	0.005324	0.000000	0.000000
Unenclosed Parking Structure	0.582256	0.043743	0.210883	0.115969	0.013375	0.006440	0.022010	0.000000	0.000000	0.000000	0.005324	0.000000	0.000000

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	8.5534	8.5534	5.2700e-003	6.4000e-004	8.8754
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	8.5534	8.5534	5.2700e-003	6.4000e-004	8.8754
NaturalGas Mitigated	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
NaturalGas Unmitigated	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677

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					
Apartments Mid Rise	1.09849e+006	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
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
Unenclosed Parking Structure	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
Total		**5.9200e-003**	**0.0506**	**0.0215**	**3.2000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**58.6194**	**58.6194**	**1.1200e-003**	**1.0700e-003**	**58.9677**

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					
Apartments Mid Rise	1.09849e+006	5.9200e-003	0.0506	0.0215	3.2000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	58.6194	58.6194	1.1200e-003	1.0700e-003	58.9677
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
Unenclosed Parking Structure	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
Total		**5.9200e-003**	**0.0506**	**0.0215**	**3.2000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**58.6194**	**58.6194**	**1.1200e-003**	**1.0700e-003**	**58.9677**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	322213	7.8309	4.8200e-003	5.8000e-004	8.1257
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	29729.7	0.7225	4.5000e-004	5.0000e-005	0.7497
Total		**8.5534**	**5.2700e-003**	**6.3000e-004**	**8.8754**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	322213	7.8309	4.8200e-003	5.8000e-004	8.1257
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	29729.7	0.7225	4.5000e-004	5.0000e-005	0.7497
Total		**8.5534**	**5.2700e-003**	**6.3000e-004**	**8.8754**

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	0.3513	0.0250	0.8492	1.4000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	19.1035	19.1035	1.6500e-003	3.2000e-004	19.2417
Unmitigated	0.3513	0.0250	0.8492	1.4000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	19.1035	19.1035	1.6500e-003	3.2000e-004	19.2417

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	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2983					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7221	17.7221	3.4000e-004	3.2000e-004	17.8274
Landscaping	0.0252	9.7200e-003	0.8427	4.0000e-005		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	1.3814	1.3814	1.3100e-003	0.0000	1.4142
Total	**0.3514**	**0.0250**	**0.8492**	**1.4000e-004**		**5.9300e-003**	**5.9300e-003**		**5.9300e-003**	**5.9300e-003**	**0.0000**	**19.1035**	**19.1035**	**1.6500e-003**	**3.2000e-004**	**19.2417**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2983					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7221	17.7221	3.4000e-004	3.2000e-004	17.8274
Landscaping	0.0252	9.7200e-003	0.8427	4.0000e-005		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	1.3814	1.3814	1.3100e-003	0.0000	1.4142
Total	**0.3514**	**0.0250**	**0.8492**	**1.4000e-004**		**5.9300e-003**	**5.9300e-003**		**5.9300e-003**	**5.9300e-003**	**0.0000**	**19.1035**	**19.1035**	**1.6500e-003**	**3.2000e-004**	**19.2417**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.9451	0.1494	3.6200e-003	7.7586
Unmitigated	2.9451	0.1494	3.6200e-003	7.7586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.55703 / 0.212011	2.9451	0.1494	3.6200e-003	7.7586
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.9451**	**0.1494**	**3.6200e-003**	**7.7586**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.55703 / 0.212011	2.9451	0.1494	3.6200e-003	7.7586
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.9451**	**0.1494**	**3.6200e-003**	**7.7586**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.6568	0.4525	0.0000	18.9695
Unmitigated	7.6568	0.4525	0.0000	18.9695

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	37.72	7.6568	0.4525	0.0000	18.9695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**7.6568**	**0.4525**	**0.0000**	**18.9695**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	37.72	7.6568	0.4525	0.0000	18.9695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**7.6568**	**0.4525**	**0.0000**	**18.9695**

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
Emergency Generator	1	0	12	50	0.73	Diesel
Fire Pump	1	0	6	50	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	4.9000e-004	1.6100e-003	1.7900e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2285	0.2285	3.0000e-005	0.0000	0.2293
Fire Pump - Diesel (50 - 75 HP)	2.5000e-004	8.0000e-004	8.9000e-004	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.1142	0.1142	2.0000e-005	0.0000	0.1146
Total	**7.4000e-004**	**2.4100e-003**	**2.6800e-003**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**0.3427**	**0.3427**	**5.0000e-005**	**0.0000**	**0.3439**

11.0 Vegetation

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APPENDIX B: AERMOD Output Files

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Alexan SP Residential Development Draft EIR (Appendix A3)
DPM Emission Estimates for I-210
Derived by MIG from EMFAC2017 data file

Vehicle Class	2023 - 2050 Average PM10 Emission Factor (Grams/Mile)	2023 Vehicle Population	Vehicle Class Percentage of Population	I-210 ADT	Class Vehicles on I-210	Trip Length (miles)	Total Daily Class Miles	Total Daily PM10 (Grams)	Total Daily PM10 (Grams/Sec)
LDA	0.001611306	36,741	0.49%	252,000	1,224	0.63	776	1.2509421	1.44785E-05
LDT1	0.028116599	252	0.00%	252,000	8	0.63	5	0.1499634	1.73569E-06
LDT2	0.003345548	9,765	0.13%	252,000	325	0.63	206	0.6903391	7.99004E-06
LHDT1	0.006014986	68,776	0.91%	252,000	2,291	0.63	1,453	8.7415092	0.000101175
LHDT2	0.010734683	27,874	0.37%	252,000	928	0.63	589	6.3226286	7.31786E-05
HHDT	0.033787693	57,613	0.76%	252,000	1,919	0.63	1,217	41.133135	0.000476078
MDV	0.001345391	21,298	0.28%	252,000	709	0.63	450	0.6054664	7.00771E-06
MH	0.038410995	6,167	0.08%	252,000	205	0.63	130	5.0052745	5.79314E-05
MHDT	0.015244088	64,520	0.85%	252,000	2,149	0.63	1,363	20.783071	0.000240545
OBUS	0.023503175	3,071	0.04%	252,000	102	0.63	65	1.5253977	1.76551E-05
SBUS	0.018215134	3,497	0.05%	252,000	116	0.63	74	1.3460165	1.55789E-05
UBUS	0.003787529	10	0.00%	252,000	0	0.63	0	0.0008114	9.39173E-09
ALL DSL	0.013830779	299,585	3.96%	252,000	9,977	0.63	6,330	87.554555	0.001013363

Notes:
2023 - 2050 average emission factor derived from EMFAC 2017
2023 vehicle population dereived from EMFAC2017
I-210 ADT from 2016 Caltrans AADT data

Aermod Source Area Size:	550951.3	square feet
Rate:	1.84E-09	grams/second/sq foot
Aermod Source Area Size:	51185.1	square meters
Rate:	1.98E-08	grams/second/sq meter

Alexan SP Residential Development Draft EIR (Appendix A3)
Los Angeles South Coast, 2023 to 2050 Average Diesel Vehicle Emission Factors (65 MPH)
Derived by MIG from EMFAC2017 data file

Vehicle Class	Speed	PM10 Average Running Exhaust Emission Factor (Grams/Mile)
HHDT	65 MPH	0.033787693
LDA	65 MPH	0.001611306
LDT1	65 MPH	0.028116599
LDY2	65 MPH	0.003345548
LHDT1	65 MPH	0.006014986
LHDT2	65 MPH	0.010734683
MDV	65 MPH	0.001345391
MH	65 MPH	0.038410995
MHDT	65 MPH	0.015244088
OBUS	65 MPH	0.023503175
SBUS	65 MPH	0.018215134
UBUS	65 MPH	0.003787529

SOURCE: EMFAC 2017
Note: SBUS factors are for 55 mph travel speed

Alexan SP Residential Development Draft EIR (Appendix A3)
EMFAC2017 WebDataBase Output file
Los Angeles South Coast, 2023 to 2050 Diesel Vehicle Emission Factors (65 MPH)

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	NOx_RUNEX	SOx_RUNEX	CO2_RUNEX	PM10_RUNEX	PM2_5_RUNEX	N2O_RUNEX
Los Angeles (SC)	2023	HHDT	Aggregated	65	DSL	799268.06	0.01991	0.022666	0.13407	2.06005	0.01231	1302.772	0.035264	0.03374	0.20478
Los Angeles (SC)	2023	LDA	Aggregated	65	DSL	50688.907	0.010517	0.011973	0.13592	0.06544	0.002	211.1015	0.007185	0.00687	0.03318
Los Angeles (SC)	2023	LDT1	Aggregated	65	DSL	217.96476	0.16994	0.193466	1.49002	1.23385	0.00436	461.0612	0.129358	0.12376	0.07247
Los Angeles (SC)	2023	LDT2	Aggregated	65	DSL	14367.879	0.00863	0.009825	0.07343	0.03335	0.00269	284.8583	0.004514	0.00432	0.04478
Los Angeles (SC)	2023	LHDT1	Aggregated	65	DSL	479102.97	0.045511	0.051811	0.31168	1.16363	0.00437	461.9479	0.011195	0.01071	0.07261
Los Angeles (SC)	2023	LHDT2	Aggregated	65	DSL	186539.62	0.044694	0.050881	0.30283	1.12006	0.00468	494.9117	0.013031	0.01247	0.07779
Los Angeles (SC)	2023	MDV	Aggregated	65	DSL	29266.79	0.006022	0.006856	0.10253	0.03484	0.00353	373.8603	0.00372	0.00356	0.05877
Los Angeles (SC)	2023	MH	Aggregated	65	DSL	6951.7461	0.042254	0.048103	0.18112	2.72341	0.00824	871.8403	0.089196	0.08534	0.13704
Los Angeles (SC)	2023	MHDT	Aggregated	65	DSL	459007.72	0.008278	0.009424	0.04933	0.9973	0.00865	916.0903	0.014408	0.01378	0.144
Los Angeles (SC)	2023	OBUS	Aggregated	65	DSL	29063.743	0.012715	0.014475	0.08454	1.4643	0.01121	1186.824	0.023288	0.02228	0.18655
Los Angeles (SC)	2023	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2023	UBUS	Aggregated	65	DSL	18.700823	0.000495	0.035384	0.04306	0.26469	0.0125	1322.252	0.02121	0.02029	0.20784
Los Angeles (SC)	2024	HHDT	Aggregated	65	DSL	728804.82	0.019918	0.022676	0.13446	2.03484	0.01209	1279.441	0.035574	0.03403	0.20111
Los Angeles (SC)	2024	LDA	Aggregated	65	DSL	47924.098	0.008547	0.00973	0.12233	0.05269	0.00194	205.3442	0.005733	0.00549	0.03228
Los Angeles (SC)	2024	LDT1	Aggregated	65	DSL	184.11359	0.158071	0.179953	1.40112	1.15731	0.00429	453.7784	0.12027	0.11507	0.07133
Los Angeles (SC)	2024	LDT2	Aggregated	65	DSL	13833.494	0.007723	0.008792	0.07011	0.02924	0.00262	276.8998	0.003866	0.0037	0.04352
Los Angeles (SC)	2024	LHDT1	Aggregated	65	DSL	457373.13	0.041563	0.047317	0.2782	0.99191	0.0043	454.6272	0.010258	0.00981	0.07146
Los Angeles (SC)	2024	LHDT2	Aggregated	65	DSL	178207.67	0.041056	0.046739	0.27215	0.96166	0.00461	487.138	0.012453	0.01191	0.07657
Los Angeles (SC)	2024	MDV	Aggregated	65	DSL	28191.365	0.00556	0.00633	0.09887	0.03059	0.00344	363.4213	0.003388	0.00324	0.05712
Los Angeles (SC)	2024	MH	Aggregated	65	DSL	6087.028	0.039881	0.045402	0.16916	2.5788	0.00811	857.8617	0.081662	0.07813	0.13484
Los Angeles (SC)	2024	MHDT	Aggregated	65	DSL	397785.14	0.008283	0.00943	0.04962	0.99496	0.00852	901.7114	0.014664	0.01403	0.14174
Los Angeles (SC)	2024	OBUS	Aggregated	65	DSL	25867.378	0.013025	0.014828	0.08674	1.48845	0.01116	1180.789	0.024209	0.02316	0.1856
Los Angeles (SC)	2024	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2024	UBUS	Aggregated	65	DSL	16.164662	0.000495	0.035384	0.04306	0.26469	0.0125	1322.252	0.02121	0.02029	0.20784
Los Angeles (SC)	2025	HHDT	Aggregated	65	DSL	736699.91	0.019847	0.022594	0.13428	2.00124	0.01184	1253.364	0.03557	0.03403	0.19701
Los Angeles (SC)	2025	LDA	Aggregated	65	DSL	49428.002	0.00734	0.008356	0.11233	0.04291	0.00189	199.6093	0.004802	0.00459	0.03138
Los Angeles (SC)	2025	LDT1	Aggregated	65	DSL	171.63949	0.148055	0.16855	1.31508	1.08196	0.00421	445.6169	0.112515	0.10765	0.07004
Los Angeles (SC)	2025	LDT2	Aggregated	65	DSL	14494.446	0.007366	0.008386	0.06852	0.02636	0.00254	269.0374	0.003594	0.00344	0.04229
Los Angeles (SC)	2025	LHDT1	Aggregated	65	DSL	475877.02	0.038219	0.043509	0.2498	0.84716	0.00423	447.2447	0.009465	0.00906	0.0703
Los Angeles (SC)	2025	LHDT2	Aggregated	65	DSL	185549.02	0.038015	0.043278	0.24644	0.82918	0.00453	479.3299	0.012031	0.01151	0.07534
Los Angeles (SC)	2025	MDV	Aggregated	65	DSL	29536.939	0.005093	0.005798	0.09548	0.02662	0.00334	353.036	0.003032	0.0029	0.05549

Los Angeles (SC)	2025	MH	Aggregated	65	DSL	6275.8008	0.037841	0.04308	0.15878	2.45261	0.00798	844.5477	0.075126	0.07188	0.13275
Los Angeles (SC)	2025	MHDT	Aggregated	65	DSL	405515.99	0.00828	0.009426	0.04982	0.99061	0.00838	886.7301	0.014865	0.01422	0.13938
Los Angeles (SC)	2025	OBUS	Aggregated	65	DSL	26409.561	0.012935	0.014725	0.08611	1.45174	0.0109	1153.704	0.023915	0.02288	0.18135
Los Angeles (SC)	2025	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2025	UBUS	Aggregated	65	DSL	10.294097	0.000495	0.035384	0.04306	0.26469	0.0125	1322.252	0.02121	0.02029	0.20784
Los Angeles (SC)	2026	HHDT	Aggregated	65	DSL	744937.2	0.019723	0.022453	0.13375	1.96218	0.01159	1226.569	0.035384	0.03385	0.1928
Los Angeles (SC)	2026	LDA	Aggregated	65	DSL	50629.893	0.006184	0.00704	0.10336	0.03414	0.00184	194.6935	0.003893	0.00372	0.0306
Los Angeles (SC)	2026	LDT1	Aggregated	65	DSL	154.47559	0.129352	0.147259	1.19404	0.96234	0.00412	435.936	0.096974	0.09278	0.06852
Los Angeles (SC)	2026	LDT2	Aggregated	65	DSL	15061.356	0.007238	0.00824	0.06833	0.025	0.00248	262.4852	0.00351	0.00336	0.04126
Los Angeles (SC)	2026	LHDT1	Aggregated	65	DSL	493044.72	0.035341	0.040234	0.22543	0.72356	0.00416	439.8214	0.008781	0.0084	0.06913
Los Angeles (SC)	2026	LHDT2	Aggregated	65	DSL	192326.6	0.035425	0.040329	0.22441	0.71695	0.00446	471.4714	0.011694	0.01119	0.07411
Los Angeles (SC)	2026	MDV	Aggregated	65	DSL	30684.241	0.004658	0.005303	0.09252	0.02311	0.00325	344.1748	0.002689	0.00257	0.0541
Los Angeles (SC)	2026	MH	Aggregated	65	DSL	6451.126	0.03602	0.041006	0.14939	2.34165	0.00787	832.7743	0.069226	0.06623	0.1309
Los Angeles (SC)	2026	MHDT	Aggregated	65	DSL	413255.64	0.008265	0.009409	0.04994	0.98312	0.00824	872.3158	0.015	0.01435	0.13712
Los Angeles (SC)	2026	OBUS	Aggregated	65	DSL	26957.96	0.012858	0.014638	0.08558	1.42014	0.01067	1129.142	0.023676	0.02265	0.17749
Los Angeles (SC)	2026	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026	UBUS	Aggregated	65	DSL	10.294097	0.000495	0.035384	0.04306	0.26469	0.0125	1322.252	0.02121	0.02029	0.20784
Los Angeles (SC)	2027	HHDT	Aggregated	65	DSL	754804.67	0.01958	0.02229	0.13306	1.91976	0.01132	1197.71	0.035115	0.0336	0.18826
Los Angeles (SC)	2027	LDA	Aggregated	65	DSL	51759.942	0.005111	0.005818	0.09534	0.02638	0.0018	190.4313	0.003037	0.00291	0.02993
Los Angeles (SC)	2027	LDT1	Aggregated	65	DSL	131.7136	0.094135	0.107167	0.9999	0.75606	0.00399	422.5541	0.067023	0.06412	0.06642
Los Angeles (SC)	2027	LDT2	Aggregated	65	DSL	15586.806	0.006953	0.007915	0.06723	0.02285	0.00243	256.6696	0.003292	0.00315	0.04034
Los Angeles (SC)	2027	LHDT1	Aggregated	65	DSL	508818.19	0.032898	0.037452	0.20466	0.61905	0.00409	432.4124	0.008186	0.00783	0.06797
Los Angeles (SC)	2027	LHDT2	Aggregated	65	DSL	198538.72	0.033239	0.03784	0.2057	0.62254	0.00438	463.6264	0.011427	0.01093	0.07288
Los Angeles (SC)	2027	MDV	Aggregated	65	DSL	31758.908	0.004116	0.004686	0.08906	0.01913	0.00318	336.4147	0.002248	0.00215	0.05288
Los Angeles (SC)	2027	MH	Aggregated	65	DSL	6610.3292	0.034345	0.039099	0.14084	2.24223	0.00776	820.5212	0.063944	0.06118	0.12897
Los Angeles (SC)	2027	MHDT	Aggregated	65	DSL	421726.1	0.008244	0.009386	0.04998	0.97259	0.0081	857.0713	0.015078	0.01443	0.13472
Los Angeles (SC)	2027	OBUS	Aggregated	65	DSL	27568.655	0.012773	0.014541	0.08499	1.38943	0.01044	1104.599	0.023399	0.02239	0.17363
Los Angeles (SC)	2027	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2027	UBUS	Aggregated	65	DSL	10.294097	0.000495	0.035384	0.04306	0.26469	0.0125	1322.252	0.02121	0.02029	0.20784
Los Angeles (SC)	2028	HHDT	Aggregated	65	DSL	761201.74	0.019445	0.022136	0.1324	1.88367	0.01105	1169.393	0.034846	0.03334	0.18381
Los Angeles (SC)	2028	LDA	Aggregated	65	DSL	52753.133	0.004426	0.005039	0.08879	0.0205	0.00177	186.75	0.002353	0.00225	0.02935
Los Angeles (SC)	2028	LDT1	Aggregated	65	DSL	120.41904	0.08061	0.091769	0.8629	0.63493	0.00388	410.9282	0.050898	0.0487	0.06459
Los Angeles (SC)	2028	LDT2	Aggregated	65	DSL	16060.241	0.006903	0.007859	0.06738	0.02212	0.00238	251.7181	0.003252	0.00311	0.03957
Los Angeles (SC)	2028	LHDT1	Aggregated	65	DSL	523380.91	0.030811	0.035076	0.18689	0.52999	0.00403	425.8955	0.007668	0.00734	0.06694
Los Angeles (SC)	2028	LHDT2	Aggregated	65	DSL	204301.5	0.031397	0.035744	0.1899	0.54321	0.00432	456.7036	0.011211	0.01073	0.07179
Los Angeles (SC)	2028	MDV	Aggregated	65	DSL	32731.716	0.003808	0.004335	0.08656	0.01637	0.00312	329.7668	0.001939	0.00186	0.05183
Los Angeles (SC)	2028	MH	Aggregated	65	DSL	6753.1991	0.032849	0.037396	0.13319	2.15383	0.00765	809.1717	0.059238	0.05668	0.12719
Los Angeles (SC)	2028	MHDT	Aggregated	65	DSL	427972.77	0.008235	0.009375	0.05007	0.96792	0.00796	843.063	0.01518	0.01452	0.13252
Los Angeles (SC)	2028	OBUS	Aggregated	65	DSL	28021.322	0.012751	0.014517	0.08482	1.37672	0.01025	1084.547	0.023373	0.02236	0.17048
Los Angeles (SC)	2028	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2028	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2029	HHDT	Aggregated	65	DSL	767642.65	0.019305	0.021977	0.13171	1.85243	0.0108	1143.231	0.034563	0.03307	0.1797
Los Angeles (SC)	2029	LDA	Aggregated	65	DSL	53625.313	0.003747	0.004265	0.08255	0.01646	0.00174	183.6033	0.001892	0.00181	0.02886
Los Angeles (SC)	2029	LDT1	Aggregated	65	DSL	111.18691	0.060066	0.068381	0.66775	0.52913	0.00379	401.0028	0.037547	0.03592	0.06303
Los Angeles (SC)	2029	LDT2	Aggregated	65	DSL	16470.84	0.006845	0.007793	0.06741	0.0216	0.00234	247.2951	0.00323	0.00309	0.03887
Los Angeles (SC)	2029	LHDT1	Aggregated	65	DSL	536960.96	0.029044	0.033064	0.17176	0.45457	0.00397	420.2819	0.007213	0.0069	0.06606

Los Angeles (SC)	2029	LHDT2	Aggregated	65	DSL	209678.27	0.029848	0.03398	0.17655	0.47657	0.00426	450.6921	0.011031	0.01055	0.07084
Los Angeles (SC)	2029	MDV	Aggregated	65	DSL	33601.162	0.003484	0.003966	0.08397	0.01427	0.00306	323.9679	0.001704	0.00163	0.05092
Los Angeles (SC)	2029	MH	Aggregated	65	DSL	6885.0679	0.03149	0.03585	0.12624	2.07418	0.00755	798.9865	0.054991	0.05261	0.12559
Los Angeles (SC)	2029	MHDT	Aggregated	65	DSL	434035.11	0.008227	0.009366	0.05014	0.96462	0.00784	830.3164	0.015267	0.01461	0.13051
Los Angeles (SC)	2029	OBUS	Aggregated	65	DSL	28475.673	0.012756	0.014522	0.08482	1.37366	0.01009	1067.809	0.023448	0.02243	0.16784
Los Angeles (SC)	2029	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2029	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2030	HHDT	Aggregated	65	DSL	774146.42	0.019183	0.021838	0.13112	1.82606	0.01057	1119.021	0.03433	0.03285	0.17589
Los Angeles (SC)	2030	LDA	Aggregated	65	DSL	54392.726	0.003206	0.00365	0.07762	0.01332	0.00171	180.8433	0.001519	0.00145	0.02843
Los Angeles (SC)	2030	LDT1	Aggregated	65	DSL	104.85422	0.043966	0.050052	0.51188	0.43854	0.0037	391.139	0.027097	0.02592	0.06148
Los Angeles (SC)	2030	LDT2	Aggregated	65	DSL	16829.679	0.006792	0.007732	0.06743	0.02116	0.0023	243.3319	0.003209	0.00307	0.03825
Los Angeles (SC)	2030	LHDT1	Aggregated	65	DSL	549638.13	0.027526	0.031336	0.15884	0.38971	0.00393	415.3829	0.006818	0.00652	0.06529
Los Angeles (SC)	2030	LHDT2	Aggregated	65	DSL	214671.83	0.028528	0.032478	0.16532	0.41976	0.00421	445.4095	0.010901	0.01043	0.07001
Los Angeles (SC)	2030	MDV	Aggregated	65	DSL	34392.602	0.003284	0.003739	0.08249	0.01284	0.00301	318.9254	0.001549	0.00148	0.05013
Los Angeles (SC)	2030	MH	Aggregated	65	DSL	7009.1637	0.03028	0.034472	0.12004	2.00309	0.00747	789.9373	0.051217	0.049	0.12417
Los Angeles (SC)	2030	MHDT	Aggregated	65	DSL	439896.7	0.008216	0.009354	0.05018	0.96089	0.00773	818.5071	0.015328	0.01466	0.12866
Los Angeles (SC)	2030	OBUS	Aggregated	65	DSL	28902.737	0.012783	0.014552	0.08498	1.37437	0.00996	1054.146	0.0236	0.02258	0.1657
Los Angeles (SC)	2030	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2030	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2031	HHDT	Aggregated	65	DSL	698779.21	0.019077	0.021718	0.13063	1.80335	0.01036	1096.929	0.034137	0.03266	0.17242
Los Angeles (SC)	2031	LDA	Aggregated	65	DSL	51753.869	0.002982	0.003395	0.07558	0.01177	0.00169	178.5202	0.001351	0.00129	0.02806
Los Angeles (SC)	2031	LDT1	Aggregated	65	DSL	94.677218	0.032569	0.037077	0.39845	0.36636	0.00361	381.8873	0.019713	0.01886	0.06003
Los Angeles (SC)	2031	LDT2	Aggregated	65	DSL	16100.862	0.00676	0.007696	0.06759	0.02086	0.00227	239.7569	0.003201	0.00306	0.03769
Los Angeles (SC)	2031	LHDT1	Aggregated	65	DSL	518485.7	0.026244	0.029877	0.14798	0.33481	0.00389	411.0767	0.006477	0.0062	0.06462
Los Angeles (SC)	2031	LHDT2	Aggregated	65	DSL	202524.13	0.027399	0.031192	0.15585	0.37144	0.00417	440.7432	0.010769	0.0103	0.06928
Los Angeles (SC)	2031	MDV	Aggregated	65	DSL	32977.415	0.003107	0.003537	0.08118	0.01163	0.00297	314.4654	0.001409	0.00135	0.04943
Los Angeles (SC)	2031	MH	Aggregated	65	DSL	5857.7218	0.029111	0.033141	0.1141	1.93938	0.00739	781.8371	0.047666	0.0456	0.12289
Los Angeles (SC)	2031	MHDT	Aggregated	65	DSL	365873.18	0.008204	0.00934	0.05021	0.95767	0.00763	807.7198	0.015371	0.01471	0.12696
Los Angeles (SC)	2031	OBUS	Aggregated	65	DSL	25067.367	0.013013	0.014814	0.08668	1.38657	0.00994	1052.353	0.024048	0.02301	0.16542
Los Angeles (SC)	2031	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2031	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2032	HHDT	Aggregated	65	DSL	703891.58	0.018975	0.021602	0.13014	1.77889	0.01018	1077.114	0.03395	0.03248	0.16931
Los Angeles (SC)	2032	LDA	Aggregated	65	DSL	52301.53	0.002705	0.003079	0.07307	0.01014	0.00167	176.4158	0.00115	0.0011	0.02773
Los Angeles (SC)	2032	LDT1	Aggregated	65	DSL	92.627303	0.026221	0.029851	0.33064	0.31399	0.00353	373.5866	0.015622	0.01495	0.05872
Los Angeles (SC)	2032	LDT2	Aggregated	65	DSL	16350.667	0.006758	0.007693	0.06796	0.02071	0.00224	236.5496	0.00321	0.00307	0.03718
Los Angeles (SC)	2032	LHDT1	Aggregated	65	DSL	528867.02	0.025181	0.028667	0.13914	0.28887	0.00385	407.2786	0.006188	0.00592	0.06402
Los Angeles (SC)	2032	LHDT2	Aggregated	65	DSL	206556.18	0.026392	0.030046	0.14757	0.32906	0.00413	436.5922	0.010641	0.01018	0.06863
Los Angeles (SC)	2032	MDV	Aggregated	65	DSL	33574.303	0.002985	0.003399	0.08034	0.01076	0.00294	310.5233	0.001305	0.00125	0.04881
Los Angeles (SC)	2032	MH	Aggregated	65	DSL	5947.3015	0.028114	0.032006	0.10887	1.88085	0.00732	774.6125	0.044491	0.04257	0.12176
Los Angeles (SC)	2032	MHDT	Aggregated	65	DSL	369778.25	0.008194	0.009328	0.05022	0.95269	0.00754	798.3107	0.015409	0.01474	0.12548
Los Angeles (SC)	2032	OBUS	Aggregated	65	DSL	25410.727	0.013015	0.014817	0.08668	1.37784	0.00984	1041.787	0.024094	0.02305	0.16375
Los Angeles (SC)	2032	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2032	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2033	HHDT	Aggregated	65	DSL	709041.48	0.018888	0.021503	0.12973	1.75654	0.01001	1059.737	0.033785	0.03232	0.16658
Los Angeles (SC)	2033	LDA	Aggregated	65	DSL	52789.505	0.002586	0.002943	0.072	0.00931	0.00165	174.6254	0.001052	0.00101	0.02745
Los Angeles (SC)	2033	LDT1	Aggregated	65	DSL	91.661801	0.023071	0.026265	0.29285	0.2771	0.00346	366.4151	0.013611	0.01302	0.0576

Los Angeles (SC)	2033	LDT2	Aggregated	65	DSL	16562.233	0.006753	0.007687	0.06825	0.02058	0.00221	233.6535	0.003215	0.00308	0.03673
Los Angeles (SC)	2033	LHDT1	Aggregated	65	DSL	538590.92	0.024277	0.027637	0.13168	0.24952	0.00382	403.9005	0.005935	0.00568	0.06349
Los Angeles (SC)	2033	LHDT2	Aggregated	65	DSL	210334.51	0.025532	0.029066	0.14062	0.293	0.00409	432.8937	0.010524	0.01007	0.06804
Los Angeles (SC)	2033	MDV	Aggregated	65	DSL	34107.344	0.002884	0.003283	0.07966	0.01006	0.0029	307.0209	0.001216	0.00116	0.04826
Los Angeles (SC)	2033	MH	Aggregated	65	DSL	6031.8887	0.027156	0.030916	0.10385	1.82625	0.00726	768.0846	0.041485	0.03969	0.12073
Los Angeles (SC)	2033	MHDT	Aggregated	65	DSL	373625.96	0.008187	0.009321	0.05025	0.94777	0.00746	789.9628	0.015445	0.01478	0.12417
Los Angeles (SC)	2033	OBUS	Aggregated	65	DSL	25758.491	0.012999	0.014798	0.08655	1.36534	0.00975	1031.725	0.024069	0.02303	0.16217
Los Angeles (SC)	2033	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2033	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2034	HHDT	Aggregated	65	DSL	714187.77	0.018799	0.021401	0.12929	1.73436	0.00986	1044.043	0.033599	0.03215	0.16411
Los Angeles (SC)	2034	LDA	Aggregated	65	DSL	53209.165	0.002481	0.002824	0.07106	0.00863	0.00164	173.0552	0.000965	0.00092	0.0272
Los Angeles (SC)	2034	LDT1	Aggregated	65	DSL	90.908981	0.020391	0.023214	0.26028	0.24458	0.0034	359.9147	0.011902	0.01139	0.05657
Los Angeles (SC)	2034	LDT2	Aggregated	65	DSL	16741.602	0.006752	0.007686	0.06853	0.02048	0.00218	231.0666	0.003222	0.00308	0.03632
Los Angeles (SC)	2034	LHDT1	Aggregated	65	DSL	547721.99	0.023539	0.026798	0.12569	0.21712	0.00379	400.8968	0.005714	0.00547	0.06302
Los Angeles (SC)	2034	LHDT2	Aggregated	65	DSL	213887.33	0.024786	0.028217	0.13475	0.26244	0.00406	429.5969	0.010385	0.00994	0.06753
Los Angeles (SC)	2034	MDV	Aggregated	65	DSL	34584.797	0.002798	0.003186	0.07909	0.00948	0.00287	303.9212	0.001138	0.00109	0.04777
Los Angeles (SC)	2034	MH	Aggregated	65	DSL	6111.2499	0.026254	0.029888	0.09909	1.77604	0.00721	762.1884	0.038654	0.03698	0.11981
Los Angeles (SC)	2034	MHDT	Aggregated	65	DSL	377375.99	0.008176	0.009308	0.05023	0.94168	0.00739	782.1761	0.015454	0.01479	0.12295
Los Angeles (SC)	2034	OBUS	Aggregated	65	DSL	26084.203	0.012955	0.014749	0.08624	1.34866	0.00965	1021.747	0.023926	0.02289	0.1606
Los Angeles (SC)	2034	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2034	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2035	HHDT	Aggregated	65	DSL	719365.02	0.018725	0.021317	0.1289	1.71479	0.00973	1030.152	0.03343	0.03198	0.16193
Los Angeles (SC)	2035	LDA	Aggregated	65	DSL	53565.494	0.002393	0.002724	0.07026	0.00808	0.00162	171.6893	0.00089	0.00085	0.02699
Los Angeles (SC)	2035	LDT1	Aggregated	65	DSL	89.797102	0.016111	0.018341	0.21437	0.2086	0.00334	353.7096	0.009146	0.00875	0.0556
Los Angeles (SC)	2035	LDT2	Aggregated	65	DSL	16895.25	0.006758	0.007694	0.06883	0.02044	0.00216	228.799	0.003233	0.00309	0.03596
Los Angeles (SC)	2035	LHDT1	Aggregated	65	DSL	556093.41	0.02288	0.026047	0.12026	0.18801	0.00376	398.1862	0.005512	0.00527	0.06259
Los Angeles (SC)	2035	LHDT2	Aggregated	65	DSL	217125.14	0.024102	0.027439	0.12928	0.23475	0.00403	426.6024	0.010237	0.00979	0.06706
Los Angeles (SC)	2035	MDV	Aggregated	65	DSL	35003.191	0.002714	0.003089	0.0785	0.00896	0.00285	301.1604	0.001062	0.00102	0.04734
Los Angeles (SC)	2035	MH	Aggregated	65	DSL	6186.5102	0.025437	0.028958	0.09468	1.73047	0.00716	756.8856	0.036045	0.03449	0.11897
Los Angeles (SC)	2035	MHDT	Aggregated	65	DSL	381084.18	0.008161	0.009291	0.05019	0.93499	0.00732	775.1561	0.01544	0.01477	0.12184
Los Angeles (SC)	2035	OBUS	Aggregated	65	DSL	26429.075	0.012901	0.014687	0.08586	1.33178	0.00956	1012.139	0.023745	0.02272	0.15909
Los Angeles (SC)	2035	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2035	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2036	HHDT	Aggregated	65	DSL	725680.71	0.018669	0.021254	0.12863	1.69862	0.00962	1018.295	0.033303	0.03186	0.16006
Los Angeles (SC)	2036	LDA	Aggregated	65	DSL	53870.946	0.00231	0.00263	0.0695	0.00759	0.00161	170.5047	0.00082	0.00078	0.0268
Los Angeles (SC)	2036	LDT1	Aggregated	65	DSL	89.277629	0.013915	0.015842	0.18791	0.18244	0.00329	348.3499	0.007746	0.00741	0.05476
Los Angeles (SC)	2036	LDT2	Aggregated	65	DSL	17030.443	0.006762	0.007698	0.06907	0.02039	0.00214	226.8391	0.003241	0.0031	0.03566
Los Angeles (SC)	2036	LHDT1	Aggregated	65	DSL	563846.56	0.022324	0.025415	0.11566	0.16314	0.00374	395.7492	0.005336	0.00511	0.06221
Los Angeles (SC)	2036	LHDT2	Aggregated	65	DSL	220225.32	0.023597	0.026863	0.12527	0.21192	0.00401	423.9792	0.010243	0.0098	0.06664
Los Angeles (SC)	2036	MDV	Aggregated	65	DSL	35377.631	0.002644	0.00301	0.07802	0.00854	0.00282	298.7247	0.000997	0.00095	0.04696
Los Angeles (SC)	2036	MH	Aggregated	65	DSL	6259.366	0.024701	0.028121	0.09066	1.68829	0.00711	752.0976	0.033628	0.03217	0.11822
Los Angeles (SC)	2036	MHDT	Aggregated	65	DSL	385390.12	0.008148	0.009276	0.05015	0.9283	0.00726	768.8635	0.015421	0.01475	0.12085
Los Angeles (SC)	2036	OBUS	Aggregated	65	DSL	26763.823	0.012844	0.014622	0.08547	1.31488	0.00948	1003.274	0.023549	0.02253	0.1577
Los Angeles (SC)	2036	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2036	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2037	HHDT	Aggregated	65	DSL	732047.11	0.018627	0.021205	0.12842	1.68569	0.00952	1007.705	0.033203	0.03177	0.1584

Los Angeles (SC)	2037	LDA	Aggregated	65	DSL	54128.977	0.002245	0.002555	0.0689	0.00721	0.0016	169.4949	0.000763	0.00073	0.02664
Los Angeles (SC)	2037	LDT1	Aggregated	65	DSL	89.125667	0.0129	0.014686	0.17299	0.16322	0.00325	343.8187	0.007111	0.0068	0.05404
Los Angeles (SC)	2037	LDT2	Aggregated	65	DSL	17146.105	0.006767	0.007704	0.0693	0.02035	0.00213	225.1562	0.003249	0.00311	0.03539
Los Angeles (SC)	2037	LHDT1	Aggregated	65	DSL	570804.39	0.021822	0.024843	0.11148	0.14064	0.00372	393.5259	0.005171	0.00495	0.06186
Los Angeles (SC)	2037	LHDT2	Aggregated	65	DSL	223005.12	0.023129	0.026331	0.12151	0.19084	0.00399	421.586	0.010245	0.0098	0.06627
Los Angeles (SC)	2037	MDV	Aggregated	65	DSL	35707.555	0.00258	0.002937	0.07757	0.00817	0.0028	296.5761	0.000937	0.0009	0.04662
Los Angeles (SC)	2037	MH	Aggregated	65	DSL	6328.2733	0.023986	0.027306	0.08677	1.64822	0.00707	747.7193	0.031314	0.02996	0.11753
Los Angeles (SC)	2037	MHDT	Aggregated	65	DSL	389625.53	0.008137	0.009263	0.0501	0.92256	0.00721	762.9935	0.0154	0.01473	0.11993
Los Angeles (SC)	2037	OBUS	Aggregated	65	DSL	27103.543	0.012792	0.014563	0.08511	1.29954	0.0094	995.2413	0.023374	0.02236	0.15644
Los Angeles (SC)	2037	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2037	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2038	HHDT	Aggregated	65	DSL	738449.31	0.018595	0.021169	0.12826	1.67522	0.00943	998.3822	0.033132	0.0317	0.15693
Los Angeles (SC)	2038	LDA	Aggregated	65	DSL	54344.163	0.002193	0.002497	0.06842	0.0069	0.00159	168.6412	0.000717	0.00069	0.02651
Los Angeles (SC)	2038	LDT1	Aggregated	65	DSL	88.902569	0.012075	0.013746	0.15935	0.14365	0.00321	339.3927	0.006602	0.00632	0.05335
Los Angeles (SC)	2038	LDT2	Aggregated	65	DSL	17245.228	0.006771	0.007708	0.06948	0.02032	0.00212	223.7269	0.003255	0.00311	0.03517
Los Angeles (SC)	2038	LHDT1	Aggregated	65	DSL	577100.85	0.021412	0.024376	0.10803	0.12205	0.0037	391.518	0.005025	0.00481	0.06154
Los Angeles (SC)	2038	LHDT2	Aggregated	65	DSL	225471.72	0.022716	0.025861	0.11821	0.17217	0.00396	419.394	0.010247	0.0098	0.06592
Los Angeles (SC)	2038	MDV	Aggregated	65	DSL	35997.532	0.002528	0.002878	0.0772	0.00786	0.00279	294.6935	0.000887	0.00085	0.04632
Los Angeles (SC)	2038	MH	Aggregated	65	DSL	6392.209	0.023312	0.026539	0.08312	1.61112	0.00703	743.7203	0.029154	0.02789	0.1169
Los Angeles (SC)	2038	MHDT	Aggregated	65	DSL	393774.28	0.008126	0.00925	0.05006	0.91741	0.00716	757.7085	0.015379	0.01471	0.1191
Los Angeles (SC)	2038	OBUS	Aggregated	65	DSL	27451.632	0.012749	0.014514	0.08481	1.28803	0.00934	988.095	0.023238	0.02223	0.15531
Los Angeles (SC)	2038	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2038	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2039	HHDT	Aggregated	65	DSL	744889.32	0.018571	0.021142	0.12815	1.66685	0.00936	990.2387	0.033088	0.03166	0.15565
Los Angeles (SC)	2039	LDA	Aggregated	65	DSL	54525.764	0.002151	0.002448	0.06802	0.00664	0.00159	167.9279	0.000679	0.00065	0.0264
Los Angeles (SC)	2039	LDT1	Aggregated	65	DSL	88.81174	0.011407	0.012986	0.14835	0.12781	0.00317	335.67	0.006192	0.00592	0.05276
Los Angeles (SC)	2039	LDT2	Aggregated	65	DSL	17331.893	0.006774	0.007712	0.06964	0.02028	0.0021	222.5311	0.003261	0.00312	0.03498
Los Angeles (SC)	2039	LHDT1	Aggregated	65	DSL	582787.59	0.021056	0.023971	0.10508	0.10585	0.00368	389.7009	0.004893	0.00468	0.06126
Los Angeles (SC)	2039	LHDT2	Aggregated	65	DSL	227645.72	0.022297	0.025384	0.11495	0.15353	0.00395	417.3802	0.010242	0.0098	0.06561
Los Angeles (SC)	2039	MDV	Aggregated	65	DSL	36252.008	0.002483	0.002826	0.07686	0.00757	0.00277	293.0467	0.000843	0.00081	0.04606
Los Angeles (SC)	2039	MH	Aggregated	65	DSL	6452.9151	0.022715	0.025859	0.07975	1.57823	0.007	740.089	0.0272	0.02602	0.11633
Los Angeles (SC)	2039	MHDT	Aggregated	65	DSL	397841.04	0.008115	0.009238	0.05001	0.91275	0.00711	752.9456	0.015354	0.01469	0.11835
Los Angeles (SC)	2039	OBUS	Aggregated	65	DSL	27781.997	0.012709	0.014468	0.08452	1.27833	0.00927	981.669	0.023109	0.02211	0.1543
Los Angeles (SC)	2039	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2039	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2040	HHDT	Aggregated	65	DSL	751350.99	0.018554	0.021123	0.12808	1.65975	0.00929	983.1156	0.033065	0.03163	0.15453
Los Angeles (SC)	2040	LDA	Aggregated	65	DSL	54679.815	0.002113	0.002406	0.06765	0.00637	0.00158	167.3349	0.000646	0.00062	0.0263
Los Angeles (SC)	2040	LDT1	Aggregated	65	DSL	88.769455	0.010816	0.012313	0.1386	0.11375	0.00314	332.4053	0.005828	0.00558	0.05225
Los Angeles (SC)	2040	LDT2	Aggregated	65	DSL	17409.445	0.006778	0.007716	0.06978	0.02027	0.00209	221.547	0.003266	0.00312	0.03482
Los Angeles (SC)	2040	LHDT1	Aggregated	65	DSL	587927.99	0.020753	0.023626	0.10257	0.09201	0.00367	388.0588	0.004774	0.00457	0.061
Los Angeles (SC)	2040	LHDT2	Aggregated	65	DSL	229715.51	0.022016	0.025064	0.1128	0.14057	0.00393	415.6282	0.010252	0.00981	0.06533
Los Angeles (SC)	2040	MDV	Aggregated	65	DSL	36475.363	0.002442	0.00278	0.07655	0.0073	0.00276	291.6082	0.000804	0.00077	0.04584
Los Angeles (SC)	2040	MH	Aggregated	65	DSL	6510.4963	0.022191	0.025263	0.07666	1.54937	0.00696	736.7187	0.025383	0.02428	0.1158
Los Angeles (SC)	2040	MHDT	Aggregated	65	DSL	401846.02	0.008105	0.009226	0.04997	0.9088	0.00707	748.696	0.015332	0.01467	0.11768
Los Angeles (SC)	2040	OBUS	Aggregated	65	DSL	28112.139	0.012684	0.01444	0.08434	1.27215	0.00922	976.2176	0.023037	0.02204	0.15345
Los Angeles (SC)	2040	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0

Los Angeles (SC)	2040	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2041	HHDT	Aggregated	65	DSL	758121.01	0.018542	0.021108	0.12804	1.65384	0.00923	976.9801	0.033057	0.03163	0.15357
Los Angeles (SC)	2041	LDA	Aggregated	65	DSL	54805.147	0.002085	0.002373	0.06738	0.00618	0.00158	166.8544	0.00062	0.00059	0.02623
Los Angeles (SC)	2041	LDT1	Aggregated	65	DSL	88.392238	0.009981	0.011363	0.1248	0.09399	0.00311	328.5822	0.005313	0.00508	0.05165
Los Angeles (SC)	2041	LDT2	Aggregated	65	DSL	17477.009	0.00678	0.007719	0.06991	0.02025	0.00209	220.7488	0.003271	0.00313	0.0347
Los Angeles (SC)	2041	LHDT1	Aggregated	65	DSL	592470.46	0.02051	0.023349	0.1006	0.08074	0.00365	386.5815	0.004672	0.00447	0.06077
Los Angeles (SC)	2041	LHDT2	Aggregated	65	DSL	231548.21	0.021777	0.024791	0.11117	0.12956	0.00391	414.0511	0.010266	0.00982	0.06508
Los Angeles (SC)	2041	MDV	Aggregated	65	DSL	36667.213	0.002407	0.00274	0.07628	0.00708	0.00275	290.3687	0.00077	0.00074	0.04564
Los Angeles (SC)	2041	MH	Aggregated	65	DSL	6564.1001	0.021716	0.024723	0.07375	1.52331	0.00694	733.6185	0.023651	0.02263	0.11531
Los Angeles (SC)	2041	MHDT	Aggregated	65	DSL	405943.97	0.008096	0.009217	0.04993	0.90519	0.00704	744.76	0.015312	0.01465	0.11707
Los Angeles (SC)	2041	OBUS	Aggregated	65	DSL	28440.043	0.012679	0.014434	0.08429	1.27007	0.00918	971.7266	0.023039	0.02204	0.15274
Los Angeles (SC)	2041	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2041	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2042	HHDT	Aggregated	65	DSL	764908.39	0.018533	0.021099	0.12803	1.64903	0.00918	971.7325	0.033058	0.03163	0.15274
Los Angeles (SC)	2042	LDA	Aggregated	65	DSL	54920.005	0.002062	0.002348	0.06717	0.00604	0.00157	166.4691	0.0006	0.00057	0.02617
Los Angeles (SC)	2042	LDT1	Aggregated	65	DSL	88.248133	0.009397	0.010698	0.11516	0.08012	0.00308	325.6425	0.004953	0.00474	0.05119
Los Angeles (SC)	2042	LDT2	Aggregated	65	DSL	17539.729	0.006783	0.007722	0.07002	0.02023	0.00208	220.1014	0.003274	0.00313	0.0346
Los Angeles (SC)	2042	LHDT1	Aggregated	65	DSL	596535.56	0.020297	0.023106	0.09883	0.07085	0.00364	385.2398	0.004578	0.00438	0.06055
Los Angeles (SC)	2042	LHDT2	Aggregated	65	DSL	233263.5	0.021588	0.024576	0.10993	0.12071	0.0039	412.6573	0.010283	0.00984	0.06486
Los Angeles (SC)	2042	MDV	Aggregated	65	DSL	36840.569	0.002376	0.002705	0.07606	0.0069	0.00273	289.3068	0.00074	0.00071	0.04548
Los Angeles (SC)	2042	MH	Aggregated	65	DSL	6615.2781	0.021291	0.024239	0.07103	1.50006	0.00691	730.7703	0.022026	0.02107	0.11487
Los Angeles (SC)	2042	MHDT	Aggregated	65	DSL	409993.08	0.008089	0.009209	0.04991	0.90203	0.007	741.2739	0.0153	0.01464	0.11652
Los Angeles (SC)	2042	OBUS	Aggregated	65	DSL	28771.552	0.012686	0.014443	0.08432	1.27094	0.00915	968.1321	0.023094	0.02209	0.15218
Los Angeles (SC)	2042	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2042	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2043	HHDT	Aggregated	65	DSL	771710.33	0.018525	0.021089	0.12802	1.64472	0.00914	967.1268	0.033063	0.03163	0.15202
Los Angeles (SC)	2043	LDA	Aggregated	65	DSL	55014.397	0.002045	0.002328	0.06701	0.00591	0.00157	166.1638	0.000584	0.00056	0.02612
Los Angeles (SC)	2043	LDT1	Aggregated	65	DSL	88.078332	0.008841	0.010065	0.10598	0.06694	0.00305	322.9272	0.00461	0.00441	0.05076
Los Angeles (SC)	2043	LDT2	Aggregated	65	DSL	17595.299	0.006785	0.007725	0.07013	0.02022	0.00208	219.5858	0.003278	0.00314	0.03452
Los Angeles (SC)	2043	LHDT1	Aggregated	65	DSL	600184.46	0.020145	0.022934	0.09758	0.0636	0.00363	384.0607	0.004501	0.00431	0.06037
Los Angeles (SC)	2043	LHDT2	Aggregated	65	DSL	234875.72	0.021461	0.024432	0.10916	0.1145	0.00389	411.4613	0.010305	0.00986	0.06468
Los Angeles (SC)	2043	MDV	Aggregated	65	DSL	36989.253	0.002351	0.002677	0.07588	0.00677	0.00273	288.4022	0.000715	0.00068	0.04533
Los Angeles (SC)	2043	MH	Aggregated	65	DSL	6662.2306	0.020901	0.023795	0.06847	1.4789	0.00688	728.0934	0.02048	0.01959	0.11445
Los Angeles (SC)	2043	MHDT	Aggregated	65	DSL	413994.41	0.008084	0.009204	0.04989	0.89925	0.00697	738.0798	0.015292	0.01463	0.11602
Los Angeles (SC)	2043	OBUS	Aggregated	65	DSL	29090.613	0.012706	0.014465	0.08445	1.27363	0.00912	965.2787	0.023189	0.02219	0.15173
Los Angeles (SC)	2043	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2043	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2044	HHDT	Aggregated	65	DSL	778512.61	0.018515	0.021078	0.12801	1.64048	0.0091	963.1626	0.033069	0.03164	0.1514
Los Angeles (SC)	2044	LDA	Aggregated	65	DSL	55094.243	0.002031	0.002313	0.06689	0.0058	0.00157	165.925	0.000572	0.00055	0.02608
Los Angeles (SC)	2044	LDT1	Aggregated	65	DSL	88.046675	0.008473	0.009646	0.09993	0.05819	0.00303	320.857	0.004384	0.00419	0.05043
Los Angeles (SC)	2044	LDT2	Aggregated	65	DSL	17644.6	0.006788	0.007727	0.07023	0.02021	0.00207	219.1717	0.003282	0.00314	0.03445
Los Angeles (SC)	2044	LHDT1	Aggregated	65	DSL	603352.04	0.019992	0.02276	0.09633	0.05642	0.00362	382.9953	0.00443	0.00424	0.0602
Los Angeles (SC)	2044	LHDT2	Aggregated	65	DSL	236182.58	0.021196	0.024131	0.10751	0.10302	0.00388	410.3079	0.010306	0.00986	0.06449
Los Angeles (SC)	2044	MDV	Aggregated	65	DSL	37119.67	0.002331	0.002653	0.07574	0.00666	0.00272	287.6372	0.000694	0.00066	0.04521
Los Angeles (SC)	2044	MH	Aggregated	65	DSL	6705.646	0.020559	0.023405	0.06609	1.46027	0.00686	725.6125	0.019026	0.0182	0.11406
Los Angeles (SC)	2044	MHDT	Aggregated	65	DSL	417961.4	0.008081	0.0092	0.04988	0.89705	0.00695	735.2263	0.01529	0.01463	0.11557

Los Angeles (SC)	2044	OBUS	Aggregated	65	DSL	29414.862	0.012724	0.014486	0.08456	1.27619	0.0091	962.8867	0.023277	0.02227	0.15135
Los Angeles (SC)	2044	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2044	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2045	HHDT	Aggregated	65	DSL	785323.48	0.018507	0.021069	0.12801	1.63675	0.00907	959.72	0.033076	0.03164	0.15085
Los Angeles (SC)	2045	LDA	Aggregated	65	DSL	55167.715	0.002021	0.002301	0.0668	0.00572	0.00157	165.7404	0.000562	0.00054	0.02605
Los Angeles (SC)	2045	LDT1	Aggregated	65	DSL	88.108307	0.008223	0.009362	0.09583	0.05222	0.00302	319.2642	0.004231	0.00405	0.05018
Los Angeles (SC)	2045	LDT2	Aggregated	65	DSL	17690.411	0.00679	0.00773	0.07032	0.02021	0.00207	218.8393	0.003285	0.00314	0.0344
Los Angeles (SC)	2045	LHDT1	Aggregated	65	DSL	606338.79	0.019872	0.022623	0.09538	0.05068	0.00361	382.0737	0.004374	0.00418	0.06006
Los Angeles (SC)	2045	LHDT2	Aggregated	65	DSL	237448.68	0.020985	0.02389	0.1062	0.09375	0.00387	409.3231	0.010311	0.00987	0.06434
Los Angeles (SC)	2045	MDV	Aggregated	65	DSL	37237.273	0.002314	0.002634	0.07564	0.00658	0.00271	286.9932	0.000677	0.00065	0.04511
Los Angeles (SC)	2045	MH	Aggregated	65	DSL	6745.6084	0.020217	0.023016	0.06382	1.44222	0.00684	723.2785	0.017672	0.01691	0.11369
Los Angeles (SC)	2045	MHDT	Aggregated	65	DSL	421898.75	0.00808	0.009198	0.04988	0.89562	0.00692	732.7181	0.015294	0.01463	0.11517
Los Angeles (SC)	2045	OBUS	Aggregated	65	DSL	29722.921	0.01274	0.014503	0.08465	1.27791	0.00908	960.9101	0.023347	0.02234	0.15104
Los Angeles (SC)	2045	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2045	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2046	HHDT	Aggregated	65	DSL	793447.59	0.018499	0.02106	0.128	1.63345	0.00904	956.885	0.033079	0.03165	0.15041
Los Angeles (SC)	2046	LDA	Aggregated	65	DSL	55223.537	0.002014	0.002293	0.06675	0.00566	0.00157	165.5992	0.000555	0.00053	0.02603
Los Angeles (SC)	2046	LDT1	Aggregated	65	DSL	88.15635	0.008012	0.009122	0.09238	0.04719	0.00301	317.8774	0.004102	0.00393	0.04997
Los Angeles (SC)	2046	LDT2	Aggregated	65	DSL	17729.631	0.006792	0.007732	0.0704	0.0202	0.00207	218.5715	0.003288	0.00315	0.03436
Los Angeles (SC)	2046	LHDT1	Aggregated	65	DSL	608912.54	0.019762	0.022498	0.09452	0.04546	0.0036	381.2493	0.004325	0.00414	0.05993
Los Angeles (SC)	2046	LHDT2	Aggregated	65	DSL	238563.13	0.020746	0.023618	0.10472	0.0835	0.00386	408.4383	0.010311	0.00987	0.0642
Los Angeles (SC)	2046	MDV	Aggregated	65	DSL	37336.062	0.0023	0.002619	0.07556	0.0065	0.00271	286.4557	0.000662	0.00063	0.04503
Los Angeles (SC)	2046	MH	Aggregated	65	DSL	6783.5008	0.019964	0.022728	0.06195	1.42838	0.00682	721.1625	0.016512	0.0158	0.11336
Los Angeles (SC)	2046	MHDT	Aggregated	65	DSL	426571.84	0.008079	0.009197	0.04988	0.89443	0.0069	730.448	0.015298	0.01464	0.11482
Los Angeles (SC)	2046	OBUS	Aggregated	65	DSL	30045.43	0.012748	0.014513	0.0847	1.27858	0.00906	959.0984	0.023394	0.02238	0.15076
Los Angeles (SC)	2046	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2046	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2047	HHDT	Aggregated	65	DSL	801592.84	0.018492	0.021051	0.12799	1.63037	0.00902	954.4307	0.033081	0.03165	0.15002
Los Angeles (SC)	2047	LDA	Aggregated	65	DSL	55276.372	0.002007	0.002285	0.0667	0.00559	0.00156	165.4896	0.000549	0.00053	0.02601
Los Angeles (SC)	2047	LDT1	Aggregated	65	DSL	87.814346	0.007448	0.008479	0.08302	0.03383	0.00298	315.5208	0.003753	0.00359	0.0496
Los Angeles (SC)	2047	LDT2	Aggregated	65	DSL	17766.439	0.006794	0.007735	0.07048	0.0202	0.00206	218.3491	0.003291	0.00315	0.03432
Los Angeles (SC)	2047	LHDT1	Aggregated	65	DSL	611280.24	0.019689	0.022414	0.09392	0.04177	0.0036	380.5282	0.004285	0.0041	0.05981
Los Angeles (SC)	2047	LHDT2	Aggregated	65	DSL	239664.94	0.020611	0.023464	0.10364	0.07729	0.00385	407.6962	0.010317	0.00987	0.06408
Los Angeles (SC)	2047	MDV	Aggregated	65	DSL	37427.77	0.002289	0.002606	0.0755	0.00644	0.0027	286.0124	0.000651	0.00062	0.04496
Los Angeles (SC)	2047	MH	Aggregated	65	DSL	6820.6247	0.019754	0.022489	0.06038	1.4168	0.0068	719.2418	0.015538	0.01487	0.11305
Los Angeles (SC)	2047	MHDT	Aggregated	65	DSL	431217.19	0.008078	0.009196	0.04988	0.89338	0.00688	728.3912	0.015303	0.01464	0.11449
Los Angeles (SC)	2047	OBUS	Aggregated	65	DSL	30374.523	0.012755	0.014521	0.08474	1.27896	0.00905	957.5145	0.023433	0.02242	0.15051
Los Angeles (SC)	2047	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2047	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2048	HHDT	Aggregated	65	DSL	809768.02	0.018488	0.021047	0.12798	1.62835	0.009	952.2986	0.03308	0.03165	0.14969
Los Angeles (SC)	2048	LDA	Aggregated	65	DSL	55317.675	0.002002	0.00228	0.06666	0.00553	0.00156	165.4052	0.000545	0.00052	0.026
Los Angeles (SC)	2048	LDT1	Aggregated	65	DSL	87.798942	0.007224	0.008224	0.07934	0.02849	0.00297	314.2752	0.003616	0.00346	0.0494
Los Angeles (SC)	2048	LDT2	Aggregated	65	DSL	17798.11	0.006796	0.007736	0.07055	0.02019	0.00206	218.1615	0.003293	0.00315	0.03429
Los Angeles (SC)	2048	LHDT1	Aggregated	65	DSL	613249.71	0.019615	0.022331	0.09333	0.03819	0.00359	379.8819	0.004247	0.00406	0.05971
Los Angeles (SC)	2048	LHDT2	Aggregated	65	DSL	240569.79	0.020438	0.023268	0.10225	0.06972	0.00385	407.0038	0.010314	0.00987	0.06398
Los Angeles (SC)	2048	MDV	Aggregated	65	DSL	37506.333	0.00228	0.002595	0.07545	0.00637	0.0027	285.6442	0.00064	0.00061	0.0449

Los Angeles (SC)	2048	MH	Aggregated	65	DSL	6854.1408	0.019662	0.022383	0.05899	1.41033	0.00678	717.4526	0.01455	0.01392	0.11277
Los Angeles (SC)	2048	MHDT	Aggregated	65	DSL	435845.55	0.008078	0.009196	0.04988	0.89264	0.00686	726.5857	0.015308	0.01465	0.11421
Los Angeles (SC)	2048	OBUS	Aggregated	65	DSL	30689.089	0.012754	0.01452	0.08474	1.2768	0.00903	955.8514	0.023436	0.02242	0.15025
Los Angeles (SC)	2048	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2048	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2049	HHDT	Aggregated	65	DSL	817973.62	0.018484	0.021043	0.12796	1.62669	0.00898	950.4733	0.033079	0.03165	0.1494
Los Angeles (SC)	2049	LDA	Aggregated	65	DSL	55348.314	0.001999	0.002276	0.06665	0.0055	0.00156	165.3411	0.000541	0.00052	0.02599
Los Angeles (SC)	2049	LDT1	Aggregated	65	DSL	87.919947	0.007169	0.008161	0.07847	0.02715	0.00296	313.5957	0.003584	0.00343	0.04929
Los Angeles (SC)	2049	LDT2	Aggregated	65	DSL	17824.939	0.006797	0.007738	0.07062	0.02018	0.00206	218.0032	0.003296	0.00315	0.03427
Los Angeles (SC)	2049	LHDT1	Aggregated	65	DSL	614898.67	0.019559	0.022267	0.09281	0.03533	0.00359	379.3148	0.004214	0.00403	0.05962
Los Angeles (SC)	2049	LHDT2	Aggregated	65	DSL	241352.47	0.020293	0.023102	0.10082	0.06316	0.00384	406.3899	0.010309	0.00986	0.06388
Los Angeles (SC)	2049	MDV	Aggregated	65	DSL	37573.689	0.002271	0.002585	0.0754	0.00628	0.0027	285.3398	0.000632	0.0006	0.04485
Los Angeles (SC)	2049	MH	Aggregated	65	DSL	6884.2897	0.019584	0.022295	0.05771	1.4047	0.00677	715.7919	0.013624	0.01303	0.11251
Los Angeles (SC)	2049	MHDT	Aggregated	65	DSL	440455.13	0.008079	0.009197	0.04989	0.89214	0.00685	725.0162	0.015316	0.01465	0.11396
Los Angeles (SC)	2049	OBUS	Aggregated	65	DSL	31000.82	0.012748	0.014513	0.0847	1.27309	0.00901	954.1499	0.023416	0.0224	0.14998
Los Angeles (SC)	2049	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2049	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2050	HHDT	Aggregated	65	DSL	826185.43	0.01848	0.021039	0.12794	1.62514	0.00901	954.1177	0.033077	0.03165	0.14997
Los Angeles (SC)	2050	LDA	Aggregated	65	DSL	55372.33	0.001997	0.002273	0.06664	0.00546	0.00156	165.2907	0.000538	0.00052	0.02598
Los Angeles (SC)	2050	LDT1	Aggregated	65	DSL	88.057044	0.007138	0.008126	0.078	0.02636	0.00296	313.076	0.003566	0.00341	0.04921
Los Angeles (SC)	2050	LDT2	Aggregated	65	DSL	17848.437	0.006797	0.007738	0.07066	0.02014	0.00206	217.8654	0.003297	0.00315	0.03425
Los Angeles (SC)	2050	LHDT1	Aggregated	65	DSL	616314.06	0.019513	0.022214	0.09239	0.03293	0.00358	378.8176	0.004184	0.004	0.05954
Los Angeles (SC)	2050	LHDT2	Aggregated	65	DSL	241909	0.020049	0.022825	0.09837	0.05268	0.00384	405.7542	0.010282	0.00984	0.06378
Los Angeles (SC)	2050	MDV	Aggregated	65	DSL	37632.884	0.002261	0.002574	0.07533	0.00615	0.0027	285.0854	0.000623	0.0006	0.04481
Los Angeles (SC)	2050	MH	Aggregated	65	DSL	6912.5655	0.019518	0.02222	0.05658	1.39984	0.00675	714.2818	0.01281	0.01226	0.11228
Los Angeles (SC)	2050	MHDT	Aggregated	65	DSL	445060.42	0.008081	0.009199	0.0499	0.89185	0.00685	724.8767	0.015327	0.01466	0.11394
Los Angeles (SC)	2050	OBUS	Aggregated	65	DSL	31315.715	0.012736	0.014499	0.08462	1.26763	0.00901	953.3878	0.023368	0.02236	0.14986
Los Angeles (SC)	2050	SBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2050	UBUS	Aggregated	65	DSL	0	0	0	0	0	0	0	0	0	0

Alexan SP Residential Development Draft EIR (Appendix A3)
EMFAC2017 WebDataBase Output file
Los Angeles South Coast Vehicle Population Data

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	ROG_RUNEX	ROG_IDLEX	ROG_STREX
Los Angeles (SC)	2023	HHDT	Aggregated	Aggregated	GAS	52.868146	5904.51091	1057.7859	0.4720415	0	0.0015683
Los Angeles (SC)	2023	HHDT	Aggregated	Aggregated	DSL	57613.017	6949256.2	573406.49	0.019784	4.6042209	0
Los Angeles (SC)	2023	HHDT	Aggregated	Aggregated	NG	2795.8173	113851.643	10903.687	0.3105878	0.059875	0
Los Angeles (SC)	2023	LDA	Aggregated	Aggregated	GAS	3986929.1	149418106	18815398	0.0104333	0	0.2104625
Los Angeles (SC)	2023	LDA	Aggregated	Aggregated	DSL	36740.629	1426244.82	174171.3	0.018777	0	0
Los Angeles (SC)	2023	LDA	Aggregated	Aggregated	ELEC	91678.538	3806341.94	457107.93	0	0	0
Los Angeles (SC)	2023	LDT1	Aggregated	Aggregated	GAS	472375.67	17372474.6	2187811.2	0.0298518	0	0.3212965
Los Angeles (SC)	2023	LDT1	Aggregated	Aggregated	DSL	252.41187	6132.92196	894.90598	0.1826007	0	0
Los Angeles (SC)	2023	LDT1	Aggregated	Aggregated	ELEC	4635.2487	196781.624	23233.685	0	0	0
Los Angeles (SC)	2023	LDT2	Aggregated	Aggregated	GAS	1397479.3	52162943.4	6567821.3	0.0183374	0	0.2923773
Los Angeles (SC)	2023	LDT2	Aggregated	Aggregated	DSL	9765.2302	404272.137	48008.058	0.022513	0	0
Los Angeles (SC)	2023	LDT2	Aggregated	Aggregated	ELEC	18283.628	584568.842	92279.452	0	0	0
Los Angeles (SC)	2023	LHDT1	Aggregated	Aggregated	GAS	105195.93	3800052.41	1567262.6	0.0317679	0.423479	0.112138
Los Angeles (SC)	2023	LHDT1	Aggregated	Aggregated	DSL	68776.357	2893383.11	865120.05	0.0614417	0.1097597	0
Los Angeles (SC)	2023	LHDT2	Aggregated	Aggregated	GAS	17937.989	625878.524	267249.3	0.0211978	0.4251469	0.1150779
Los Angeles (SC)	2023	LHDT2	Aggregated	Aggregated	DSL	27873.775	1126544.03	350617.03	0.0608606	0.1097597	0
Los Angeles (SC)	2023	MCY	Aggregated	Aggregated	GAS	183955.37	1265084.64	367910.74	2.5957164	0	1.8021736
Los Angeles (SC)	2023	MDV	Aggregated	Aggregated	GAS	931795.97	32264362.1	4326648	0.0247481	0	0.3713853
Los Angeles (SC)	2023	MDV	Aggregated	Aggregated	DSL	21297.507	823486.054	104465.34	0.0145728	0	0
Los Angeles (SC)	2023	MDV	Aggregated	Aggregated	ELEC	10378.926	342100.126	52903.33	0	0	0
Los Angeles (SC)	2023	MH	Aggregated	Aggregated	GAS	18786.355	191391.548	1879.387	0.0447898	0	0.1209132
Los Angeles (SC)	2023	MH	Aggregated	Aggregated	DSL	6166.7976	64319.4793	616.67976	0.0645308	0	0
Los Angeles (SC)	2023	MHDT	Aggregated	Aggregated	GAS	14623.108	797300.084	292579.15	0.0542902	1.0051305	0.2029533
Los Angeles (SC)	2023	MHDT	Aggregated	Aggregated	DSL	64520.19	4246866.5	635166.64	0.0079226	0.0703788	0
Los Angeles (SC)	2023	OBUS	Aggregated	Aggregated	GAS	3965.9552	159342.808	79350.831	0.0557275	0.7442649	0.1546471
Los Angeles (SC)	2023	OBUS	Aggregated	Aggregated	DSL	3071.4533	241091.735	29880.372	0.0111139	0.8947138	0
Los Angeles (SC)	2023	SBUS	Aggregated	Aggregated	GAS	1481.565	58916.2147	5926.2602	0.0488937	10.61523	0.3184968
Los Angeles (SC)	2023	SBUS	Aggregated	Aggregated	DSL	3497.0784	110638.369	40355.8	0.1076404	0.2810165	0
Los Angeles (SC)	2023	UBUS	Aggregated	Aggregated	GAS	463.32299	33183.9659	1853.292	0.0197322	0	0.4627467
Los Angeles (SC)	2023	UBUS	Aggregated	Aggregated	DSL	10.1389	1181.23011	40.5556	0.0011593	0	0
Los Angeles (SC)	2023	UBUS	Aggregated	Aggregated	ELEC	12	1070.40331	48	0	0	0
Los Angeles (SC)	2023	UBUS	Aggregated	Aggregated	NG	4153.8408	439713.485	16615.363	0.0905348	0	0
					Total Vehicle Population:	**7,566,565**					

ROG_HOTSC	ROG_RUNLC	ROG_RESTLC	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSO	TOG_RUNLC	TOG_RESTLC	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX
0.1267051	0.6597345	0.0462079	0.0653095	0.6888018	0	0.0017171	0.1267051	0.6597345	0.0462079	0.0653095	32.570209	0	5.2816631
0	0	0	0	0.0225226	5.241555	0	0	0	0	0	0.2172206	67.201232	0
0	0	0	0	5.3306473	1.3434872	0	0	0	0	0	13.548792	20.364809	0
0.097942	0.2096253	0.2274498	0.2362833	0.0152196	0	0.2304291	0.097942	0.2096253	0.2274498	0.2362833	0.6866092	0	2.0977977
0	0	0	0	0.0213764	0	0	0	0	0	0	0.2811583	0	0
0.004888	0	0.0075002	0.0224074	0	0	0	0.004888	0	0.0075002	0.0224074	0	0	0
0.1850677	0.6503251	0.4655494	0.5444003	0.0435482	0	0.3517785	0.1850677	0.6503251	0.4655494	0.5444003	1.3106666	0	2.206069
0	0	0	0	0.2078787	0	0	0	0	0	0	1.0746805	0	0
0.004888	0	0.0075002	0.0224074	0	0	0	0.004888	0	0.0075002	0.0224074	0	0	0
0.1184948	0.3981981	0.3420797	0.3336875	0.0267531	0	0.320116	0.1184948	0.3981981	0.3420797	0.3336875	0.9539169	0	2.6017314
0	0	0	0	0.0256296	0	0	0	0	0	0	0.1930751	0	0
0.004888	0	0.0075002	0.0224074	0	0	0	0.004888	0	0.0075002	0.0224074	0	0	0
0.1161862	0.798777	0.0336444	0.0543763	0.0463557	0.6179395	0.1227769	0.1161862	0.798777	0.0336444	0.0543763	0.7654656	3.7532173	1.6788405
0	0	0	0	0.0699473	0.1249541	0	0	0	0	0	0.3060369	0.9097451	0
0.115058	0.7285108	0.031271	0.0493313	0.0309318	0.6203734	0.1259959	0.115058	0.7285108	0.031271	0.0493313	0.5364241	3.7601286	1.6624364
0	0	0	0	0.0692857	0.1249541	0	0	0	0	0	0.3019327	0.9097451	0
0.6362594	1.884499	1.3060708	2.1476171	3.23302	0	1.9618647	0.6362594	1.884499	1.3060708	2.1476171	18.860918	0	8.5427308
0.1376719	0.425777	0.4111326	0.3840631	0.0360305	0	0.406616	0.1376719	0.425777	0.4111326	0.3840631	1.1187919	0	3.0191653
0	0	0	0	0.0165902	0	0	0	0	0	0	0.2711278	0	0
0.004888	0	0.0075002	0.0224074	0	0	0	0.004888	0	0.0075002	0.0224074	0	0	0
0.0686858	1.7059596	0.0417315	0.0972237	0.0653572	0	0.1323847	0.0686858	1.7059596	0.0417315	0.0972237	1.2132359	0	2.7010976
0	0	0	0	0.0734641	0	0	0	0	0	0	0.2536482	0	0
0.0827975	0.4355809	0.0260205	0.0395071	0.0792202	1.4666841	0.2222083	0.0827975	0.4355809	0.0260205	0.0395071	1.3648569	14.38372	4.3582444
0	0	0	0	0.0090193	0.0801209	0	0	0	0	0	0.0755529	2.5213015	0
0.0306605	0.3678905	0.0261777	0.0506712	0.0813175	1.0860297	0.1693191	0.0306605	0.3678905	0.0261777	0.0506712	1.364894	5.7625098	3.2233612
0	0	0	0	0.0126524	1.0185636	0	0	0	0	0	0.1192105	14.288763	0
0.070086	0.434635	0.0174778	0.0321522	0.0713455	15.489719	0.3487139	0.070086	0.434635	0.0174778	0.0321522	1.0385336	82.081251	7.5394891
0	0	0	0	0.1225404	0.3199159	0	0	0	0	0	0.3171184	6.8010966	0
0.0742267	0.4713731	0.0173794	0.0218987	0.0287932	0	0.5066494	0.0742267	0.4713731	0.0173794	0.0218987	0.3531277	0	7.149494
0	0	0	0	0.0828045	0	0	0	0	0	0	0.1380373	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	6.4464311	0	0	0	0	0	0	49.056471	0	0

NOx_RUNEX	NOx_IDLEX	NOx_STREX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	PM10_RUNE	PM10_IDLEX	PM10_STRE	PM10_PMTV	PM10_PMBV	PM2_5_RUN	PM2_5_IDLE	PM2_5_STRI
3.8486845	0	0.6002106	2037.4239	0	46.988586	0.0012712	0	0.0007478	0.02	0.06174	0.0011688	0	0.0006876
2.707637	57.304971	2.3978612	1365.8644	11243.413	0	0.0187258	0.0304967	0	0.0356001	0.0610542	0.0179157	0.0291775	0
2.8212388	22.752134	0	3359.9821	4009.7531	0	0.0061727	0.0398974	0	0.036	0.06174	0.0059057	0.0381714	0
0.0363387	0	0.1762394	269.43991	0	53.37874	0.0016845	0	0.0018122	0.008	0.03675	0.0015488	0	0.0016663
0.0647416	0	0	209.56177	0	0	0.0083456	0	0	0.008	0.03675	0.0079846	0	0
0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0
0.1053621	0	0.2388508	312.85464	0	62.100757	0.0024752	0	0.0024666	0.008	0.03675	0.0022759	0	0.002268
0.9875566	0	0	461.03311	0	0	0.1357518	0	0	0.008	0.03675	0.1298792	0	0
0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0
0.0758112	0	0.2593997	332.57915	0	67.106666	0.0018058	0	0.0018481	0.008	0.03675	0.0016604	0	0.0016993
0.0454151	0	0	284.84095	0	0	0.0059066	0	0	0.008	0.03675	0.0056511	0	0
0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0
0.1825114	0.0369678	0.4891643	801.787	119.66159	18.712064	0.0013455	0	0.0004162	0.008	0.07644	0.0012371	0	0.0003827
1.0345584	1.7625949	0	457.53793	128.66409	0	0.0120862	0.0277128	0	0.012	0.07644	0.0115634	0.026514	0
0.1832372	0.0370861	0.504559	920.09306	138.18857	21.305237	0.0012212	0	0.0003515	0.008	0.08918	0.0011229	0	0.0003232
0.9978902	1.7830788	0	506.26767	207.1181	0	0.0142965	0.0282813	0	0.012	0.08918	0.013678	0.0270578	0
1.1309028	0	0.2636946	223.64968	0	59.207707	0.0024798	0	0.0031545	0.004	0.01176	0.002316	0	0.0029646
0.0992283	0	0.3202875	408.96995	0	82.738205	0.0018977	0	0.001998	0.008	0.03675	0.0017451	0	0.0018373
0.0411069	0	0	367.98445	0	0	0.0047834	0	0	0.008	0.03675	0.0045765	0	0
0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0
0.2911923	0	0.3290884	1650.508	0	25.017692	0.0014055	0	0.0003549	0.012	0.13034	0.0012923	0	0.0003263
3.2715493	0	0	953.66624	0	0	0.068592	0	0	0.016	0.13034	0.0656247	0	0
0.3882813	0.089421	0.3600666	1656.2728	539.13904	38.23287	0.0011073	0	0.000427	0.012	0.13034	0.0010182	0	0.0003926
1.2143651	5.0387888	2.1454172	913.18534	807.48588	0	0.0070728	0.0046918	0	0.012	0.13034	0.0067668	0.0044889	0
0.4362003	0.0649258	0.3203441	1676.61	375.50696	26.189048	0.0009963	0	0.0002753	0.012	0.13034	0.000916	0	0.0002532
1.6452302	12.358405	2.2092926	1143.6055	2721.7363	0	0.0111126	0.0042028	0	0.012	0.13034	0.0106319	0.004021	0
0.3842747	0.9247315	0.5969796	858.35243	2563.6235	46.638361	0.0011399	0	0.0004705	0.008	0.7448002	0.0010481	0	0.0004326
6.506548	39.728697	1.0073537	1207.2126	3604.9279	0	0.037856	0.0474633	0	0.012	0.7448002	0.0362184	0.0454101	0
0.2731504	0	0.8097461	1971.4937	0	84.305584	0.0014384	0	0.0005664	0.0113413	0.1235617	0.0013226	0	0.0005208
0.8323917	0	0	1797.1178	0	0	0.0061374	0	0	0.036	0.06174	0.0058719	0	0
0	0	0	0	0	0	0	0	0	0.012	0.1303401	0	0	0
0.4830237	0	0	1994.5861	0	0	0.0033401	0	0	0.0334626	0.0687295	0.0031956	0	0

PM2_5_PMT	PM2_5_PME	SOx_RUNEX	SOx_IDLEX	SOx_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX
0.005	0.02646	0.020162	0	0.000465	0.1435097	0	0.0153547
0.0089	0.0261661	0.012904	0.1062222	0	0.2146949	1.7673079	0
0.009	0.02646	0	0	0	0.6849543	0.8174144	0
0.002	0.01575	0.0026663	0	0.0005282	0.0043123	0	0.024674
0.002	0.01575	0.0019811	0	0	0.0329402	0	0
0.002	0.01575	0	0	0	0	0	0
0.002	0.01575	0.003096	0	0.0006145	0.0079945	0	0.0273447
0.002	0.01575	0.0043584	0	0	0.072468	0	0
0.002	0.01575	0	0	0	0	0	0
0.002	0.01575	0.0032911	0	0.0006641	0.0063836	0	0.0304076
0.002	0.01575	0.0026928	0	0	0.044773	0	0
0.002	0.01575	0	0	0	0	0	0
0.002	0.03276	0.0079343	0.0011841	0.0001852	0.0111964	0.0031824	0.0401596
0.003	0.03276	0.0043254	0.0012163	0	0.0719186	0.0202242	0
0.002	0.03822	0.0091051	0.0013675	0.0002108	0.0120001	0.0030998	0.0401877
0.003	0.03822	0.0047861	0.001958	0	0.0795782	0.0325561	0
0.001	0.00504	0.0022132	0	0.0005859	0.065393	0	0.0150617
0.002	0.01575	0.0040471	0	0.0008188	0.0079228	0	0.0332333
0.002	0.01575	0.0034788	0	0	0.057842	0	0
0.002	0.01575	0	0	0	0	0	0
0.003	0.05586	0.0163331	0	0.0002476	0.0199369	0	0.0369478
0.004	0.05586	0.0090156	0	0	0.1499031	0	0
0.003	0.05586	0.0163902	0.0053352	0.0003783	0.0203065	0.0078759	0.0293041
0.003	0.05586	0.0086273	0.0076287	0	0.14354	0.1269255	0
0.003	0.05586	0.0165914	0.0037159	0.0002592	0.021614	0.0055221	0.0250441
0.003	0.05586	0.0108042	0.0257136	0	0.1797589	0.427819	0
0.002	0.3192001	0.0084941	0.0253691	0.0004615	0.022563	0.0870184	0.054779
0.003	0.3192001	0.0114051	0.0340576	0	0.189757	0.5666445	0
0.0028353	0.052955	0.0195095	0	0.0008343	0.022808	0	0.0702831
0.009	0.02646	0.0169892	0	0	0.2824819	0	0
0.003	0.05586	0	0	0	0	0	0
0.0083656	0.0294555	0	0	0	0.4066094	0	0

Control Pathway

AERMOD

Dispersion Options

Titles

C:\Lakes\AERMOD View\Alexan_ProjectArea_RCZ\Alexan_ProjectArea_RCZ.i

Dispersion Options

- [x] Regulatory Default
- [ ] Non-Default Options

Dispersion Coefficient

Urban

Population:
Name (Optional):
Roughness Length:

Output Type

- [x] Concentration
- [ ] Total Deposition (Dry & Wet)
- [ ] Dry Deposition
- [ ] Wet Deposition

Plume Depletion

- [ ] Dry Removal
- [ ] Wet Removal

Output Warnings

- [ ] No Output Warnings
- [ ] Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
☐	☐	☐	☐	☐	☐	☐	☐

- [ ] Month
- [x] Period
- [ ] Annual

Exponential Decay

Half-life of 4 hrs will be used

Option for variable

Terrain Height Options

- [ ] Flat
- [x] Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

- [x] Yes
- [ ] No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: Alexan_ProjectArea_RCZ_v2.err

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: T:\CASE\Env\13819_Monrovia_TrammelCrowe\AGN\HRA\SCAQMD_MetData\AZUS_V9_ADJU\AZUS_v9.SI
Format Type: Default AERMET format

Profile Met Data

Filename: T:\CASE\Env\13819_Monrovia_TrammelCrowe\AGN\HRA\SCAQMD_MetData\AZUS_V9_ADJU\AZUS_v9.P
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 182.00 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2012			
Upper Air		2012			
On-Site		2012			

Data Period

Data Period to Process

Start Date: 1/1/2012 Start Hour: 1 End Date: 12/31/2016 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: PAREA1 (I-210)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
142.58	3.28	1.98E-8		8	406639.35	3777858.98
		1.98E-8			406623.02	3777814.44
		1.98E-8			407144.12	3777616.98
		1.98E-8			407233.20	3777606.59
		1.98E-8			407637.02	3777600.65
		1.98E-8			407637.02	3777648.16
		1.98E-8			407230.23	3777658.55
		1.98E-8			407158.97	3777664.49

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	407307.69	3777427.61	FENCEGRD	132.89	
2	407302.96	3777429.21	FENCEGRD	132.82	
3	407298.23	3777430.82	FENCEGRD	132.98	
4	407293.50	3777432.42	FENCEGRD	132.94	
5	407288.77	3777434.02	FENCEGRD	132.61	
6	407284.04	3777435.62	FENCEGRD	132.50	
7	407279.32	3777437.22	FENCEGRD	132.53	
8	407274.59	3777438.82	FENCEGRD	132.72	
9	407269.86	3777440.42	FENCEGRD	132.90	
10	407265.13	3777442.02	FENCEGRD	133.04	
11	407260.40	3777443.62	FENCEGRD	132.94	
12	407255.67	3777445.22	FENCEGRD	132.64	
13	407250.95	3777446.82	FENCEGRD	132.58	
14	407246.22	3777448.43	FENCEGRD	132.64	
15	407241.49	3777450.03	FENCEGRD	132.61	
16	407236.76	3777451.63	FENCEGRD	132.79	
17	407232.03	3777453.23	FENCEGRD	133.12	
18	407227.30	3777454.83	FENCEGRD	132.96	
19	407222.58	3777456.43	FENCEGRD	132.63	
20	407217.85	3777458.03	FENCEGRD	132.60	
21	407213.12	3777459.63	FENCEGRD	132.83	
22	407208.39	3777461.23	FENCEGRD	133.09	
23	407203.66	3777462.83	FENCEGRD	133.35	
24	407198.93	3777464.43	FENCEGRD	133.26	
25	407194.21	3777466.03	FENCEGRD	133.02	
26	407189.48	3777467.64	FENCEGRD	132.40	
27	407184.75	3777469.24	FENCEGRD	132.15	
28	407180.02	3777470.84	FENCEGRD	132.66	
29	407175.29	3777472.44	FENCEGRD	133.08	
30	407170.56	3777474.04	FENCEGRD	133.40	

31	407165.83	3777475.64	FENCEGRD	133.23
32	407161.11	3777477.24	FENCEGRD	132.92
33	407156.38	3777478.84	FENCEGRD	132.82
34	407151.65	3777480.44	FENCEGRD	132.86
35	407146.92	3777482.04	FENCEGRD	133.12
36	407142.19	3777483.64	FENCEGRD	133.41
37	407137.46	3777485.25	FENCEGRD	133.50
38	407132.74	3777486.85	FENCEGRD	133.17
39	407128.01	3777488.45	FENCEGRD	132.75
40	407123.28	3777490.05	FENCEGRD	132.74
41	407118.55	3777491.65	FENCEGRD	132.96
42	407113.82	3777493.25	FENCEGRD	133.29
43	407109.09	3777494.85	FENCEGRD	133.63
44	407104.37	3777496.45	FENCEGRD	133.60
45	407099.64	3777498.05	FENCEGRD	133.43
46	407094.91	3777499.65	FENCEGRD	132.88
47	407090.18	3777501.25	FENCEGRD	132.54
48	407085.45	3777502.85	FENCEGRD	131.85
49	407080.72	3777504.46	FENCEGRD	130.94
50	407076.00	3777506.06	FENCEGRD	130.15
51	407071.27	3777507.66	FENCEGRD	130.94
52	407066.54	3777509.26	FENCEGRD	132.56
53	407061.81	3777510.86	FENCEGRD	133.06
54	407057.08	3777512.46	FENCEGRD	133.42
55	407052.35	3777514.06	FENCEGRD	133.65
56	407047.62	3777515.66	FENCEGRD	133.80
57	407042.90	3777517.26	FENCEGRD	133.74
58	407038.17	3777518.86	FENCEGRD	133.42
59	407033.44	3777520.46	FENCEGRD	133.13
60	407028.71	3777522.07	FENCEGRD	133.13
61	407023.98	3777523.67	FENCEGRD	133.29
62	407019.25	3777525.27	FENCEGRD	133.66
63	407014.53	3777526.87	FENCEGRD	134.01
64	407009.80	3777528.47	FENCEGRD	133.67
65	407005.07	3777530.07	FENCEGRD	133.40
66	407000.34	3777531.67	FENCEGRD	133.20
67	406995.61	3777533.27	FENCEGRD	133.30
68	406990.88	3777534.87	FENCEGRD	133.59

69	406986.16	3777536.47	FENCEGRD	133.93
70	406981.43	3777538.07	FENCEGRD	134.25
71	406976.70	3777539.67	FENCEGRD	133.78
72	406971.97	3777541.28	FENCEGRD	133.54
73	406967.24	3777542.88	FENCEGRD	133.48
74	406962.51	3777544.48	FENCEGRD	133.62
75	406957.79	3777546.08	FENCEGRD	133.92
76	406953.06	3777547.68	FENCEGRD	134.19
77	406948.33	3777549.28	FENCEGRD	134.20
78	406943.60	3777550.88	FENCEGRD	134.12
79	406938.87	3777552.48	FENCEGRD	134.15
80	406934.14	3777554.08	FENCEGRD	134.47
81	406929.41	3777555.68	FENCEGRD	134.72
82	406924.69	3777557.28	FENCEGRD	134.76
83	407310.61	3777423.56	FENCEGRD	132.89
84	407317.22	3777428.32	FENCEGRD	133.35
85	407306.08	3777422.88	FENCEGRD	132.31
86	407301.35	3777424.48	FENCEGRD	132.25
87	407296.63	3777426.08	FENCEGRD	132.39
88	407291.90	3777427.68	FENCEGRD	132.39
89	407287.17	3777429.28	FENCEGRD	132.25
90	407282.44	3777430.88	FENCEGRD	132.11
91	407277.71	3777432.48	FENCEGRD	131.97
92	407272.98	3777434.08	FENCEGRD	132.18
93	407268.26	3777435.69	FENCEGRD	132.35
94	407263.53	3777437.29	FENCEGRD	132.48
95	407258.80	3777438.89	FENCEGRD	132.44
96	407254.07	3777440.49	FENCEGRD	132.22
97	407249.34	3777442.09	FENCEGRD	132.02
98	407244.61	3777443.69	FENCEGRD	131.87
99	407239.89	3777445.29	FENCEGRD	131.31
100	407235.16	3777446.89	FENCEGRD	131.18
101	407230.43	3777448.49	FENCEGRD	131.57
102	407225.70	3777450.09	FENCEGRD	131.87
103	407220.97	3777451.69	FENCEGRD	131.87
104	407216.24	3777453.29	FENCEGRD	131.90
105	407211.52	3777454.90	FENCEGRD	132.09
106	407206.79	3777456.50	FENCEGRD	132.38

107	407202.06	3777458.10	FENCEGRD	132.65
108	407197.33	3777459.70	FENCEGRD	132.25
109	407192.60	3777461.30	FENCEGRD	131.94
110	407187.87	3777462.90	FENCEGRD	131.21
111	407183.14	3777464.50	FENCEGRD	130.85
112	407178.42	3777466.10	FENCEGRD	131.43
113	407173.69	3777467.70	FENCEGRD	131.78
114	407168.96	3777469.30	FENCEGRD	132.06
115	407164.23	3777470.90	FENCEGRD	132.33
116	407159.50	3777472.50	FENCEGRD	132.32
117	407154.77	3777474.11	FENCEGRD	132.03
118	407150.05	3777475.71	FENCEGRD	131.87
119	407145.32	3777477.31	FENCEGRD	132.12
120	407140.59	3777478.91	FENCEGRD	132.38
121	407135.86	3777480.51	FENCEGRD	132.59
122	407131.13	3777482.11	FENCEGRD	132.45
123	407126.40	3777483.71	FENCEGRD	131.97
124	407121.68	3777485.31	FENCEGRD	131.72
125	407116.95	3777486.91	FENCEGRD	131.83
126	407112.22	3777488.51	FENCEGRD	132.16
127	407107.49	3777490.11	FENCEGRD	132.47
128	407102.76	3777491.72	FENCEGRD	132.70
129	407098.03	3777493.32	FENCEGRD	132.61
130	407093.31	3777494.92	FENCEGRD	131.95
131	407088.58	3777496.52	FENCEGRD	131.67
132	407083.85	3777498.12	FENCEGRD	131.54
133	407079.12	3777499.72	FENCEGRD	130.71
134	407074.39	3777501.32	FENCEGRD	129.91
135	407069.66	3777502.92	FENCEGRD	131.37
136	407064.94	3777504.52	FENCEGRD	132.42
137	407060.21	3777506.12	FENCEGRD	132.46
138	407055.48	3777507.72	FENCEGRD	132.71
139	407050.75	3777509.32	FENCEGRD	132.95
140	407046.02	3777510.93	FENCEGRD	132.90
141	407041.29	3777512.53	FENCEGRD	132.77
142	407036.56	3777514.13	FENCEGRD	132.66
143	407031.84	3777515.73	FENCEGRD	132.34
144	407027.11	3777517.33	FENCEGRD	132.05

145	407022.38	3777518.93	FENCEGRD	132.10
146	407017.65	3777520.53	FENCEGRD	132.48
147	407012.92	3777522.13	FENCEGRD	132.77
148	407008.19	3777523.73	FENCEGRD	132.83
149	407003.47	3777525.33	FENCEGRD	132.65
150	406998.74	3777526.93	FENCEGRD	132.23
151	406994.01	3777528.54	FENCEGRD	132.18
152	406989.28	3777530.14	FENCEGRD	132.38
153	406984.55	3777531.74	FENCEGRD	132.76
154	406979.82	3777533.34	FENCEGRD	133.06
155	406975.10	3777534.94	FENCEGRD	133.02
156	406970.37	3777536.54	FENCEGRD	132.82
157	406965.64	3777538.14	FENCEGRD	132.48
158	406960.91	3777539.74	FENCEGRD	132.54
159	406956.18	3777541.34	FENCEGRD	132.78
160	406951.45	3777542.94	FENCEGRD	133.16
161	406946.73	3777544.54	FENCEGRD	133.46
162	406942.00	3777546.14	FENCEGRD	133.79
163	406937.27	3777547.75	FENCEGRD	133.95
164	406932.54	3777549.35	FENCEGRD	134.38
165	406927.81	3777550.95	FENCEGRD	134.65
166	406923.08	3777552.55	FENCEGRD	134.72
167	407309.01	3777418.82	FENCEGRD	132.40
168	407313.54	3777419.50	FENCEGRD	132.88
169	407320.14	3777424.27	FENCEGRD	133.38
170	407322.22	3777428.35	FENCEGRD	133.41
171	407304.48	3777418.14	FENCEGRD	131.98
172	407299.75	3777419.74	FENCEGRD	131.92
173	407295.02	3777421.34	FENCEGRD	131.88
174	407290.29	3777422.94	FENCEGRD	131.93
175	407285.57	3777424.55	FENCEGRD	131.97
176	407280.84	3777426.15	FENCEGRD	131.95
177	407276.11	3777427.75	FENCEGRD	131.91
178	407271.38	3777429.35	FENCEGRD	131.94
179	407266.65	3777430.95	FENCEGRD	131.93
180	407261.92	3777432.55	FENCEGRD	131.91
181	407257.20	3777434.15	FENCEGRD	131.95
182	407252.47	3777435.75	FENCEGRD	131.88

183	407247.74	3777437.35	FENCEGRD	131.77
184	407243.01	3777438.95	FENCEGRD	131.35
185	407238.28	3777440.55	FENCEGRD	130.41
186	407233.55	3777442.16	FENCEGRD	129.94
187	407228.83	3777443.76	FENCEGRD	130.08
188	407224.10	3777445.36	FENCEGRD	130.68
189	407219.37	3777446.96	FENCEGRD	131.09
190	407214.64	3777448.56	FENCEGRD	131.57
191	407209.91	3777450.16	FENCEGRD	131.83
192	407205.18	3777451.76	FENCEGRD	131.89
193	407200.46	3777453.36	FENCEGRD	131.65
194	407195.73	3777454.96	FENCEGRD	130.95
195	407191.00	3777456.56	FENCEGRD	130.66
196	407186.27	3777458.16	FENCEGRD	130.34
197	407181.54	3777459.76	FENCEGRD	130.52
198	407176.81	3777461.37	FENCEGRD	130.87
199	407172.08	3777462.97	FENCEGRD	130.74
200	407167.36	3777464.57	FENCEGRD	130.77
201	407162.63	3777466.17	FENCEGRD	131.51
202	407157.90	3777467.77	FENCEGRD	131.82
203	407153.17	3777469.37	FENCEGRD	131.72
204	407148.44	3777470.97	FENCEGRD	131.60
205	407143.71	3777472.57	FENCEGRD	131.53
206	407138.99	3777474.17	FENCEGRD	131.55
207	407134.26	3777475.77	FENCEGRD	131.73
208	407129.53	3777477.37	FENCEGRD	131.76
209	407124.80	3777478.98	FENCEGRD	131.61
210	407120.07	3777480.58	FENCEGRD	131.53
211	407115.34	3777482.18	FENCEGRD	131.42
212	407110.62	3777483.78	FENCEGRD	131.38
213	407105.89	3777485.38	FENCEGRD	131.39
214	407101.16	3777486.98	FENCEGRD	131.69
215	407096.43	3777488.58	FENCEGRD	131.80
216	407091.70	3777490.18	FENCEGRD	131.57
217	407086.97	3777491.78	FENCEGRD	131.55
218	407082.25	3777493.38	FENCEGRD	131.38
219	407077.52	3777494.98	FENCEGRD	130.42
220	407072.79	3777496.58	FENCEGRD	130.41

221	407068.06	3777498.19	FENCEGRD	132.01
222	407063.33	3777499.79	FENCEGRD	132.64
223	407058.60	3777501.39	FENCEGRD	132.61
224	407053.87	3777502.99	FENCEGRD	132.49
225	407049.15	3777504.59	FENCEGRD	132.44
226	407044.42	3777506.19	FENCEGRD	131.94
227	407039.69	3777507.79	FENCEGRD	131.68
228	407034.96	3777509.39	FENCEGRD	131.90
229	407030.23	3777510.99	FENCEGRD	131.91
230	407025.50	3777512.59	FENCEGRD	131.78
231	407020.78	3777514.19	FENCEGRD	131.67
232	407016.05	3777515.79	FENCEGRD	131.65
233	407011.32	3777517.40	FENCEGRD	131.70
234	407006.59	3777519.00	FENCEGRD	131.96
235	407001.86	3777520.60	FENCEGRD	132.06
236	406997.13	3777522.20	FENCEGRD	131.96
237	406992.41	3777523.80	FENCEGRD	131.89
238	406987.68	3777525.40	FENCEGRD	131.80
239	406982.95	3777527.00	FENCEGRD	131.80
240	406978.22	3777528.60	FENCEGRD	131.99
241	406973.49	3777530.20	FENCEGRD	132.22
242	406968.76	3777531.80	FENCEGRD	132.28
243	406964.04	3777533.40	FENCEGRD	132.17
244	406959.31	3777535.01	FENCEGRD	132.12
245	406954.58	3777536.61	FENCEGRD	132.07
246	406949.85	3777538.21	FENCEGRD	132.26
247	406945.12	3777539.81	FENCEGRD	132.86
248	406940.39	3777541.41	FENCEGRD	133.57
249	406935.66	3777543.01	FENCEGRD	133.96
250	406930.94	3777544.61	FENCEGRD	134.30
251	406926.21	3777546.21	FENCEGRD	134.52
252	406921.48	3777547.81	FENCEGRD	134.67
253	407307.41	3777414.09	FENCEGRD	132.04
254	407311.93	3777414.77	FENCEGRD	132.26
255	407316.46	3777415.45	FENCEGRD	132.74
256	407323.07	3777420.21	FENCEGRD	133.38
257	407325.14	3777424.30	FENCEGRD	133.43
258	407327.22	3777428.38	FENCEGRD	133.42

259	407302.88	3777413.41	FENCEGRD	131.92
260	407298.15	3777415.01	FENCEGRD	131.89
261	407293.42	3777416.61	FENCEGRD	131.86
262	407288.69	3777418.21	FENCEGRD	131.83
263	407283.96	3777419.81	FENCEGRD	131.83
264	407279.23	3777421.41	FENCEGRD	131.86
265	407274.51	3777423.01	FENCEGRD	131.83
266	407269.78	3777424.61	FENCEGRD	131.82
267	407265.05	3777426.21	FENCEGRD	131.81
268	407260.32	3777427.81	FENCEGRD	131.78
269	407255.59	3777429.41	FENCEGRD	131.72
270	407250.86	3777431.02	FENCEGRD	131.64
271	407246.14	3777432.62	FENCEGRD	131.57
272	407241.41	3777434.22	FENCEGRD	130.98
273	407236.68	3777435.82	FENCEGRD	130.11
274	407231.95	3777437.42	FENCEGRD	129.97
275	407227.22	3777439.02	FENCEGRD	129.97
276	407222.49	3777440.62	FENCEGRD	130.43
277	407217.77	3777442.22	FENCEGRD	130.80
278	407213.04	3777443.82	FENCEGRD	131.43
279	407208.31	3777445.42	FENCEGRD	131.70
280	407203.58	3777447.02	FENCEGRD	131.65
281	407198.85	3777448.63	FENCEGRD	131.11
282	407194.12	3777450.23	FENCEGRD	130.25
283	407189.39	3777451.83	FENCEGRD	130.07
284	407184.67	3777453.43	FENCEGRD	129.90
285	407179.94	3777455.03	FENCEGRD	130.35
286	407175.21	3777456.63	FENCEGRD	130.62
287	407170.48	3777458.23	FENCEGRD	130.45
288	407165.75	3777459.83	FENCEGRD	130.72
289	407161.02	3777461.43	FENCEGRD	131.37
290	407156.30	3777463.03	FENCEGRD	131.55
291	407151.57	3777464.63	FENCEGRD	131.55
292	407146.84	3777466.23	FENCEGRD	131.50
293	407142.11	3777467.84	FENCEGRD	131.44
294	407137.38	3777469.44	FENCEGRD	131.50
295	407132.65	3777471.04	FENCEGRD	131.52
296	407127.93	3777472.64	FENCEGRD	131.45

297	407123.20	3777474.24	FENCEGRD	131.42
298	407118.47	3777475.84	FENCEGRD	131.41
299	407113.74	3777477.44	FENCEGRD	131.36
300	407109.01	3777479.04	FENCEGRD	131.30
301	407104.28	3777480.64	FENCEGRD	131.31
302	407099.56	3777482.24	FENCEGRD	131.34
303	407094.83	3777483.84	FENCEGRD	131.41
304	407090.10	3777485.45	FENCEGRD	131.50
305	407085.37	3777487.05	FENCEGRD	131.53
306	407080.64	3777488.65	FENCEGRD	131.06
307	407075.91	3777490.25	FENCEGRD	130.07
308	407071.18	3777491.85	FENCEGRD	130.69
309	407066.46	3777493.45	FENCEGRD	132.25
310	407061.73	3777495.05	FENCEGRD	132.61
311	407057.00	3777496.65	FENCEGRD	132.67
312	407052.27	3777498.25	FENCEGRD	132.32
313	407047.54	3777499.85	FENCEGRD	132.07
314	407042.81	3777501.45	FENCEGRD	131.69
315	407038.09	3777503.05	FENCEGRD	131.49
316	407033.36	3777504.66	FENCEGRD	131.59
317	407028.63	3777506.26	FENCEGRD	131.67
318	407023.90	3777507.86	FENCEGRD	131.73
319	407019.17	3777509.46	FENCEGRD	131.71
320	407014.44	3777511.06	FENCEGRD	131.71
321	407009.72	3777512.66	FENCEGRD	131.86
322	407004.99	3777514.26	FENCEGRD	131.98
323	407000.26	3777515.86	FENCEGRD	132.04
324	406995.53	3777517.46	FENCEGRD	131.83
325	406990.80	3777519.06	FENCEGRD	131.87
326	406986.07	3777520.66	FENCEGRD	131.88
327	406981.35	3777522.27	FENCEGRD	131.91
328	406976.62	3777523.87	FENCEGRD	132.10
329	406971.89	3777525.47	FENCEGRD	132.18
330	406967.16	3777527.07	FENCEGRD	132.10
331	406962.43	3777528.67	FENCEGRD	132.04
332	406957.70	3777530.27	FENCEGRD	132.07
333	406952.98	3777531.87	FENCEGRD	132.16
334	406948.25	3777533.47	FENCEGRD	132.36

335	406943.52	3777535.07	FENCEGRD	132.94
336	406938.79	3777536.67	FENCEGRD	133.70
337	406934.06	3777538.27	FENCEGRD	133.90
338	406929.33	3777539.87	FENCEGRD	134.14
339	406924.60	3777541.48	FENCEGRD	134.35
340	406919.88	3777543.08	FENCEGRD	134.49
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342	407310.33	3777410.03	FENCEGRD	131.93
343	407314.86	3777410.71	FENCEGRD	132.22
344	407319.39	3777411.39	FENCEGRD	132.84
345	407325.99	3777416.16	FENCEGRD	133.30
346	407328.07	3777420.24	FENCEGRD	133.41
347	407330.14	3777424.33	FENCEGRD	133.44
348	407332.22	3777428.41	FENCEGRD	133.45
349	407301.27	3777408.67	FENCEGRD	131.84
350	407296.54	3777410.27	FENCEGRD	131.84
351	407291.82	3777411.87	FENCEGRD	131.83
352	407287.09	3777413.47	FENCEGRD	131.79
353	407282.36	3777415.07	FENCEGRD	131.78
354	407277.63	3777416.67	FENCEGRD	131.77
355	407272.90	3777418.28	FENCEGRD	131.74
356	407268.17	3777419.88	FENCEGRD	131.72
357	407263.45	3777421.48	FENCEGRD	131.69
358	407258.72	3777423.08	FENCEGRD	131.64
359	407253.99	3777424.68	FENCEGRD	131.58
360	407249.26	3777426.28	FENCEGRD	131.47
361	407244.53	3777427.88	FENCEGRD	131.37
362	407239.80	3777429.48	FENCEGRD	130.62
363	407235.08	3777431.08	FENCEGRD	130.00
364	407230.35	3777432.68	FENCEGRD	129.99
365	407225.62	3777434.28	FENCEGRD	130.24
366	407220.89	3777435.89	FENCEGRD	130.84
367	407216.16	3777437.49	FENCEGRD	130.82
368	407211.43	3777439.09	FENCEGRD	130.84
369	407206.71	3777440.69	FENCEGRD	131.05
370	407201.98	3777442.29	FENCEGRD	131.19
371	407197.25	3777443.89	FENCEGRD	130.62
372	407192.52	3777445.49	FENCEGRD	130.06

373	407187.79	3777447.09	FENCEGRD	130.21
374	407183.06	3777448.69	FENCEGRD	130.45
375	407178.33	3777450.29	FENCEGRD	130.92
376	407173.61	3777451.89	FENCEGRD	130.78
377	407168.88	3777453.49	FENCEGRD	130.27
378	407164.15	3777455.10	FENCEGRD	130.80
379	407159.42	3777456.70	FENCEGRD	131.56
380	407154.69	3777458.30	FENCEGRD	131.54
381	407149.96	3777459.90	FENCEGRD	131.51
382	407145.24	3777461.50	FENCEGRD	131.44
383	407140.51	3777463.10	FENCEGRD	131.40
384	407135.78	3777464.70	FENCEGRD	131.46
385	407131.05	3777466.30	FENCEGRD	131.44
386	407126.32	3777467.90	FENCEGRD	131.36
387	407121.59	3777469.50	FENCEGRD	131.34
388	407116.87	3777471.10	FENCEGRD	131.33
389	407112.14	3777472.70	FENCEGRD	131.27
390	407107.41	3777474.31	FENCEGRD	131.23
391	407102.68	3777475.91	FENCEGRD	131.23
392	407097.95	3777477.51	FENCEGRD	131.26
393	407093.22	3777479.11	FENCEGRD	131.32
394	407088.50	3777480.71	FENCEGRD	131.40
395	407083.77	3777482.31	FENCEGRD	131.47
396	407079.04	3777483.91	FENCEGRD	130.83
397	407074.31	3777485.51	FENCEGRD	129.77
398	407069.58	3777487.11	FENCEGRD	130.71
399	407064.85	3777488.71	FENCEGRD	131.70
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401	407055.40	3777491.92	FENCEGRD	132.02
402	407050.67	3777493.52	FENCEGRD	131.91
403	407045.94	3777495.12	FENCEGRD	131.76
404	407041.21	3777496.72	FENCEGRD	131.54
405	407036.48	3777498.32	FENCEGRD	131.53
406	407031.75	3777499.92	FENCEGRD	131.60
407	407027.03	3777501.52	FENCEGRD	131.66
408	407022.30	3777503.12	FENCEGRD	131.72
409	407017.57	3777504.72	FENCEGRD	131.73
410	407012.84	3777506.32	FENCEGRD	131.88

411	407008.11	3777507.92	FENCEGRD	132.16
412	407003.38	3777509.52	FENCEGRD	132.67
413	406998.66	3777511.13	FENCEGRD	133.13
414	406993.93	3777512.73	FENCEGRD	132.61
415	406989.20	3777514.33	FENCEGRD	132.14
416	406984.47	3777515.93	FENCEGRD	132.08
417	406979.74	3777517.53	FENCEGRD	132.13
418	406975.01	3777519.13	FENCEGRD	132.57
419	406970.29	3777520.73	FENCEGRD	132.85
420	406965.56	3777522.33	FENCEGRD	132.98
421	406960.83	3777523.93	FENCEGRD	132.60
422	406956.10	3777525.53	FENCEGRD	132.20
423	406951.37	3777527.13	FENCEGRD	132.26
424	406946.64	3777528.74	FENCEGRD	132.46
425	406941.91	3777530.34	FENCEGRD	133.25
426	406937.19	3777531.94	FENCEGRD	133.85
427	406932.46	3777533.54	FENCEGRD	133.86
428	406927.73	3777535.14	FENCEGRD	133.99
429	406923.00	3777536.74	FENCEGRD	134.20
430	406918.27	3777538.34	FENCEGRD	134.32
431	406921.29	3777561.95	FENCEGRD	134.81
432	406921.22	3777566.80	FENCEGRD	134.83
433	406921.15	3777571.66	FENCEGRD	134.82
434	406921.08	3777576.51	FENCEGRD	134.76
435	406921.00	3777581.36	FENCEGRD	134.70
436	406920.93	3777586.22	FENCEGRD	134.65
437	406920.86	3777591.07	FENCEGRD	134.61
438	406920.79	3777595.93	FENCEGRD	134.60
439	406920.72	3777600.78	FENCEGRD	134.58
440	406920.65	3777605.64	FENCEGRD	134.55
441	406920.58	3777610.49	FENCEGRD	134.51
442	406920.50	3777615.34	FENCEGRD	134.47
443	406920.43	3777620.20	FENCEGRD	134.43
444	406920.36	3777625.05	FENCEGRD	134.42
445	406920.29	3777629.91	FENCEGRD	134.40
446	406920.22	3777634.76	FENCEGRD	134.42
447	406920.15	3777639.62	FENCEGRD	134.44
448	406920.08	3777644.47	FENCEGRD	134.45

449	406920.00	3777649.32	FENCEGRD	134.47
450	406919.93	3777654.18	FENCEGRD	134.48
451	406919.86	3777659.03	FENCEGRD	134.50
452	406919.79	3777663.89	FENCEGRD	134.51
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454	406916.22	3777566.73	FENCEGRD	134.82
455	406916.15	3777571.58	FENCEGRD	134.80
456	406916.08	3777576.44	FENCEGRD	134.74
457	406916.01	3777581.29	FENCEGRD	134.68
458	406915.93	3777586.14	FENCEGRD	134.63
459	406915.86	3777591.00	FENCEGRD	134.59
460	406915.79	3777595.85	FENCEGRD	134.58
461	406915.72	3777600.71	FENCEGRD	134.56
462	406915.65	3777605.56	FENCEGRD	134.52
463	406915.58	3777610.42	FENCEGRD	134.48
464	406915.51	3777615.27	FENCEGRD	134.44
465	406915.43	3777620.12	FENCEGRD	134.40
466	406915.36	3777624.98	FENCEGRD	134.39
467	406915.29	3777629.83	FENCEGRD	134.38
468	406915.22	3777634.69	FENCEGRD	134.39
469	406915.15	3777639.54	FENCEGRD	134.41
470	406915.08	3777644.40	FENCEGRD	134.43
471	406915.01	3777649.25	FENCEGRD	134.45
472	406914.93	3777654.10	FENCEGRD	134.47
473	406914.86	3777658.96	FENCEGRD	134.47
474	406914.79	3777663.81	FENCEGRD	134.49
475	406912.73	3777557.49	FENCEGRD	134.76
476	406917.82	3777550.50	FENCEGRD	134.70
477	406911.22	3777566.65	FENCEGRD	134.78
478	406911.15	3777571.51	FENCEGRD	134.80
479	406911.08	3777576.36	FENCEGRD	134.74
480	406911.01	3777581.22	FENCEGRD	134.68
481	406910.93	3777586.07	FENCEGRD	134.62
482	406910.86	3777590.93	FENCEGRD	134.58
483	406910.79	3777595.78	FENCEGRD	134.58
484	406910.72	3777600.63	FENCEGRD	134.58
485	406910.65	3777605.49	FENCEGRD	134.55
486	406910.58	3777610.34	FENCEGRD	134.52

487	406910.51	3777615.20	FENCEGRD	134.49
488	406910.43	3777620.05	FENCEGRD	134.46
489	406910.36	3777624.91	FENCEGRD	134.49
490	406910.29	3777629.76	FENCEGRD	134.52
491	406910.22	3777634.61	FENCEGRD	134.51
492	406910.15	3777639.47	FENCEGRD	134.47
493	406910.08	3777644.32	FENCEGRD	134.49
494	406910.01	3777649.18	FENCEGRD	134.57
495	406909.93	3777654.03	FENCEGRD	134.61
496	406909.86	3777658.89	FENCEGRD	134.60
497	406909.79	3777663.74	FENCEGRD	134.59
498	406907.57	3777557.90	FENCEGRD	134.40
499	406913.37	3777547.86	FENCEGRD	134.60
500	406906.22	3777566.58	FENCEGRD	134.69
501	406906.15	3777571.43	FENCEGRD	134.81
502	406906.08	3777576.29	FENCEGRD	134.76
503	406906.01	3777581.14	FENCEGRD	134.70
504	406905.94	3777586.00	FENCEGRD	134.63
505	406905.86	3777590.85	FENCEGRD	134.57
506	406905.79	3777595.71	FENCEGRD	134.61
507	406905.72	3777600.56	FENCEGRD	134.65
508	406905.65	3777605.41	FENCEGRD	134.63
509	406905.58	3777610.27	FENCEGRD	134.62
510	406905.51	3777615.12	FENCEGRD	134.60
511	406905.44	3777619.98	FENCEGRD	134.58
512	406905.36	3777624.83	FENCEGRD	134.66
513	406905.29	3777629.69	FENCEGRD	134.76
514	406905.22	3777634.54	FENCEGRD	134.70
515	406905.15	3777639.39	FENCEGRD	134.56
516	406905.08	3777644.25	FENCEGRD	134.58
517	406905.01	3777649.10	FENCEGRD	134.73
518	406904.94	3777653.96	FENCEGRD	134.78
519	406904.86	3777658.81	FENCEGRD	134.74
520	406904.79	3777663.67	FENCEGRD	134.71
521	406902.49	3777558.06	FENCEGRD	134.10
522	406904.88	3777550.89	FENCEGRD	133.94
523	406909.13	3777545.06	FENCEGRD	134.19
524	406901.22	3777566.51	FENCEGRD	134.56

525	406901.15	3777571.36	FENCEGRD	134.74
526	406901.08	3777576.22	FENCEGRD	134.67
527	406901.01	3777581.07	FENCEGRD	134.60
528	406900.94	3777585.92	FENCEGRD	134.56
529	406900.86	3777590.78	FENCEGRD	134.54
530	406900.79	3777595.63	FENCEGRD	134.60
531	406900.72	3777600.49	FENCEGRD	134.67
532	406900.65	3777605.34	FENCEGRD	134.68
533	406900.58	3777610.20	FENCEGRD	134.69
534	406900.51	3777615.05	FENCEGRD	134.65
535	406900.44	3777619.90	FENCEGRD	134.61
536	406900.36	3777624.76	FENCEGRD	134.69
537	406900.29	3777629.61	FENCEGRD	134.81
538	406900.22	3777634.47	FENCEGRD	134.79
539	406900.15	3777639.32	FENCEGRD	134.71
540	406900.08	3777644.18	FENCEGRD	134.72
541	406900.01	3777649.03	FENCEGRD	134.81
542	406899.94	3777653.88	FENCEGRD	134.83
543	406899.86	3777658.74	FENCEGRD	134.76
544	406899.79	3777663.59	FENCEGRD	134.71
545	406923.75	3777669.99	FENCEGRD	134.51
546	406928.74	3777674.99	FENCEGRD	134.44
547	406916.74	3777668.63	FENCEGRD	134.51
548	406920.22	3777673.53	FENCEGRD	134.54
549	406925.21	3777678.52	FENCEGRD	134.52
550	406913.09	3777671.86	FENCEGRD	134.54
551	406916.68	3777677.06	FENCEGRD	134.53
552	406921.67	3777682.06	FENCEGRD	134.58
553	406909.48	3777675.21	FENCEGRD	134.56
554	406907.13	3777669.44	FENCEGRD	134.65
555	406913.14	3777680.60	FENCEGRD	134.51
556	406918.14	3777685.59	FENCEGRD	134.54
557	406905.89	3777678.63	FENCEGRD	134.52
558	406903.45	3777672.61	FENCEGRD	134.67
559	406909.61	3777684.13	FENCEGRD	134.47
560	406914.60	3777689.13	FENCEGRD	134.52
561	406934.29	3777676.03	FENCEGRD	134.38
562	406938.75	3777674.06	FENCEGRD	134.31

563	406943.22	3777672.10	FENCEGRD	134.28
564	406947.68	3777670.14	FENCEGRD	134.27
565	406952.14	3777668.18	FENCEGRD	134.27
566	406956.60	3777666.21	FENCEGRD	134.28
567	406961.06	3777664.25	FENCEGRD	134.21
568	406965.52	3777662.29	FENCEGRD	134.08
569	406969.98	3777660.32	FENCEGRD	134.08
570	406974.45	3777658.36	FENCEGRD	134.11
571	406978.91	3777656.40	FENCEGRD	134.10
572	406983.37	3777654.44	FENCEGRD	134.08
573	406987.83	3777652.47	FENCEGRD	133.99
574	406992.29	3777650.51	FENCEGRD	133.89
575	406996.75	3777648.55	FENCEGRD	133.91
576	407001.21	3777646.58	FENCEGRD	133.90
577	407005.68	3777644.62	FENCEGRD	133.82
578	407010.14	3777642.66	FENCEGRD	133.76
579	407014.60	3777640.70	FENCEGRD	133.70
580	407019.06	3777638.73	FENCEGRD	133.71
581	407023.52	3777636.77	FENCEGRD	133.73
582	407027.98	3777634.81	FENCEGRD	133.70
583	406933.37	3777680.94	FENCEGRD	134.45
584	406940.77	3777678.64	FENCEGRD	134.46
585	406945.23	3777676.68	FENCEGRD	134.59
586	406949.69	3777674.71	FENCEGRD	134.61
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588	406958.61	3777670.79	FENCEGRD	134.29
589	406963.08	3777668.83	FENCEGRD	134.29
590	406967.54	3777666.86	FENCEGRD	134.35
591	406972.00	3777664.90	FENCEGRD	134.41
592	406976.46	3777662.94	FENCEGRD	134.32
593	406980.92	3777660.97	FENCEGRD	134.08
594	406985.38	3777659.01	FENCEGRD	134.13
595	406989.84	3777657.05	FENCEGRD	134.13
596	406994.31	3777655.09	FENCEGRD	134.18
597	406998.77	3777653.12	FENCEGRD	134.12
598	407003.23	3777651.16	FENCEGRD	133.95
599	407007.69	3777649.20	FENCEGRD	133.85
600	407012.15	3777647.23	FENCEGRD	133.92

601	407016.61	3777645.27	FENCEGRD	133.94
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603	407025.54	3777641.35	FENCEGRD	133.83
604	407030.00	3777639.38	FENCEGRD	133.67
605	406933.92	3777685.69	FENCEGRD	134.91
606	406942.78	3777683.22	FENCEGRD	135.20
607	406947.24	3777681.25	FENCEGRD	135.06
608	406951.70	3777679.29	FENCEGRD	135.38
609	406956.17	3777677.33	FENCEGRD	135.49
610	406960.63	3777675.37	FENCEGRD	135.38
611	406965.09	3777673.40	FENCEGRD	135.00
612	406969.55	3777671.44	FENCEGRD	134.78
613	406974.01	3777669.48	FENCEGRD	134.98
614	406978.47	3777667.51	FENCEGRD	135.16
615	406982.93	3777665.55	FENCEGRD	135.12
616	406987.40	3777663.59	FENCEGRD	134.96
617	406991.86	3777661.63	FENCEGRD	134.58
618	406996.32	3777659.66	FENCEGRD	134.63
619	407000.78	3777657.70	FENCEGRD	134.81
620	407005.24	3777655.74	FENCEGRD	134.95
621	407009.70	3777653.77	FENCEGRD	134.84
622	407014.16	3777651.81	FENCEGRD	134.52
623	407018.63	3777649.85	FENCEGRD	134.38
624	407023.09	3777647.89	FENCEGRD	134.58
625	407027.55	3777645.92	FENCEGRD	134.73
626	407032.01	3777643.96	FENCEGRD	134.66
627	406936.42	3777690.21	FENCEGRD	136.41
628	406925.11	3777689.27	FENCEGRD	134.55
629	406944.80	3777687.79	FENCEGRD	137.61
630	406949.26	3777685.83	FENCEGRD	137.32
631	406953.72	3777683.87	FENCEGRD	136.93
632	406958.18	3777681.91	FENCEGRD	136.83
633	406962.64	3777679.94	FENCEGRD	136.98
634	406967.10	3777677.98	FENCEGRD	137.08
635	406971.56	3777676.02	FENCEGRD	137.16
636	406976.03	3777674.05	FENCEGRD	136.78
637	406980.49	3777672.09	FENCEGRD	136.40
638	406984.95	3777670.13	FENCEGRD	136.54

639	406989.41	3777668.17	FENCEGRD	136.63
640	406993.87	3777666.20	FENCEGRD	136.44
641	406998.33	3777664.24	FENCEGRD	136.14
642	407002.79	3777662.28	FENCEGRD	136.13
643	407007.26	3777660.31	FENCEGRD	136.28
644	407011.72	3777658.35	FENCEGRD	136.47
645	407016.18	3777656.39	FENCEGRD	136.41
646	407020.64	3777654.43	FENCEGRD	136.33
647	407025.10	3777652.46	FENCEGRD	136.06
648	407029.56	3777650.50	FENCEGRD	135.94
649	407034.02	3777648.54	FENCEGRD	136.17
650	406938.68	3777694.76	FENCEGRD	138.04
651	406931.34	3777695.60	FENCEGRD	134.61
652	406924.40	3777694.30	FENCEGRD	134.55
653	406946.81	3777692.37	FENCEGRD	140.32
654	406951.27	3777690.41	FENCEGRD	139.78
655	406955.73	3777688.44	FENCEGRD	139.13
656	406960.19	3777686.48	FENCEGRD	138.76
657	406964.65	3777684.52	FENCEGRD	138.67
658	406969.12	3777682.56	FENCEGRD	139.38
659	406973.58	3777680.59	FENCEGRD	140.00
660	406978.04	3777678.63	FENCEGRD	139.25
661	406982.50	3777676.67	FENCEGRD	138.65
662	406986.96	3777674.70	FENCEGRD	138.39
663	406991.42	3777672.74	FENCEGRD	138.42
664	406995.88	3777670.78	FENCEGRD	138.38
665	407000.35	3777668.82	FENCEGRD	138.25
666	407004.81	3777666.85	FENCEGRD	138.42
667	407009.27	3777664.89	FENCEGRD	138.40
668	407013.73	3777662.93	FENCEGRD	138.32
669	407018.19	3777660.96	FENCEGRD	138.61
670	407022.65	3777659.00	FENCEGRD	138.73
671	407027.11	3777657.04	FENCEGRD	138.57
672	407031.58	3777655.08	FENCEGRD	138.36
673	407036.04	3777653.11	FENCEGRD	138.15
674	407032.46	3777633.02	FENCEGRD	133.61
675	407037.09	3777631.17	FENCEGRD	133.55
676	407041.72	3777629.32	FENCEGRD	133.47

677	407046.34	3777627.47	FENCEGRD	133.52
678	407050.97	3777625.61	FENCEGRD	133.56
679	407055.60	3777623.76	FENCEGRD	133.61
680	407060.23	3777621.91	FENCEGRD	133.63
681	407064.86	3777620.06	FENCEGRD	133.54
682	407069.49	3777618.21	FENCEGRD	133.49
683	407074.12	3777616.35	FENCEGRD	133.52
684	407078.75	3777614.50	FENCEGRD	133.58
685	407083.38	3777612.65	FENCEGRD	133.63
686	407088.01	3777610.80	FENCEGRD	133.67
687	407092.64	3777608.95	FENCEGRD	133.68
688	407097.27	3777607.10	FENCEGRD	133.62
689	407101.90	3777605.24	FENCEGRD	133.63
690	407106.53	3777603.39	FENCEGRD	133.70
691	407034.31	3777637.66	FENCEGRD	133.66
692	407038.94	3777635.81	FENCEGRD	133.70
693	407043.57	3777633.96	FENCEGRD	133.75
694	407048.20	3777632.11	FENCEGRD	133.76
695	407052.83	3777630.26	FENCEGRD	133.59
696	407057.46	3777628.40	FENCEGRD	133.55
697	407062.09	3777626.55	FENCEGRD	133.58
698	407066.72	3777624.70	FENCEGRD	133.56
699	407071.35	3777622.85	FENCEGRD	133.66
700	407075.98	3777621.00	FENCEGRD	133.66
701	407080.61	3777619.15	FENCEGRD	133.55
702	407085.24	3777617.29	FENCEGRD	133.61
703	407089.87	3777615.44	FENCEGRD	133.65
704	407094.50	3777613.59	FENCEGRD	133.69
705	407099.13	3777611.74	FENCEGRD	133.67
706	407103.75	3777609.89	FENCEGRD	133.64
707	407108.38	3777608.03	FENCEGRD	133.64
708	407036.17	3777642.31	FENCEGRD	134.47
709	407040.80	3777640.45	FENCEGRD	134.04
710	407045.43	3777638.60	FENCEGRD	134.26
711	407050.06	3777636.75	FENCEGRD	134.49
712	407054.69	3777634.90	FENCEGRD	134.61
713	407059.32	3777633.05	FENCEGRD	134.49
714	407063.95	3777631.19	FENCEGRD	134.14

715	407068.58	3777629.34	FENCEGRD	133.74
716	407073.21	3777627.49	FENCEGRD	134.01
717	407077.83	3777625.64	FENCEGRD	134.23
718	407082.46	3777623.79	FENCEGRD	134.36
719	407087.09	3777621.94	FENCEGRD	134.26
720	407091.72	3777620.08	FENCEGRD	133.94
721	407096.35	3777618.23	FENCEGRD	133.77
722	407100.98	3777616.38	FENCEGRD	133.84
723	407105.61	3777614.53	FENCEGRD	133.91
724	407110.24	3777612.68	FENCEGRD	133.94
725	407042.66	3777645.10	FENCEGRD	136.14
726	407047.29	3777643.24	FENCEGRD	136.05
727	407051.92	3777641.39	FENCEGRD	135.89
728	407056.54	3777639.54	FENCEGRD	135.88
729	407061.17	3777637.69	FENCEGRD	136.03
730	407065.80	3777635.84	FENCEGRD	135.95
731	407070.43	3777633.99	FENCEGRD	135.76
732	407075.06	3777632.13	FENCEGRD	135.48
733	407079.69	3777630.28	FENCEGRD	135.30
734	407084.32	3777628.43	FENCEGRD	135.40
735	407088.95	3777626.58	FENCEGRD	135.52
736	407093.58	3777624.73	FENCEGRD	135.44
737	407098.21	3777622.87	FENCEGRD	135.20
738	407102.84	3777621.02	FENCEGRD	134.82
739	407107.47	3777619.17	FENCEGRD	134.34
740	407112.10	3777617.32	FENCEGRD	134.44
741	407044.51	3777649.74	FENCEGRD	138.43
742	407049.14	3777647.89	FENCEGRD	138.47
743	407053.77	3777646.03	FENCEGRD	138.36
744	407058.40	3777644.18	FENCEGRD	138.24
745	407063.03	3777642.33	FENCEGRD	138.00
746	407067.66	3777640.48	FENCEGRD	137.96
747	407072.29	3777638.63	FENCEGRD	138.01
748	407076.92	3777636.78	FENCEGRD	137.91
749	407081.55	3777634.92	FENCEGRD	137.80
750	407086.18	3777633.07	FENCEGRD	137.59
751	407090.81	3777631.22	FENCEGRD	137.33
752	407095.44	3777629.37	FENCEGRD	137.12

753	407100.07	3777627.52	FENCEGRD	137.05
754	407104.70	3777625.67	FENCEGRD	136.82
755	407109.33	3777623.81	FENCEGRD	136.46
756	407113.95	3777621.96	FENCEGRD	136.16
757	407110.84	3777601.95	FENCEGRD	133.74
758	407115.43	3777600.41	FENCEGRD	133.80
759	407120.01	3777598.87	FENCEGRD	133.81
760	407124.59	3777597.33	FENCEGRD	133.77
761	407129.17	3777595.79	FENCEGRD	133.78
762	407133.75	3777594.25	FENCEGRD	133.82
763	407138.33	3777592.71	FENCEGRD	133.89
764	407142.91	3777591.16	FENCEGRD	133.96
765	407147.49	3777589.62	FENCEGRD	133.97
766	407152.07	3777588.08	FENCEGRD	133.96
767	407156.65	3777586.54	FENCEGRD	133.88
768	407161.23	3777585.00	FENCEGRD	133.85
769	407165.81	3777583.46	FENCEGRD	133.89
770	407170.39	3777581.92	FENCEGRD	133.93
771	407174.97	3777580.38	FENCEGRD	133.97
772	407179.55	3777578.84	FENCEGRD	134.02
773	407184.13	3777577.30	FENCEGRD	134.07
774	407188.71	3777575.76	FENCEGRD	134.04
775	407117.02	3777605.15	FENCEGRD	133.75
776	407121.60	3777603.61	FENCEGRD	133.78
777	407126.18	3777602.07	FENCEGRD	133.76
778	407130.76	3777600.53	FENCEGRD	133.78
779	407135.34	3777598.98	FENCEGRD	133.76
780	407139.92	3777597.44	FENCEGRD	133.79
781	407144.50	3777595.90	FENCEGRD	133.86
782	407149.08	3777594.36	FENCEGRD	133.90
783	407153.66	3777592.82	FENCEGRD	133.92
784	407158.24	3777591.28	FENCEGRD	133.90
785	407162.82	3777589.74	FENCEGRD	133.89
786	407167.41	3777588.20	FENCEGRD	133.89
787	407171.99	3777586.66	FENCEGRD	133.91
788	407176.57	3777585.12	FENCEGRD	133.96
789	407181.15	3777583.58	FENCEGRD	134.00
790	407185.73	3777582.04	FENCEGRD	134.06

791	407190.31	3777580.50	FENCEGRD	134.04
792	407118.61	3777609.89	FENCEGRD	133.93
793	407123.19	3777608.35	FENCEGRD	133.78
794	407127.77	3777606.81	FENCEGRD	133.83
795	407132.35	3777605.26	FENCEGRD	133.92
796	407136.94	3777603.72	FENCEGRD	133.96
797	407141.52	3777602.18	FENCEGRD	133.98
798	407146.10	3777600.64	FENCEGRD	133.98
799	407150.68	3777599.10	FENCEGRD	133.94
800	407155.26	3777597.56	FENCEGRD	133.93
801	407159.84	3777596.02	FENCEGRD	133.98
802	407164.42	3777594.48	FENCEGRD	134.02
803	407169.00	3777592.94	FENCEGRD	134.06
804	407173.58	3777591.40	FENCEGRD	134.04
805	407178.16	3777589.86	FENCEGRD	134.03
806	407182.74	3777588.32	FENCEGRD	134.02
807	407187.32	3777586.78	FENCEGRD	134.04
808	407191.90	3777585.24	FENCEGRD	134.07
809	407120.21	3777614.63	FENCEGRD	134.75
810	407124.79	3777613.08	FENCEGRD	134.80
811	407129.37	3777611.54	FENCEGRD	134.71
812	407133.95	3777610.00	FENCEGRD	134.51
813	407138.53	3777608.46	FENCEGRD	134.22
814	407143.11	3777606.92	FENCEGRD	134.25
815	407147.69	3777605.38	FENCEGRD	134.31
816	407152.27	3777603.84	FENCEGRD	134.32
817	407156.85	3777602.30	FENCEGRD	134.43
818	407161.43	3777600.76	FENCEGRD	134.44
819	407166.01	3777599.22	FENCEGRD	134.36
820	407170.59	3777597.68	FENCEGRD	134.22
821	407175.17	3777596.14	FENCEGRD	134.20
822	407179.75	3777594.60	FENCEGRD	134.19
823	407184.33	3777593.06	FENCEGRD	134.20
824	407188.92	3777591.52	FENCEGRD	134.21
825	407193.50	3777589.98	FENCEGRD	134.21
826	407121.80	3777619.36	FENCEGRD	135.90
827	407126.38	3777617.82	FENCEGRD	136.02
828	407130.96	3777616.28	FENCEGRD	136.07

829	407135.54	3777614.74	FENCEGRD	136.01
830	407140.12	3777613.20	FENCEGRD	135.85
831	407144.70	3777611.66	FENCEGRD	135.60
832	407149.28	3777610.12	FENCEGRD	135.27
833	407153.86	3777608.58	FENCEGRD	134.94
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835	407163.03	3777605.50	FENCEGRD	135.18
836	407167.61	3777603.96	FENCEGRD	135.20
837	407172.19	3777602.42	FENCEGRD	135.12
838	407176.77	3777600.88	FENCEGRD	134.94
839	407181.35	3777599.34	FENCEGRD	134.72
840	407185.93	3777597.80	FENCEGRD	134.43
841	407190.51	3777596.26	FENCEGRD	134.40
842	407195.09	3777594.72	FENCEGRD	134.41
843	407196.34	3777574.72	FENCEGRD	133.97
844	407204.83	3777573.47	FENCEGRD	134.04
845	407213.33	3777572.22	FENCEGRD	134.14
846	407197.07	3777579.66	FENCEGRD	134.01
847	407205.56	3777578.41	FENCEGRD	134.04
848	407214.06	3777577.16	FENCEGRD	134.06
849	407197.80	3777584.61	FENCEGRD	134.13
850	407206.29	3777583.36	FENCEGRD	134.23
851	407214.78	3777582.11	FENCEGRD	134.28
852	407198.53	3777589.56	FENCEGRD	134.29
853	407207.02	3777588.31	FENCEGRD	134.42
854	407215.51	3777587.06	FENCEGRD	134.50
855	407203.50	3777593.88	FENCEGRD	134.54
856	407211.99	3777592.63	FENCEGRD	134.60
857	407218.08	3777571.46	FENCEGRD	134.15
858	407222.76	3777570.71	FENCEGRD	134.15
859	407227.45	3777569.96	FENCEGRD	134.13
860	407232.13	3777569.21	FENCEGRD	134.17
861	407218.87	3777576.39	FENCEGRD	134.09
862	407223.55	3777575.64	FENCEGRD	134.12
863	407228.24	3777574.89	FENCEGRD	134.14
864	407232.92	3777574.14	FENCEGRD	134.18
865	407219.66	3777581.33	FENCEGRD	134.28
866	407224.34	3777580.58	FENCEGRD	134.28

867	407229.03	3777579.83	FENCEGRD	134.27
868	407233.71	3777579.08	FENCEGRD	134.26
869	407220.45	3777586.27	FENCEGRD	134.50
870	407225.13	3777585.52	FENCEGRD	134.47
871	407229.82	3777584.77	FENCEGRD	134.45
872	407234.50	3777584.02	FENCEGRD	134.42
873	407216.55	3777591.96	FENCEGRD	134.65
874	407221.24	3777591.21	FENCEGRD	134.68
875	407225.92	3777590.46	FENCEGRD	134.70
876	407230.61	3777589.71	FENCEGRD	134.70
877	407235.29	3777588.96	FENCEGRD	134.67
878	407240.94	3777569.36	FENCEGRD	134.30
879	407245.77	3777569.41	FENCEGRD	134.36
880	407250.59	3777569.46	FENCEGRD	134.34
881	407255.42	3777569.50	FENCEGRD	134.33
882	407260.24	3777569.55	FENCEGRD	134.36
883	407265.07	3777569.60	FENCEGRD	134.39
884	407269.89	3777569.64	FENCEGRD	134.40
885	407274.72	3777569.69	FENCEGRD	134.45
886	407279.54	3777569.74	FENCEGRD	134.54
887	407284.37	3777569.79	FENCEGRD	134.60
888	407289.19	3777569.83	FENCEGRD	134.67
889	407294.02	3777569.88	FENCEGRD	134.76
890	407298.84	3777569.93	FENCEGRD	134.85
891	407303.67	3777569.97	FENCEGRD	134.95
892	407308.49	3777570.02	FENCEGRD	135.03
893	407240.89	3777574.36	FENCEGRD	134.23
894	407245.72	3777574.41	FENCEGRD	134.27
895	407250.54	3777574.46	FENCEGRD	134.28
896	407255.37	3777574.50	FENCEGRD	134.29
897	407260.19	3777574.55	FENCEGRD	134.32
898	407265.02	3777574.60	FENCEGRD	134.34
899	407269.84	3777574.64	FENCEGRD	134.36
900	407274.67	3777574.69	FENCEGRD	134.40
901	407279.49	3777574.74	FENCEGRD	134.45
902	407284.32	3777574.79	FENCEGRD	134.53
903	407289.14	3777574.83	FENCEGRD	134.63
904	407293.97	3777574.88	FENCEGRD	134.75

905	407298.79	3777574.93	FENCEGRD	134.87
906	407303.62	3777574.97	FENCEGRD	134.99
907	407308.44	3777575.02	FENCEGRD	135.07
908	407240.84	3777579.36	FENCEGRD	134.30
909	407245.67	3777579.41	FENCEGRD	134.33
910	407250.49	3777579.46	FENCEGRD	134.39
911	407255.32	3777579.50	FENCEGRD	134.45
912	407260.14	3777579.55	FENCEGRD	134.50
913	407264.97	3777579.60	FENCEGRD	134.54
914	407269.79	3777579.64	FENCEGRD	134.58
915	407274.62	3777579.69	FENCEGRD	134.62
916	407279.44	3777579.74	FENCEGRD	134.66
917	407284.27	3777579.78	FENCEGRD	134.76
918	407289.09	3777579.83	FENCEGRD	134.88
919	407293.92	3777579.88	FENCEGRD	135.01
920	407298.74	3777579.93	FENCEGRD	135.12
921	407303.57	3777579.97	FENCEGRD	135.20
922	407308.39	3777580.02	FENCEGRD	135.25
923	407240.80	3777584.36	FENCEGRD	134.46
924	407245.62	3777584.41	FENCEGRD	134.50
925	407250.45	3777584.46	FENCEGRD	134.62
926	407255.27	3777584.50	FENCEGRD	134.73
927	407260.10	3777584.55	FENCEGRD	134.81
928	407264.92	3777584.60	FENCEGRD	134.88
929	407269.75	3777584.64	FENCEGRD	134.92
930	407274.57	3777584.69	FENCEGRD	134.96
931	407279.40	3777584.74	FENCEGRD	134.99
932	407284.22	3777584.78	FENCEGRD	135.10
933	407289.05	3777584.83	FENCEGRD	135.22
934	407293.87	3777584.88	FENCEGRD	135.35
935	407298.70	3777584.93	FENCEGRD	135.44
936	407303.52	3777584.97	FENCEGRD	135.45
937	407308.35	3777585.02	FENCEGRD	135.47
938	407240.75	3777589.36	FENCEGRD	134.76
939	407245.57	3777589.41	FENCEGRD	134.85
940	407250.40	3777589.46	FENCEGRD	135.00
941	407255.22	3777589.50	FENCEGRD	135.16
942	407260.05	3777589.55	FENCEGRD	135.28

943	407264.87	3777589.60	FENCEGRD	135.39
944	407269.70	3777589.64	FENCEGRD	135.47
945	407274.52	3777589.69	FENCEGRD	135.56
946	407279.35	3777589.74	FENCEGRD	135.66
947	407284.17	3777589.78	FENCEGRD	135.72
948	407289.00	3777589.83	FENCEGRD	135.77
949	407293.82	3777589.88	FENCEGRD	135.82
950	407298.65	3777589.93	FENCEGRD	135.85
951	407303.47	3777589.97	FENCEGRD	135.82
952	407308.30	3777590.02	FENCEGRD	135.75
953	407313.54	3777565.05	FENCEGRD	135.09
954	407313.57	3777560.13	FENCEGRD	134.94
955	407313.60	3777555.22	FENCEGRD	134.79
956	407313.62	3777550.31	FENCEGRD	134.74
957	407313.65	3777545.39	FENCEGRD	134.69
958	407313.68	3777540.48	FENCEGRD	134.60
959	407313.71	3777535.57	FENCEGRD	134.51
960	407313.73	3777530.65	FENCEGRD	134.44
961	407313.76	3777525.74	FENCEGRD	134.37
962	407313.79	3777520.82	FENCEGRD	134.31
963	407313.82	3777515.91	FENCEGRD	134.25
964	407313.85	3777511.00	FENCEGRD	134.15
965	407313.87	3777506.08	FENCEGRD	134.05
966	407313.90	3777501.17	FENCEGRD	133.92
967	407313.93	3777496.26	FENCEGRD	133.78
968	407313.96	3777491.34	FENCEGRD	133.66
969	407313.98	3777486.43	FENCEGRD	133.58
970	407314.01	3777481.52	FENCEGRD	133.50
971	407314.04	3777476.60	FENCEGRD	133.43
972	407314.07	3777471.69	FENCEGRD	133.37
973	407314.10	3777466.77	FENCEGRD	133.33
974	407314.12	3777461.86	FENCEGRD	133.29
975	407314.15	3777456.95	FENCEGRD	133.26
976	407314.18	3777452.03	FENCEGRD	133.24
977	407314.21	3777447.12	FENCEGRD	133.29
978	407314.23	3777442.21	FENCEGRD	133.34
979	407314.26	3777437.29	FENCEGRD	133.37
980	407314.29	3777432.38	FENCEGRD	133.39

981	407317.05	3777568.61	FENCEGRD	135.13
982	407318.57	3777560.16	FENCEGRD	134.99
983	407318.60	3777555.25	FENCEGRD	134.88
984	407318.62	3777550.34	FENCEGRD	134.81
985	407318.65	3777545.42	FENCEGRD	134.74
986	407318.68	3777540.51	FENCEGRD	134.65
987	407318.71	3777535.59	FENCEGRD	134.56
988	407318.73	3777530.68	FENCEGRD	134.48
989	407318.76	3777525.77	FENCEGRD	134.40
990	407318.79	3777520.85	FENCEGRD	134.32
991	407318.82	3777515.94	FENCEGRD	134.25
992	407318.85	3777511.03	FENCEGRD	134.17
993	407318.87	3777506.11	FENCEGRD	134.07
994	407318.90	3777501.20	FENCEGRD	133.97
995	407318.93	3777496.28	FENCEGRD	133.86
996	407318.96	3777491.37	FENCEGRD	133.75
997	407318.98	3777486.46	FENCEGRD	133.65
998	407319.01	3777481.54	FENCEGRD	133.56
999	407319.04	3777476.63	FENCEGRD	133.47
1,000	407319.07	3777471.72	FENCEGRD	133.39
1,001	407319.10	3777466.80	FENCEGRD	133.32
1,002	407319.12	3777461.89	FENCEGRD	133.26
1,003	407319.15	3777456.98	FENCEGRD	133.23
1,004	407319.18	3777452.06	FENCEGRD	133.20
1,005	407319.21	3777447.15	FENCEGRD	133.25
1,006	407319.23	3777442.23	FENCEGRD	133.29
1,007	407319.26	3777437.32	FENCEGRD	133.34
1,008	407319.29	3777432.41	FENCEGRD	133.40
1,009	407322.05	3777568.64	FENCEGRD	135.15
1,010	407315.51	3777577.14	FENCEGRD	135.19
1,011	407323.57	3777560.19	FENCEGRD	135.00
1,012	407323.60	3777555.28	FENCEGRD	134.93
1,013	407323.62	3777550.36	FENCEGRD	134.85
1,014	407323.65	3777545.45	FENCEGRD	134.76
1,015	407323.68	3777540.54	FENCEGRD	134.67
1,016	407323.71	3777535.62	FENCEGRD	134.57
1,017	407323.73	3777530.71	FENCEGRD	134.48
1,018	407323.76	3777525.80	FENCEGRD	134.39

1,019	407323.79	3777520.88	FENCEGRD	134.31
1,020	407323.82	3777515.97	FENCEGRD	134.23
1,021	407323.85	3777511.05	FENCEGRD	134.14
1,022	407323.87	3777506.14	FENCEGRD	134.05
1,023	407323.90	3777501.23	FENCEGRD	133.95
1,024	407323.93	3777496.31	FENCEGRD	133.86
1,025	407323.96	3777491.40	FENCEGRD	133.77
1,026	407323.98	3777486.49	FENCEGRD	133.67
1,027	407324.01	3777481.57	FENCEGRD	133.57
1,028	407324.04	3777476.66	FENCEGRD	133.48
1,029	407324.07	3777471.74	FENCEGRD	133.39
1,030	407324.10	3777466.83	FENCEGRD	133.30
1,031	407324.12	3777461.92	FENCEGRD	133.23
1,032	407324.15	3777457.00	FENCEGRD	133.18
1,033	407324.18	3777452.09	FENCEGRD	133.15
1,034	407324.21	3777447.18	FENCEGRD	133.20
1,035	407324.23	3777442.26	FENCEGRD	133.25
1,036	407324.26	3777437.35	FENCEGRD	133.33
1,037	407324.29	3777432.43	FENCEGRD	133.40
1,038	407327.05	3777568.67	FENCEGRD	135.03
1,039	407324.06	3777575.74	FENCEGRD	135.25
1,040	407319.02	3777580.71	FENCEGRD	135.35
1,041	407328.57	3777560.22	FENCEGRD	134.90
1,042	407328.60	3777555.31	FENCEGRD	134.88
1,043	407328.62	3777550.39	FENCEGRD	134.78
1,044	407328.65	3777545.48	FENCEGRD	134.69
1,045	407328.68	3777540.56	FENCEGRD	134.59
1,046	407328.71	3777535.65	FENCEGRD	134.49
1,047	407328.73	3777530.74	FENCEGRD	134.39
1,048	407328.76	3777525.82	FENCEGRD	134.30
1,049	407328.79	3777520.91	FENCEGRD	134.21
1,050	407328.82	3777516.00	FENCEGRD	134.13
1,051	407328.85	3777511.08	FENCEGRD	134.03
1,052	407328.87	3777506.17	FENCEGRD	133.91
1,053	407328.90	3777501.25	FENCEGRD	133.82
1,054	407328.93	3777496.34	FENCEGRD	133.75
1,055	407328.96	3777491.43	FENCEGRD	133.67
1,056	407328.98	3777486.51	FENCEGRD	133.61

1,057	407329.01	3777481.60	FENCEGRD	133.54
1,058	407329.04	3777476.69	FENCEGRD	133.44
1,059	407329.07	3777471.77	FENCEGRD	133.36
1,060	407329.10	3777466.86	FENCEGRD	133.27
1,061	407329.12	3777461.95	FENCEGRD	133.20
1,062	407329.15	3777457.03	FENCEGRD	133.13
1,063	407329.18	3777452.12	FENCEGRD	133.07
1,064	407329.21	3777447.20	FENCEGRD	133.15
1,065	407329.23	3777442.29	FENCEGRD	133.22
1,066	407329.26	3777437.38	FENCEGRD	133.32
1,067	407329.29	3777432.46	FENCEGRD	133.41
1,068	407331.68	3777569.58	FENCEGRD	134.93
1,069	407329.81	3777574.00	FENCEGRD	135.06
1,070	407327.95	3777578.42	FENCEGRD	135.23
1,071	407321.64	3777584.63	FENCEGRD	135.47
1,072	407317.19	3777586.43	FENCEGRD	135.53
1,073	407312.74	3777588.22	FENCEGRD	135.60
1,074	407333.54	3777565.16	FENCEGRD	134.92
1,075	407333.57	3777560.25	FENCEGRD	134.92
1,076	407333.60	3777555.33	FENCEGRD	134.92
1,077	407333.62	3777550.42	FENCEGRD	134.85
1,078	407333.65	3777545.51	FENCEGRD	134.78
1,079	407333.68	3777540.59	FENCEGRD	134.68
1,080	407333.71	3777535.68	FENCEGRD	134.57
1,081	407333.73	3777530.77	FENCEGRD	134.48
1,082	407333.76	3777525.85	FENCEGRD	134.40
1,083	407333.79	3777520.94	FENCEGRD	134.31
1,084	407333.82	3777516.02	FENCEGRD	134.21
1,085	407333.85	3777511.11	FENCEGRD	134.10
1,086	407333.87	3777506.20	FENCEGRD	133.96
1,087	407333.90	3777501.28	FENCEGRD	133.85
1,088	407333.93	3777496.37	FENCEGRD	133.77
1,089	407333.96	3777491.46	FENCEGRD	133.70
1,090	407333.98	3777486.54	FENCEGRD	133.67
1,091	407334.01	3777481.63	FENCEGRD	133.63
1,092	407334.04	3777476.71	FENCEGRD	133.58
1,093	407334.07	3777471.80	FENCEGRD	133.52
1,094	407334.10	3777466.89	FENCEGRD	133.45

1,095	407334.12	3777461.97	FENCEGRD	133.36
1,096	407334.15	3777457.06	FENCEGRD	133.23
1,097	407334.18	3777452.15	FENCEGRD	133.11
1,098	407334.21	3777447.23	FENCEGRD	133.21
1,099	407334.23	3777442.32	FENCEGRD	133.30
1,100	407334.26	3777437.41	FENCEGRD	133.38
1,101	407334.29	3777432.49	FENCEGRD	133.46
1,102	407308.54	3777565.02	FENCEPRI	134.98
1,103	407309.29	3777432.35	FENCEPRI	133.30
1,104	406926.29	3777562.02	FENCEPRI	134.79
1,105	406924.79	3777663.96	FENCEPRI	134.48
1,106	406932.28	3777671.45	FENCEPRI	134.36
1,107	407025.97	3777630.23	FENCEPRI	133.78
1,108	407104.67	3777598.75	FENCEPRI	133.77
1,109	407187.12	3777571.02	FENCEPRI	134.02
1,110	407212.60	3777567.27	FENCEPRI	134.24
1,111	407231.34	3777564.27	FENCEPRI	134.21
1,112	407308.57	3777560.11	FENCEINT	134.82
1,113	407308.60	3777555.19	FENCEINT	134.67
1,114	407308.62	3777550.28	FENCEINT	134.66
1,115	407308.65	3777545.37	FENCEINT	134.66
1,116	407308.68	3777540.45	FENCEINT	134.56
1,117	407308.71	3777535.54	FENCEINT	134.46
1,118	407308.73	3777530.62	FENCEINT	134.38
1,119	407308.76	3777525.71	FENCEINT	134.30
1,120	407308.79	3777520.80	FENCEINT	134.24
1,121	407308.82	3777515.88	FENCEINT	134.19
1,122	407308.85	3777510.97	FENCEINT	134.11
1,123	407308.87	3777506.06	FENCEINT	134.02
1,124	407308.90	3777501.14	FENCEINT	133.92
1,125	407308.93	3777496.23	FENCEINT	133.82
1,126	407308.96	3777491.31	FENCEINT	133.72
1,127	407308.98	3777486.40	FENCEINT	133.63
1,128	407309.01	3777481.49	FENCEINT	133.53
1,129	407309.04	3777476.57	FENCEINT	133.41
1,130	407309.07	3777471.66	FENCEINT	133.32
1,131	407309.10	3777466.75	FENCEINT	133.25
1,132	407309.12	3777461.83	FENCEINT	133.19

1,133	407309.15	3777456.92	FENCEINT	133.18
1,134	407309.18	3777452.00	FENCEINT	133.18
1,135	407309.21	3777447.09	FENCEINT	133.23
1,136	407309.23	3777442.18	FENCEINT	133.28
1,137	407309.26	3777437.26	FENCEINT	133.29
1,138	407304.56	3777433.95	FENCEINT	133.17
1,139	407299.83	3777435.55	FENCEINT	133.12
1,140	407295.10	3777437.15	FENCEINT	133.00
1,141	407290.38	3777438.75	FENCEINT	132.86
1,142	407285.65	3777440.35	FENCEINT	132.87
1,143	407280.92	3777441.96	FENCEINT	133.05
1,144	407276.19	3777443.56	FENCEINT	133.14
1,145	407271.46	3777445.16	FENCEINT	133.08
1,146	407266.73	3777446.76	FENCEINT	132.96
1,147	407262.01	3777448.36	FENCEINT	132.79
1,148	407257.28	3777449.96	FENCEINT	132.84
1,149	407252.55	3777451.56	FENCEINT	133.11
1,150	407247.82	3777453.16	FENCEINT	133.30
1,151	407243.09	3777454.76	FENCEINT	133.22
1,152	407238.36	3777456.36	FENCEINT	133.12
1,153	407233.64	3777457.96	FENCEINT	133.01
1,154	407228.91	3777459.56	FENCEINT	133.01
1,155	407224.18	3777461.17	FENCEINT	133.05
1,156	407219.45	3777462.77	FENCEINT	133.30
1,157	407214.72	3777464.37	FENCEINT	133.42
1,158	407209.99	3777465.97	FENCEINT	133.29
1,159	407205.27	3777467.57	FENCEINT	133.18
1,160	407200.54	3777469.17	FENCEINT	133.10
1,161	407195.81	3777470.77	FENCEINT	133.22
1,162	407191.08	3777472.37	FENCEINT	133.30
1,163	407186.35	3777473.97	FENCEINT	133.51
1,164	407181.62	3777475.57	FENCEINT	133.50
1,165	407176.89	3777477.17	FENCEINT	133.34
1,166	407172.17	3777478.78	FENCEINT	133.21
1,167	407167.44	3777480.38	FENCEINT	133.17
1,168	407162.71	3777481.98	FENCEINT	133.26
1,169	407157.98	3777483.58	FENCEINT	133.53
1,170	407153.25	3777485.18	FENCEINT	133.71

1,171	407148.52	3777486.78	FENCEINT	133.53
1,172	407143.80	3777488.38	FENCEINT	133.34
1,173	407139.07	3777489.98	FENCEINT	133.24
1,174	407134.34	3777491.58	FENCEINT	133.37
1,175	407129.61	3777493.18	FENCEINT	133.38
1,176	407124.88	3777494.78	FENCEINT	133.67
1,177	407120.15	3777496.38	FENCEINT	133.72
1,178	407115.43	3777497.99	FENCEINT	133.51
1,179	407110.70	3777499.59	FENCEINT	133.38
1,180	407105.97	3777501.19	FENCEINT	133.38
1,181	407101.24	3777502.79	FENCEINT	133.63
1,182	407096.51	3777504.39	FENCEINT	133.63
1,183	407091.78	3777505.99	FENCEINT	133.78
1,184	407087.06	3777507.59	FENCEINT	132.40
1,185	407082.33	3777509.19	FENCEINT	131.32
1,186	407077.60	3777510.79	FENCEINT	130.56
1,187	407072.87	3777512.39	FENCEINT	130.71
1,188	407068.14	3777513.99	FENCEINT	132.61
1,189	407063.41	3777515.59	FENCEINT	133.70
1,190	407058.69	3777517.20	FENCEINT	133.90
1,191	407053.96	3777518.80	FENCEINT	133.57
1,192	407049.23	3777520.40	FENCEINT	133.27
1,193	407044.50	3777522.00	FENCEINT	133.35
1,194	407039.77	3777523.60	FENCEINT	133.70
1,195	407035.04	3777525.20	FENCEINT	133.78
1,196	407030.31	3777526.80	FENCEINT	134.06
1,197	407025.59	3777528.40	FENCEINT	133.91
1,198	407020.86	3777530.00	FENCEINT	133.68
1,199	407016.13	3777531.60	FENCEINT	133.73
1,200	407011.40	3777533.20	FENCEINT	133.73
1,201	407006.67	3777534.81	FENCEINT	133.95
1,202	407001.94	3777536.41	FENCEINT	134.05
1,203	406997.22	3777538.01	FENCEINT	134.29
1,204	406992.49	3777539.61	FENCEINT	134.06
1,205	406987.76	3777541.21	FENCEINT	133.90
1,206	406983.03	3777542.81	FENCEINT	133.92
1,207	406978.30	3777544.41	FENCEINT	133.95
1,208	406973.57	3777546.01	FENCEINT	134.10

1,209	406968.85	3777547.61	FENCEINT	134.32
1,210	406964.12	3777549.21	FENCEINT	134.37
1,211	406959.39	3777550.81	FENCEINT	134.16
1,212	406954.66	3777552.41	FENCEINT	134.01
1,213	406949.93	3777554.02	FENCEINT	134.06
1,214	406945.20	3777555.62	FENCEINT	134.25
1,215	406940.48	3777557.22	FENCEINT	134.43
1,216	406935.75	3777558.82	FENCEINT	134.66
1,217	406931.02	3777560.42	FENCEINT	134.74
1,218	406926.22	3777566.87	FENCEINT	134.79
1,219	406926.15	3777571.73	FENCEINT	134.77
1,220	406926.08	3777576.58	FENCEINT	134.72
1,221	406926.00	3777581.44	FENCEINT	134.67
1,222	406925.93	3777586.29	FENCEINT	134.61
1,223	406925.86	3777591.15	FENCEINT	134.56
1,224	406925.79	3777596.00	FENCEINT	134.54
1,225	406925.72	3777600.85	FENCEINT	134.51
1,226	406925.65	3777605.71	FENCEINT	134.43
1,227	406925.58	3777610.56	FENCEINT	134.35
1,228	406925.50	3777615.42	FENCEINT	134.33
1,229	406925.43	3777620.27	FENCEINT	134.31
1,230	406925.36	3777625.13	FENCEINT	134.33
1,231	406925.29	3777629.98	FENCEINT	134.34
1,232	406925.22	3777634.83	FENCEINT	134.37
1,233	406925.15	3777639.69	FENCEINT	134.39
1,234	406925.08	3777644.54	FENCEINT	134.39
1,235	406925.00	3777649.40	FENCEINT	134.39
1,236	406924.93	3777654.25	FENCEINT	134.41
1,237	406924.86	3777659.11	FENCEINT	134.45
1,238	406927.29	3777666.46	FENCEINT	134.43
1,239	406929.78	3777668.95	FENCEINT	134.39
1,240	406936.74	3777669.49	FENCEINT	134.30
1,241	406941.20	3777667.52	FENCEINT	134.27
1,242	406945.66	3777665.56	FENCEINT	134.26
1,243	406950.13	3777663.60	FENCEINT	134.26
1,244	406954.59	3777661.64	FENCEINT	134.28
1,245	406959.05	3777659.67	FENCEINT	134.19
1,246	406963.51	3777657.71	FENCEINT	134.10

1,247	406967.97	3777655.75	FENCEINT	134.10
1,248	406972.43	3777653.78	FENCEINT	134.15
1,249	406976.89	3777651.82	FENCEINT	134.14
1,250	406981.36	3777649.86	FENCEINT	134.10
1,251	406985.82	3777647.90	FENCEINT	134.02
1,252	406990.28	3777645.93	FENCEINT	133.95
1,253	406994.74	3777643.97	FENCEINT	133.97
1,254	406999.20	3777642.01	FENCEINT	133.98
1,255	407003.66	3777640.04	FENCEINT	133.85
1,256	407008.12	3777638.08	FENCEINT	133.76
1,257	407012.59	3777636.12	FENCEINT	133.79
1,258	407017.05	3777634.16	FENCEINT	133.80
1,259	407021.51	3777632.19	FENCEINT	133.81
1,260	407030.60	3777628.38	FENCEINT	133.67
1,261	407035.23	3777626.53	FENCEINT	133.62
1,262	407039.86	3777624.67	FENCEINT	133.60
1,263	407044.49	3777622.82	FENCEINT	133.61
1,264	407049.12	3777620.97	FENCEINT	133.64
1,265	407053.75	3777619.12	FENCEINT	133.67
1,266	407058.38	3777617.27	FENCEINT	133.65
1,267	407063.01	3777615.42	FENCEINT	133.55
1,268	407067.63	3777613.56	FENCEINT	133.52
1,269	407072.26	3777611.71	FENCEINT	133.55
1,270	407076.89	3777609.86	FENCEINT	133.60
1,271	407081.52	3777608.01	FENCEINT	133.62
1,272	407086.15	3777606.16	FENCEINT	133.60
1,273	407090.78	3777604.31	FENCEINT	133.59
1,274	407095.41	3777602.45	FENCEINT	133.62
1,275	407100.04	3777600.60	FENCEINT	133.71
1,276	407109.25	3777597.21	FENCEINT	133.78
1,277	407113.83	3777595.67	FENCEINT	133.82
1,278	407118.41	3777594.13	FENCEINT	133.88
1,279	407122.99	3777592.59	FENCEINT	133.87
1,280	407127.57	3777591.05	FENCEINT	133.89
1,281	407132.15	3777589.51	FENCEINT	133.94
1,282	407136.73	3777587.97	FENCEINT	134.00
1,283	407141.31	3777586.43	FENCEINT	133.99
1,284	407145.90	3777584.89	FENCEINT	133.95

1,285	407150.48	3777583.34	FENCEINT	133.89	
1,286	407155.06	3777581.80	FENCEINT	133.86	
1,287	407159.64	3777580.26	FENCEINT	133.87	
1,288	407164.22	3777578.72	FENCEINT	133.91	
1,289	407168.80	3777577.18	FENCEINT	133.94	
1,290	407173.38	3777575.64	FENCEINT	133.96	
1,291	407177.96	3777574.10	FENCEINT	133.99	
1,292	407182.54	3777572.56	FENCEINT	134.01	
1,293	407191.37	3777570.40	FENCEINT	134.01	
1,294	407195.61	3777569.77	FENCEINT	134.03	
1,295	407199.86	3777569.15	FENCEINT	134.07	
1,296	407204.11	3777568.52	FENCEINT	134.12	
1,297	407208.35	3777567.90	FENCEINT	134.19	
1,298	407217.29	3777566.52	FENCEINT	134.23	
1,299	407221.97	3777565.77	FENCEINT	134.20	
1,300	407226.66	3777565.02	FENCEINT	134.17	
1,301	407236.17	3777564.32	FENCEINT	134.28	
1,302	407240.99	3777564.36	FENCEINT	134.34	
1,303	407245.82	3777564.41	FENCEINT	134.40	
1,304	407250.64	3777564.46	FENCEINT	134.35	
1,305	407255.47	3777564.50	FENCEINT	134.33	
1,306	407260.29	3777564.55	FENCEINT	134.36	
1,307	407265.12	3777564.60	FENCEINT	134.39	
1,308	407269.94	3777564.65	FENCEINT	134.42	
1,309	407274.77	3777564.69	FENCEINT	134.49	
1,310	407279.59	3777564.74	FENCEINT	134.59	
1,311	407284.42	3777564.79	FENCEINT	134.64	
1,312	407289.24	3777564.83	FENCEINT	134.69	
1,313	407294.07	3777564.88	FENCEINT	134.75	
1,314	407298.89	3777564.93	FENCEINT	134.82	
1,315	407303.72	3777564.97	FENCEINT	134.89	

Plant Boundary Receptors

Receptor Pathway

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	407308.54	3777565.02	FENCEPRI	134.98	
2	407309.29	3777432.35	FENCEPRI	133.30	
3	406926.29	3777562.02	FENCEPRI	134.79	
4	406924.79	3777663.96	FENCEPRI	134.48	
5	406932.28	3777671.45	FENCEPRI	134.36	
6	407025.97	3777630.23	FENCEPRI	133.78	
7	407104.67	3777598.75	FENCEPRI	133.77	
8	407187.12	3777571.02	FENCEPRI	134.02	
9	407212.60	3777567.27	FENCEPRI	134.24	
10	407231.34	3777564.27	FENCEPRI	134.21	

Intermediate

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	407308.57	3777560.11	FENCEINT	134.82	
2	407308.60	3777555.19	FENCEINT	134.67	
3	407308.62	3777550.28	FENCEINT	134.66	
4	407308.65	3777545.37	FENCEINT	134.66	
5	407308.68	3777540.45	FENCEINT	134.56	
6	407308.71	3777535.54	FENCEINT	134.46	
7	407308.73	3777530.62	FENCEINT	134.38	
8	407308.76	3777525.71	FENCEINT	134.30	
9	407308.79	3777520.80	FENCEINT	134.24	
10	407308.82	3777515.88	FENCEINT	134.19	
11	407308.85	3777510.97	FENCEINT	134.11	
12	407308.87	3777506.06	FENCEINT	134.02	
13	407308.90	3777501.14	FENCEINT	133.92	
14	407308.93	3777496.23	FENCEINT	133.82	
15	407308.96	3777491.31	FENCEINT	133.72	
16	407308.98	3777486.40	FENCEINT	133.63	
17	407309.01	3777481.49	FENCEINT	133.53	
18	407309.04	3777476.57	FENCEINT	133.41	
19	407309.07	3777471.66	FENCEINT	133.32	
20	407309.10	3777466.75	FENCEINT	133.25	
21	407309.12	3777461.83	FENCEINT	133.19	
22	407309.15	3777456.92	FENCEINT	133.18	
23	407309.18	3777452.00	FENCEINT	133.18	

24	407309.21	3777447.09	FENCEINT	133.23	
25	407309.23	3777442.18	FENCEINT	133.28	
26	407309.26	3777437.26	FENCEINT	133.29	
27	407304.56	3777433.95	FENCEINT	133.17	
28	407299.83	3777435.55	FENCEINT	133.12	
29	407295.10	3777437.15	FENCEINT	133.00	
30	407290.38	3777438.75	FENCEINT	132.86	
31	407285.65	3777440.35	FENCEINT	132.87	
32	407280.92	3777441.96	FENCEINT	133.05	
33	407276.19	3777443.56	FENCEINT	133.14	
34	407271.46	3777445.16	FENCEINT	133.08	
35	407266.73	3777446.76	FENCEINT	132.96	
36	407262.01	3777448.36	FENCEINT	132.79	
37	407257.28	3777449.96	FENCEINT	132.84	
38	407252.55	3777451.56	FENCEINT	133.11	
39	407247.82	3777453.16	FENCEINT	133.30	
40	407243.09	3777454.76	FENCEINT	133.22	
41	407238.36	3777456.36	FENCEINT	133.12	
42	407233.64	3777457.96	FENCEINT	133.01	
43	407228.91	3777459.56	FENCEINT	133.01	
44	407224.18	3777461.17	FENCEINT	133.05	
45	407219.45	3777462.77	FENCEINT	133.30	
46	407214.72	3777464.37	FENCEINT	133.42	
47	407209.99	3777465.97	FENCEINT	133.29	
48	407205.27	3777467.57	FENCEINT	133.18	
49	407200.54	3777469.17	FENCEINT	133.10	
50	407195.81	3777470.77	FENCEINT	133.22	
51	407191.08	3777472.37	FENCEINT	133.30	
52	407186.35	3777473.97	FENCEINT	133.51	
53	407181.62	3777475.57	FENCEINT	133.50	
54	407176.89	3777477.17	FENCEINT	133.34	
55	407172.17	3777478.78	FENCEINT	133.21	
56	407167.44	3777480.38	FENCEINT	133.17	
57	407162.71	3777481.98	FENCEINT	133.26	
58	407157.98	3777483.58	FENCEINT	133.53	
59	407153.25	3777485.18	FENCEINT	133.71	
60	407148.52	3777486.78	FENCEINT	133.53	
61	407143.80	3777488.38	FENCEINT	133.34	
62	407139.07	3777489.98	FENCEINT	133.24	
63	407134.34	3777491.58	FENCEINT	133.37	
64	407129.61	3777493.18	FENCEINT	133.38	

65	407124.88	3777494.78	FENCEINT	133.67	
66	407120.15	3777496.38	FENCEINT	133.72	
67	407115.43	3777497.99	FENCEINT	133.51	
68	407110.70	3777499.59	FENCEINT	133.38	
69	407105.97	3777501.19	FENCEINT	133.38	
70	407101.24	3777502.79	FENCEINT	133.63	
71	407096.51	3777504.39	FENCEINT	133.63	
72	407091.78	3777505.99	FENCEINT	133.78	
73	407087.06	3777507.59	FENCEINT	132.40	
74	407082.33	3777509.19	FENCEINT	131.32	
75	407077.60	3777510.79	FENCEINT	130.56	
76	407072.87	3777512.39	FENCEINT	130.71	
77	407068.14	3777513.99	FENCEINT	132.61	
78	407063.41	3777515.59	FENCEINT	133.70	
79	407058.69	3777517.20	FENCEINT	133.90	
80	407053.96	3777518.80	FENCEINT	133.57	
81	407049.23	3777520.40	FENCEINT	133.27	
82	407044.50	3777522.00	FENCEINT	133.35	
83	407039.77	3777523.60	FENCEINT	133.70	
84	407035.04	3777525.20	FENCEINT	133.78	
85	407030.31	3777526.80	FENCEINT	134.06	
86	407025.59	3777528.40	FENCEINT	133.91	
87	407020.86	3777530.00	FENCEINT	133.68	
88	407016.13	3777531.60	FENCEINT	133.73	
89	407011.40	3777533.20	FENCEINT	133.73	
90	407006.67	3777534.81	FENCEINT	133.95	
91	407001.94	3777536.41	FENCEINT	134.05	
92	406997.22	3777538.01	FENCEINT	134.29	
93	406992.49	3777539.61	FENCEINT	134.06	
94	406987.76	3777541.21	FENCEINT	133.90	
95	406983.03	3777542.81	FENCEINT	133.92	
96	406978.30	3777544.41	FENCEINT	133.95	
97	406973.57	3777546.01	FENCEINT	134.10	
98	406968.85	3777547.61	FENCEINT	134.32	
99	406964.12	3777549.21	FENCEINT	134.37	
100	406959.39	3777550.81	FENCEINT	134.16	
101	406954.66	3777552.41	FENCEINT	134.01	
102	406949.93	3777554.02	FENCEINT	134.06	
103	406945.20	3777555.62	FENCEINT	134.25	
104	406940.48	3777557.22	FENCEINT	134.43	
105	406935.75	3777558.82	FENCEINT	134.66	

106	406931.02	3777560.42	FENCEINT	134.74	
107	406926.22	3777566.87	FENCEINT	134.79	
108	406926.15	3777571.73	FENCEINT	134.77	
109	406926.08	3777576.58	FENCEINT	134.72	
110	406926.00	3777581.44	FENCEINT	134.67	
111	406925.93	3777586.29	FENCEINT	134.61	
112	406925.86	3777591.15	FENCEINT	134.56	
113	406925.79	3777596.00	FENCEINT	134.54	
114	406925.72	3777600.85	FENCEINT	134.51	
115	406925.65	3777605.71	FENCEINT	134.43	
116	406925.58	3777610.56	FENCEINT	134.35	
117	406925.50	3777615.42	FENCEINT	134.33	
118	406925.43	3777620.27	FENCEINT	134.31	
119	406925.36	3777625.13	FENCEINT	134.33	
120	406925.29	3777629.98	FENCEINT	134.34	
121	406925.22	3777634.83	FENCEINT	134.37	
122	406925.15	3777639.69	FENCEINT	134.39	
123	406925.08	3777644.54	FENCEINT	134.39	
124	406925.00	3777649.40	FENCEINT	134.39	
125	406924.93	3777654.25	FENCEINT	134.41	
126	406924.86	3777659.11	FENCEINT	134.45	
127	406927.29	3777666.46	FENCEINT	134.43	
128	406929.78	3777668.95	FENCEINT	134.39	
129	406936.74	3777669.49	FENCEINT	134.30	
130	406941.20	3777667.52	FENCEINT	134.27	
131	406945.66	3777665.56	FENCEINT	134.26	
132	406950.13	3777663.60	FENCEINT	134.26	
133	406954.59	3777661.64	FENCEINT	134.28	
134	406959.05	3777659.67	FENCEINT	134.19	
135	406963.51	3777657.71	FENCEINT	134.10	
136	406967.97	3777655.75	FENCEINT	134.10	
137	406972.43	3777653.78	FENCEINT	134.15	
138	406976.89	3777651.82	FENCEINT	134.14	
139	406981.36	3777649.86	FENCEINT	134.10	
140	406985.82	3777647.90	FENCEINT	134.02	
141	406990.28	3777645.93	FENCEINT	133.95	
142	406994.74	3777643.97	FENCEINT	133.97	
143	406999.20	3777642.01	FENCEINT	133.98	
144	407003.66	3777640.04	FENCEINT	133.85	
145	407008.12	3777638.08	FENCEINT	133.76	
146	407012.59	3777636.12	FENCEINT	133.79	

147	407017.05	3777634.16	FENCEINT	133.80	
148	407021.51	3777632.19	FENCEINT	133.81	
149	407030.60	3777628.38	FENCEINT	133.67	
150	407035.23	3777626.53	FENCEINT	133.62	
151	407039.86	3777624.67	FENCEINT	133.60	
152	407044.49	3777622.82	FENCEINT	133.61	
153	407049.12	3777620.97	FENCEINT	133.64	
154	407053.75	3777619.12	FENCEINT	133.67	
155	407058.38	3777617.27	FENCEINT	133.65	
156	407063.01	3777615.42	FENCEINT	133.55	
157	407067.63	3777613.56	FENCEINT	133.52	
158	407072.26	3777611.71	FENCEINT	133.55	
159	407076.89	3777609.86	FENCEINT	133.60	
160	407081.52	3777608.01	FENCEINT	133.62	
161	407086.15	3777606.16	FENCEINT	133.60	
162	407090.78	3777604.31	FENCEINT	133.59	
163	407095.41	3777602.45	FENCEINT	133.62	
164	407100.04	3777600.60	FENCEINT	133.71	
165	407109.25	3777597.21	FENCEINT	133.78	
166	407113.83	3777595.67	FENCEINT	133.82	
167	407118.41	3777594.13	FENCEINT	133.88	
168	407122.99	3777592.59	FENCEINT	133.87	
169	407127.57	3777591.05	FENCEINT	133.89	
170	407132.15	3777589.51	FENCEINT	133.94	
171	407136.73	3777587.97	FENCEINT	134.00	
172	407141.31	3777586.43	FENCEINT	133.99	
173	407145.90	3777584.89	FENCEINT	133.95	
174	407150.48	3777583.34	FENCEINT	133.89	
175	407155.06	3777581.80	FENCEINT	133.86	
176	407159.64	3777580.26	FENCEINT	133.87	
177	407164.22	3777578.72	FENCEINT	133.91	
178	407168.80	3777577.18	FENCEINT	133.94	
179	407173.38	3777575.64	FENCEINT	133.96	
180	407177.96	3777574.10	FENCEINT	133.99	
181	407182.54	3777572.56	FENCEINT	134.01	
182	407191.37	3777570.40	FENCEINT	134.01	
183	407195.61	3777569.77	FENCEINT	134.03	
184	407199.86	3777569.15	FENCEINT	134.07	
185	407204.11	3777568.52	FENCEINT	134.12	
186	407208.35	3777567.90	FENCEINT	134.19	
187	407217.29	3777566.52	FENCEINT	134.23	

188	407221.97	3777565.77	FENCEINT	134.20	
189	407226.66	3777565.02	FENCEINT	134.17	
190	407236.17	3777564.32	FENCEINT	134.28	
191	407240.99	3777564.36	FENCEINT	134.34	
192	407245.82	3777564.41	FENCEINT	134.40	
193	407250.64	3777564.46	FENCEINT	134.35	
194	407255.47	3777564.50	FENCEINT	134.33	
195	407260.29	3777564.55	FENCEINT	134.36	
196	407265.12	3777564.60	FENCEINT	134.39	
197	407269.94	3777564.65	FENCEINT	134.42	
198	407274.77	3777564.69	FENCEINT	134.49	
199	407279.59	3777564.74	FENCEINT	134.59	
200	407284.42	3777564.79	FENCEINT	134.64	
201	407289.24	3777564.83	FENCEINT	134.69	
202	407294.07	3777564.88	FENCEINT	134.75	
203	407298.89	3777564.93	FENCEINT	134.82	
204	407303.72	3777564.97	FENCEINT	134.89	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid
3	FENCEINT	Cartesian plant boundary Intermediate Receptors

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Results Summary

C:\Lakes\AERMOD View\Alexan_ProjectArea_RCZ\Alexan_ProjectArea_RCZ.i

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.07087	ug/m^3	406946.81	3777692.37	140.32	0.00	140.72	

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APPENDIX C: HRA Calculations

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HARP2 - HRACalc (dated 16057) 7/30/2018 2:47:36 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
TIER 2 SETTINGS
Tier2 not used.

****

Alexan SP Residential Development Draft EIR (Appendix A3)
HARP Output for Alexan SP - MEIR

*HARP - HRACalc v16057 7/30/2018 2:50:50 PM - Cancer Risk

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1			9901	DieselExhP	0.03481	2.37E-05	30YrCance	*	2.37E-05

Alexan SP Residential Development Draft EIR (Appendix A3)
HARP Output for GP/ZCA - MEIR

*HARP - HRACalc v16057 7/30/2018 2:45:56 PM - Cancer Risk

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1			9901	DieselExhP	0.03768	2.57E-05	30YrCance	*	2.57E-05

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
PD GPA, PD ZCA & ALEXAN FOOTHILLS SPECIFIC PLAN PROJECT
Approved by City Council on XXXX, 2020

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Aesthetics			
MM AES-1: Neighborhood Compatibility Design Review. To ensure compatibility with the surrounding residential neighborhood, all future development in the PD-27 area, including non-residential development, shall undergo the Neighborhood Compatibility Design Review process outlined in Section 17.12.005 of the Residential Development Standards in the Monrovia Zoning Code. **Plan Requirements and Timing:** Prior to construction of future development in the PD-27 area, the development must complete the Neighborhood Compatibility Design Review process as outlined in Section 17.12.005 of the Monrovia Zoning Code. **Monitoring:** City staff shall ensure completion of the Design Review process prior to granting land use clearance for future development.	Land Use Clearance	Prior to Issuance of Land Use Clearance	Applicant
MM AES-2: Maintenance of Construction Barriers. Prior to issuance of any construction permits, the City of Monrovia (City) Community Development Director, or designee, shall verify that all construction plans include the following note: "During construction, the Construction Contractor shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways are maintained in a visually attractive manner. In the event that unauthorized materials or markings are discovered on any temporary construction barrier or temporary pedestrian walkway, the Construction Contractor shall remove such items within 48 hours." **Requirements and Timing:** Measure shall be printed on all construction drawings. **Monitoring:** City staff shall conduct periodic site inspections during construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM AES-3: Lighting shall be directed and shielded to focus illumination onto the desired areas only and avoid light trespass into adjacent areas. Reflective glass, metallic, and other highly reflective and glare producing materials, shall not be used in new building construction. **Requirements and Timing:** Measure shall be printed on all construction drawings. **Monitoring:** City staff shall conduct periodic site inspections during construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM AES-4: Comprehensive Lighting Plan. Prior to issuance of a building permit, the applicant shall submit a comprehensive lighting plan for review and approval by the City Community Development Director, or designee. The lighting plan shall be	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
prepared by a qualified engineer (i.e., an engineer who is an active member of the Illuminating Engineering Society of North America [IESNA]) and shall be in compliance with applicable standards of the City's Municipal Code. The lighting plan shall address all aspects of lighting, including infrastructure, onsite driveways, recreation, safety, signage, and promotional lighting, if any. The lighting plan shall include the following in conjunction with other measures, as determined by the illumination engineer: • Exterior onsite lighting shall be shielded and confined within site boundaries. • No direct rays or glare are permitted to shine onto public streets, freeways or adjacent sites. • Lighting fixtures that blink, flash, or emit unusual high intensity or brightness shall not be permitted. • The site shall not be excessively illuminated based on the illumination recommendations of the IESNA. **Requirements and Timing:** The Lighting Plan shall be reviewed and approved prior to issuance of building permits. **Monitoring:** The City's Community Development Director, or designee, shall review and approve the Lighting Plan prior to issuance of building permits.		Construction	
Air Quality			
SC AIR-1: Comply with South Coast Air Quality Rule 1113 to reduce VOC emissions from architectural coating applications. Prior to the issuance of a building permit for the development, the applicant shall submit, to the satisfaction of the Planning Division, a Coating Restriction Plan (CRP), consistent with South Coast Air Quality Management District (SCAQMD) guidelines. The applicant shall include in any construction contracts, and/or subcontracts, a requirement that contractors adhere to the requirements of the CRP. The CRP shall include a requirement that all interior and exterior residential and non-residential architectural coatings used in construction meet the SCAQMD "super compliant" coating VOC content standard of less than 10 grams of VOC per liter of coating. The CRP shall also specify the use of high-volume, low pressure spray guns during coating applications to reduce coating waste. **Requirements and Timing**: Applicant shall receive Planning Division approval of a Coating Restriction Plan (CRP) prior to receipt of building permits. **Monitoring**: City staff shall conduct site inspections to ensure that the CRP is followed during construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
SC AIR-2: Comply with South Coast Air Quality Management District Rule 403,	Plan Check & Site	Prior to Issuance	Applicant &

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Fugitive Dust, by incorporating best available control measures during construction. **Requirements and Timing**: Standard condition shall be printed on construction drawings and included as a requirement in the construction contract. **Monitoring**: City staff shall conduct site inspections during construction to ensure that the standard condition is adhered to.	Inspection	of Building Permits & During Construction	Construction Contractor
SC AIR-3. Natural Gas Fireplaces. All residential fireplaces installed shall be fueled by natural gas. Wood stoves and wood burning fireplaces shall be prohibited. (Consistent with General Plan EIR Mitigation Measure AIR-D). **Requirements and Timing**: Standard condition shall be printed on construction drawings. **Monitoring**: City staff shall conduct site inspections during construction to confirm condition is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM AIR-1: Idling Restrictions. Idling of diesel-powered vehicles and equipment shall not be permitted during periods of non-active vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows: • When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control; • When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment; • To bring the equipment to the manufacturer's recommended operating temperature; • When the ambient temperature is below 40 degrees F or above 85 degrees F; or • When equipment is being repaired. **Requirements and Timing:** Mitigation measure shall be printed on construction drawings and included as a requirement in the construction contract. **Monitoring:** City staff shall conduct site inspections during construction to ensure that the mitigation measure is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM AIR-2: For all new residential units in the Project area, the developer shall install, and owner maintain, HVAC systems with air filters meeting or exceeding the most current California Building Standards Code requirement for an ASHRAE Standard 52.2 Minimum Efficiency Rating Value (MERV) of 13 (a Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size). Air	Plan Check & Site Inspection	Prior to Issuance of Building Permits, During Construction, Prior to Sign-Off on	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
filters shall be replaced at a minimum of two times per year, or more, as needed, by the owner. **Requirements and Timing**: This measure shall be printed on construction drawings and included as a requirement of the construction contract for new residential buildings. This measure shall also be recorded in a Notice to Property Owner, which shall be provided to all occupants of the Alexan Specific Plan units and for each new residential property within the Project area. **Monitoring**: City staff shall confirm that HVAC units and MERV-13 filters (or better) are installed in accordance with this measure prior to final sign off on construction for all new residential units. City staff shall also review and approve of the Notice to Property Owner language and ensure recordation prior to final sign-off on construction of new residential units in the Project area.		Construction	
Biological Resources			
MM BIO-1: Nesting Bird Protection. If vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) no more than five (5) days prior to the beginning of excavation, grading and/or vegetation removal. Surveys shall be conducted in proposed work areas, staging and storage areas, along equipment transportation routes, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus Buteo, the survey area shall encompass a 500-foot radius. Surveys shall be conducted during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If active nests are found during any preconstruction survey, a qualified biologist shall establish an appropriate buffer between the nest and active construction. The qualified biologist shall clearly mark the established buffer. The applicant shall maintain the buffer until young have fledged and are foraging independently. The qualified biologist shall document pre-construction baseline monitoring of the nest to characterize “normal” bird behavior. The qualified biologist shall monitor the nesting birds daily during construction activities and shall increase the buffer if birds are showing signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and flying away from the nest). If this is not possible, work shall cease in the area until young have fledged and the nest is no longer active (e.g. young have fledged, predation, or other non-anthropogenic nest failure). **Requirements and Timing**: Measure shall be printed	Plan Check & Site Inspection	Prior to Issuance of Building Permits, Prior to Construction, & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
on all construction drawings. **Monitoring**: City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.			
MM BIO-2a: Avoidance and Minimization Measures for Channel. Applicant shall implement the following standard construction and post-construction measures to minimize impacts to the drainage channel in the Project area: • Use standard Best Management Practices (BMPs) to minimize impacts during construction. • Construction-related equipment shall be stored in upland areas, outside of the channel except as required by project design (restoration, trash removal, etc.). • Source control and treatment control BMPs shall be implemented to minimize the potential contaminants that are generated during and after construction. Source control BMPs may include landscape planning, roof runoff controls, trash storage areas, use of alternative building materials, and education of future tenants and residents. Treatment control BMPs may include detention basins, vegetated swales (bio-swales), drain inlets, and vegetated buffers. Water quality BMPs shall be implemented throughout the project site to capture and treat contaminants. • To avoid attracting predators during construction, the project shall be kept clean of debris to the extent possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from site. • Employees shall strictly limit their activities, vehicles, equipment, and construction material to the proposed project footprint, staging areas, and designated routes of travel. • Construction limits shall be fenced with orange snow screen and exclusion fencing should be maintained until the completion of construction activities. **Requirements and Timing:** This measure shall be printed on all drawings. **Monitoring:** City staff shall confirm that measures are printed on all drawings and adhered to during construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM BIO-2b: Obtain USACE 404 Permit. If any alterations of, or discharges into, waters of the United States, including Section 404 wetlands are proposed, these alterations must be in conformance with the Sections 404 and 401 of the CWA via certification and permitting prior to any grading or construction that may impact jurisdictional area(s), as applicable. Activities that usually involve a regulated	Plan Check & Site Inspection	Prior to Issuance of Demolition or Building Permits & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments), stockpiling excavated material, mechanized removal of vegetation, and driving of piles for certain types of structures. If avoidance of federally protected wetlands is not feasible, securing 404 and 401 permits under the Clean Water Act and compliance with the federal and state "no net loss of wetlands" policy will be required in accordance with USACE and RWQCB regulations. The terms and conditions of these permits are anticipated to require mitigation consistent with Compensatory Mitigation for Losses of Aquatic Resources; Final Rule (USACE, United States Environmental Protection Agency [EPA], Federal Register, April 10, 2008). Prior to initiation of ground disturbance activities within waters of the U.S., the applicant shall submit a jurisdictional delineation of waters of the U.S. to the USACE to request a formal verification of the limits of their jurisdiction and to identify potential impacts to waters of the U.S. If the USACE determines that jurisdictional waters of the U.S. will be impacted, the appropriate CWA Section 404 permit shall be acquired by the applicant for the construction of the development. In addition, the applicant shall be required to submit a Section 401 Water Quality Certification application to the Los Angeles RWQCB. If the USACE does not assert regulatory jurisdiction, then the applicant may be required to submit a Notice of Intent to the RWQCB for their General Permit R6T-2003-0004 for minor impact projects. If required, all regulatory permits will be obtained, and all conditions will be agreed upon to prior to project implementation. The applicant shall be responsible for complying with all conditions outlined in the applicable USACE, and/or RWQCB permit. Impact minimization measures associated with permit conditions of approval may include implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required. **Requirements and Timing:** This measure shall be printed on all drawings. A Section 404 permit and Section 401 Water Quality Certification or Waiver shall be obtained prior to issuance of demolition or building permits for any portion of the development resulting in the discharge of dredged or fill material into the drainage. **Monitoring:** For developments resulting in the discharge of dredged or fill materials into the drainage in the Project area, City staff shall confirm that any required Section 404 permit and Section 401 Water Quality Certification or Waiver is obtained prior to issuance of demolition or building permits for the portion of the development impacting the jurisdictional drainage.			
MM BIO-2c: Consult CDFW on Section 1602 Requirements. If waters of the State	Plan Check & Site	Prior to Issuance	Applicant &

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
subject to CDFW's jurisdiction cannot be feasibly avoided, the applicant shall submit to CDFW a Section 1602 Notification regarding the potential need for a Lake and Streambed Alteration Agreement (LSAA) to authorize work in CDFW jurisdictional areas. If an LSAA is required, the applicant shall be responsible for complying with all conditions outlined in the LSAA, which may include wildlife habitat and streambed impact avoidance, minimization, and mitigation measures consistent with CDFW requirements for LSAAs. Impacts to development in Project areas subject to CDFW's jurisdiction shall not occur unless an LSAA is received from CDFW, correspondence is received indicating that an LSAA is not required, or the work is authorized by "operation of law" pursuant to the Fish and Game Code. **Requirements and Timing:** This measure shall be printed on all drawings. Prior to issuance of demolition or building permits for any portion of the development impacting areas subject to CDFW's jurisdiction, either the applicant receives from CDFW an LSAA or correspondence that an LSAA is not required, or the work is authorized by "operation of law" pursuant to the Fish and Game Code. **Monitoring:** For developments disturbing areas subject to CDFW's jurisdiction, City staff shall confirm that an LSAA has been obtained, if required, prior to issuance of demolition or building permits for those portions of the development subject to CDFW's jurisdiction.	Inspection	of Demolition or Building Permits & During Construction	Construction Contractor
MM BIO-2d: Habitat Mitigation Plan. Preparation of a habitat mitigation plan may be required by the CDFW as part of an LSAA process or by the USACE and the RWQCB for permitting of discharges to waters of the United States, if required. The mitigation plan would address protection measures for the jurisdictional drainage and any protected trees retained onsite, quantify the total acreage of impacts to each sensitive resource, describe creation/replacement ratio for acres impacted (typically at least 1:1), identify potential mitigation sites, provide a planting plan, and outline monitoring and maintenance requirements. The amount of compensatory acreage shall be based on the functions and values of the impacted drainage and riparian habitat. If required, the plan would be prepared by a qualified biologist pursuant to, and through consultation with, CDFW. As an alternative, equivalent mitigation credits may be purchased at a mitigation bank to offset impacts to jurisdictional resources. The mitigation plan would provide detailed information about the bank and how the purchase of credits will result in no net loss of these protected resources. Purchase of mitigation credits would be subject to approval and verification by CDFW. **Requirements and Timing:** Measure shall be printed on all drawings. If required by the permitting resource agencies (i.e., USACE, RWQCB, or CDFW), a Habitat Mitigation Plan shall be prepared and approved by the City and other responsible natural resource agencies prior to issuance of demolition or building permits for the portion of the development impacting the drainage. **Monitoring:** City staff and the City Engineer shall review and approve of the Habitat Mitigation Plan, if one is required by resource agencies, prior to issuance of demolition or building permits for	Plan Check & Site Inspection	Prior to Issuance of Demolition or Building Permits & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
the portion of the development impacting the drainage.			
SC BIO-1: Compliance with the City of Monrovia Oak Tree Preservation Ordinance (87-11), Municipal Code Section 17.20.40 is required for disturbance to protected coast live oak trees that are greater than or equal to 10" in diameter at least 2 feet above the ground. **Requirements and Timing:** This measure shall be printed on all construction drawings. Any planned removal or encroachment upon oak trees shall be shown on proposed demolition plans, site plans and grading plans, including the number and size of each oak tree, as well as the limits of the dripline of each oak tree. **Monitoring:** City staff shall review and approve the demolition plans, site plans and grading plans prior to issuance of any demolition, grading and building permits to confirm that the Oak Tree Preservation Ordinance is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Demolition or Building Permits & During Construction	Applicant & Construction Contractor
Cultural Resources and Tribal Cultural Resources			
MM CUL-1. Conduct Archaeological Sensitivity Training for Construction Personnel. The applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall include a handout and focus on how to identify archaeological resources that may be encountered during earthmoving activities; the procedures to be followed in such an event, the duties of archaeological monitors, and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation, if one is necessary. **Requirements and Timing:** This measure shall be printed on all construction drawings and grading plans. The archaeologist shall obtain signatures from each worker receiving the training and shall submit the list to the City following completion of construction. **Monitoring:** City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM CUL-2. Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered. If archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities will not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals shall be contacted and consulted, and Native American construction monitoring shall be initiated. The applicant and City shall coordinate with the archaeologist to develop an appropriate	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis. **Requirements and Timing**: This measure shall be printed on all construction drawings and grading plans. **Monitoring:** City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.			
MM CUL-3. Conduct Periodic Archaeological Resources Spot Checks during grading and earth-moving activities in Younger Alluvial Sediments. The applicant shall retain a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct periodic Archaeological Spot Checks beginning at depths below three (3) feet to determine if construction excavations have exposed or have a high probability of exposing archaeological resources. After the initial Archaeological Spot Check, further periodic checks will be conducted at the discretion of the qualified archaeologist. If the qualified archaeologist determines that construction excavations have exposed or have a high probability of exposing archaeological artifacts, ongoing construction monitoring for archaeological resources will be required. For the ongoing monitoring, the applicant shall retain a qualified archaeological monitor and Native American monitor, who will work under the guidance and direction of a professional archaeologist, who meets the qualifications set forth by the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archaeological monitor and Native American monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections as directed by the Project archaeologist. **Requirements and Timing**: This measure shall be printed on all construction drawings and grading plans. **Monitoring**: City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM CUL-4. Prepare Report Upon Completion of Monitoring Services. The archaeological monitor, under the direction of a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards, shall prepare a final report at the conclusion of archaeological monitoring (if required). The report shall be submitted to the applicant, the South Central Coastal Information Center, the City, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of construction activities	Plan Check & Site Inspection	Prior to Issuance of Building Permits, During Construction, & Prior to Sign-off on Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
and required mitigation measures. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of the resources. **Requirements and Timing:** This measure shall be printed on all construction drawings. An archaeological monitoring report shall be prepared and submitted for City review and approval prior to final sign off on construction. **Monitoring:** City staff shall review and approve the archaeological monitoring report prior to final sign off on construction.			
MM CUL-5. Cease Ground-Disturbing Activities and Notify County Coroner If Human Remains Are Encountered. If human remains are unearthed during construction, the City of Monrovia and the applicant shall comply with State Health and Safety Code Section 6050.5. The City of Monrovia and the applicant shall immediately notify the County Coroner and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment and/or disposal, with appropriate dignity, of the human remains and any associated funerary objects. Upon the reburial of the human remains, the MLD shall file a record of reburial with the NAHC and the Project archaeologist shall file a record of the reburial with the CHRIS-SCCIC. If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. **Requirements and Timing**: This measure shall be printed on all construction drawings and grading plans. **Monitoring**: City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
Geology and Soils			
MM GEO-1. Prior to the issuance of grading and building permits for all proposed development, the applicant shall retain a California registered and licensed geotechnical engineer to prepare a Geotechnical Report to provide construction and design recommendations for the proposed facilities to withstand probable seismically induced ground shaking The Geotechnical Report shall provide specific recommendations for structural foundations and specifications and procedures for grading, including the suitability of onsite materials for use as fill. All grading, drainage, and building plans shall include all recommendations of the final	Plan Check	Prior to Issuance of Building Permits	Applicant & Geotechnical Engineer

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Geotechnical Report for the development. **Requirements and Timing:** The Geotechnical Report shall be reviewed and approved by the City Department of Public Works prior to issuance of grading and permits. In addition, the geotechnical engineers for the development shall sign a title block on the grading, drainage, and building plans stating that the recommendations of the development's Geotechnical Report have been followed in the approved plans that he or she is signing. **Monitoring:** City Department of Public Works staff shall review and approve of the Geotechnical Report, and that grading, drainage, and building plans are signed by the geotechnical engineer, prior to issuance of grading and building permits.			
MM GEO-2. Conduct Paleontological Sensitivity Training for Construction Personnel. The applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology and shall conduct a paleontological sensitivity training for construction personnel prior to commencement of excavation activities. The training shall include a handout and shall focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of paleontological monitors, notification and other procedures to follow upon discovery of resources, and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. **Requirements and Timing:** This measure shall be printed on all grading and construction drawings. The paleontologist shall obtain signatures from each worker receiving the training and shall submit the list to the City following completion of construction. **Monitoring:** City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits, Prior to Construction, & During Construction	Applicant & Construction Contractor
MM GEO-3. Conduct Periodic Paleontological Spot Checks during Grading and Earth-moving Activities. The applicant shall retain a professional paleontologist who meets the qualifications set forth by the Society of Vertebrate Paleontology and shall conduct periodic Paleontological Spot Checks beginning at depths below six feet to determine if construction excavations have extended into older Quaternary deposits. After the initial paleontological spot check, further periodic checks shall be conducted at the discretion of the qualified paleontologist. If the qualified paleontologist determines that construction excavations have extended into the older Quaternary deposits, construction monitoring for paleontological resources shall be required. The applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into the older Pleistocene alluvial deposits. Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
activities, proximity to known paleontological resources and/or unique geological features, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of paleontological resources and/or unique geological features encountered. Full-time monitoring can be reduced to part-time inspections if directed by the qualified professional paleontologist. **Requirements and Timing:** This measure shall be printed on all grading and construction drawings. **Monitoring:** City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.			
MM GEO-4. Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered. If paleontological resources and/or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the applicant and the City. Work shall be allowed to continue outside of the buffer area. The applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. **Requirements and Timing:** This measure shall be printed on all grading and construction drawings. **Monitoring:** City staff shall conduct periodic inspections in the field during construction to ensure measure is adhered to.	Plan Check & Site Inspection	Prior to Issuance of Building Permits & During Construction	Applicant & Construction Contractor
MM GEO-5. Report Upon Completion of Monitoring Services. Upon completion of the above activities, the professional paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the applicant, the City, the Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of construction and required mitigation measures. **Requirements and Timing:** This measure shall be printed on all construction drawings. An archaeological monitoring report shall be prepared and submitted for City review and approval prior to final sign off on construction. **Monitoring:** City staff shall review and approve the archaeological monitoring report prior to final sign off on construction.	Plan Check & Site Inspection	Prior to Issuance of Building Permits, During Construction, & Prior to Sign-Off on Construction	Applicant & Construction Contractor
Hazards and Hazardous Materials			
MM HAZ-1: To the extent required under law based on the concentrations detected	Plan Check	Prior to Issuance	Applicant

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
at the Project, the Department of Toxic Substances Control (DTSC), or another regulatory agency delegated authority by DTSC to investigate and remediate the contaminated property (i.e., the Los Angeles County Fire Department's Health Hazardous Materials Division's Site Mitigation Unit) (herein referred to as designee), shall be notified of the results of the Phase I Environmental Site Assessments (ESA) and Phase II (ESA) prepared for the Alexan Foothills Specific Plan. All requirements of DTSC, or its designee, shall be complied with prior to issuance of grading and demolition permits for the portion of the development subject to CERCLA or California Health and Safety Code Division 20, Chapter 6.8. The TBA-impacted soil will be excavated for off-site disposal at a licensed disposal facility, in accordance with all applicable laws. In addition, soil sampling will be performed in the vicinity of the trichlorofluoromethane impacts to soil vapor and, if the source of trichlorofluoromethane in soil is identified, the trichlorofluoromethane-affected soil will also be excavated for off-site disposal at a licensed disposal facility, in accordance with all applicable laws. **Requirements and Timing:** The measures specified above shall be performed prior to grading and demolition in the portions of the development subject to CERCLA or California Health and Safety Code Division 20, Chapter 6.8 **Monitoring:** To the extent that contaminant concentrations are detected at levels exceeding prescribed volumetric thresholds, prior to issuance of grading and demolition permits for any portion of the development subject to CERCLA or California Health and Safety Code Division 20, Chapter 6.8, City staff shall obtain documentation that DTSC, or its designee, signs off and approves of the development to commence grading and demolition.		of Demolition, Grading or Building Permits	
MM HAZ-2. Prior to receipt of land use clearance for developments involving ground disturbance in ZCA Area A and C, a Phase I Environmental Site Assessment (ESA) must be performed in accordance with ASTM standards to determine the potential for contamination at the project site and need for further investigation or cleanup. If results of the Phase I ESA conclude that a subsurface investigation is warranted, a Phase II ESA shall be performed to further determine the nature and extent of contamination. If contaminants are detected at levels exceeding applicable prescribed volumetric thresholds, the reports shall be forwarded to the DTSC, or another regulatory agency delegated authority by DTSC to investigate and remediate the contaminated property (e.g., the Los Angeles County Fire Department's Health Hazardous Materials Division's Site Mitigation Unit) (herein referred to as designee). If a Phase II ESA is required by DTSC or designee, all requirements of DTSC, or its designee, shall be complied with prior to issuance of grading and demolition permits for the portion of the development subject to CERCLA and the California Health and Safety Code. **Requirements and Timing:** The measures specified above shall be performed prior to grading and demolition in the portions of the development subject to CERCLA and California Health and Safety Code Division 20, Chapter 6.8.	Land Use Clearance & Plan Check	Prior to Issuance of Land Use Clearance & Prior to Issuance of Demolition, Grading or Building Permits	Applicant

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Monitoring: Prior to issuance of grading and demolition permits for any portion of the development subject to CERCLA and California Health and Safety Code, City staff shall obtain documentation that DTSC, or its designee, signs off and approves of the development to commence grading and demolition.			
MM HAZ-3. Prior to demolition of structures older than 1950 in the Project area, a survey for lead-based paint (LBP) and asbestos containing material (ACM) shall be performed. Prior to issuance of building permits, copies of the survey report(s) shall be submitted to the City of Monrovia for review and sign off. Prior to the start of construction, the Project Applicant shall provide the City with copies of all notifications submitted to the South Coast Air Quality Management District (SCAQMD) for proposed demolition, as well as documentation of agency sign off on any abatement activities completed. **Requirements and Timing:** A LBP and ACM survey report shall be submitted to the City for review and approval prior to issuance of building permits. Notifications shall also be submitted to the SCAQMD prior to issuance of building permits. Documentation of signoff by the SCAQMD on any abatement activities performed shall be provided prior to City sign off on construction. **Monitoring:** City staff shall review and approve of LBP and ACM reports and shall confirm notifications are made to the SCAQMD prior to issuance of building permits. City staff shall confirm that the SCAQMD has signed off on any abatement activities prior to City sign off on construction.	Plan Check	Prior to Issuance of Demolition, Permits & Prior to Sign-off on Construction	Applicant
Hydrology and Water Quality			
SC HYD-1: Based upon the requirements of the City's Stormwater Management Ordinance, MMC 12.36 and the Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (MS4 NPDES) Permit issued by California Regional Water Quality Control Board, Los Angeles Region, the following shall be incorporated into development applications: • Minimize impacts from storm water runoff on the biological integrity of natural drainage systems and water bodies in accordance with requirements under the California Environmental Quality Act (California Public Resources Code Section 21100), Section 13369 of the California Water Code, Sections 319, 402(p), and 404 of the Clean Water Act, Section 6217(g) of the Coastal Zone Act Reauthorization Amendments, Section 7 of the Environmental Protection Act, and local governmental ordinances. • Maximize the percentage of permeable surfaces to allow more percolation of storm water into the ground. • Minimize the amount of storm water directed to impermeable surfaces.	Land Use Clearance & Plan Check & Site Inspection	Prior to Issuance of Land Use Clearance & Prior to Issuance of Grading or Building Permits & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
• Minimize pollution emanating from parking lots through the use of appropriate treatment control using best management and good housekeeping practices. • The applicant shall integrate Best Management Practices to ensure compliance with NPDES guidelines and the City's Stormwater Management Ordinance, MMC 12.36 to the satisfaction of the City Engineer, prior to the issuance of the grading permit. The design, implementation, construction activities and maintenance of the management devices shall mitigate and reduce pollutants in storm water discharges to the maximum extent practicable and shall be identified as on a "site specific mitigation plan." Site Specific Mitigation Plan must specifically address and provide best management practices (BMPs) either structural or non-structural to mitigate pollutants. The applicant or any successor in interest shall conduct annual maintenance inspections by the manufacturer or by a City approved inspector of all structural and/or treatment control storm water devices by following best management practices which shall also verify the legibility of all required stencils and signs which shall be repainted and labeled as necessary. Proof of such inspection shall be retained by the applicant or any successor in interest and a copy submitted to the City of Monrovia on a yearly basis.			
Noise and Vibration			
MM NOI-1: Confirm Compliance with Applicable Interior Noise Standard Requirements. Prior to the issuance of a building permit for any development in the Project area, the City shall review and approve an acoustical analysis, prepared by or on behalf of the applicant, and based on the final design, that: 1) Identifies the exterior noise levels at: a. Exterior building facades that face West Evergreen Avenue/I-210, South Magnolia Avenue, and the Metro Gold Line ROW; and b. Exterior recreation areas, including patios, that face and have a line of sight to West Evergreen Avenue/I-210, South Magnolia Avenue, and the METRO Gold Line ROW. 2) Identifies the final site and building design features that would: a. a. Attenuate exterior building façade noise levels to interior levels that do not exceed 45 CNEL in habitable rooms and 50 dBA Leq (1-hour) in other occupied rooms. Potential noise insulation site and building design features capable of achieving this requirement may include, but are not limited to:	Plan Check	Prior to Issuance of Building Permits	Applicant

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
• Sound barriers • Enhanced exterior wall construction/noise insulation design • Use of enhanced window, door, and roof assemblies with above average sound transmission class (STC) or outdoor/indoor transmission class (OITC) values • Use of mechanical, forced air ventilation systems to permit a windows closed condition in residential units. **Requirements and Timing**: An acoustical report shall be submitted to City Planning for review and approval prior to the issuance of building permits, documenting that actual interior and exterior noise level at the locations indicated in this measure, meet City and State standards. **Monitoring:** City staff shall approve the acoustical analysis prior to issuance of building permits.			
MM NOI-2: To reduce temporary construction noise impacts on adjacent land uses, the applicant or the applicant's construction contractor shall implement the following construction-period noise abatement measures for any development within the Project area: • *Construction Activity Notification.* All residential units located within 500 feet of the construction site shall be sent a notice regarding the construction schedule for the proposed development. A sign, legible at a distance of 50 feet shall also be posted at the construction site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can enquire about the construction process and register complaints. • *Noise Disturbance Coordinator.* A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator. • *Construction Traffic.* Route all construction traffic to and from the construction site via designated truck routes to the maximum extent feasible.	Plan Check & Site Inspection	Prior to Issuance of Building Permits, Prior to Construction, & During Construction	Applicant & Construction Contractor

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Prohibit construction-related heavy truck traffic in residential areas where feasible. • *Equipment Noise Controls:* The applicant and/or its construction contractor shall implement the following equipment noise control measures during all phases of construction: • *Mufflers.* All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields). • *Equipment Selection.* Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible. • *Provide Electric Hook-Ups.* If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load. • *Temporary Barriers.* During all demolition and construction activities, one or more physical barriers capable of achieving a minimum reduction in predicated noise levels by 11 dB shall be installed between future development and Magnolia Avenue and Mayflower Avenue, and between the western boundary of the Alexan Foothills Specific Plan and ZCA Area A. Potential options for achieving this level of attenuation can include, but are not limited to: o A concrete, wood, or other barrier installed at-grade (or mounted to structures located at-grade, such as K-Rail) along the property line. Such a wall/barrier shall consist of material that has a minimum rated transmission loss value of 21 dB (or equivalent rating) and shall contain no gaps in the structure through which noise may pass. o Commercially available acoustic panels or other products such as acoustic barrier blankets installed along the property line, building envelope or, if feasible and necessary, at or near sensitive residential receptor areas. o Any combination of noise barriers and commercial products capable of achieving an 11-dB reduction in construction noise levels at			

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
sensitive receptor locations. **Requirements and Planning:** This measure shall be printed on all construction drawings and included in construction contracts. **Monitoring:** City staff shall ensure that this measure is located on final construction drawings. City staff shall conduct inspections during construction to ensure that measures are implemented.			
Public Services and Recreation			
SC PS-1: Prior to the issuance of building permits, a Project applicant shall pay a fire impact fee, as required by Municipal Code Section 3.46.040, Schedule of Fees and Service Charges, or a CFD shall be established along with the approval of the special tax set at the amount established by the City. This fee shall either be paid directly to the City, be incorporated into a Communities Facilities District (CFD) fee to be paid by the applicant. **Requirement and Timing:** Development impact fees shall be paid to the City, or the establishment of the CFD along with the approval of the special tax set at the amount established by the City shall occur prior to issuance of building permits. **Monitoring:** City staff shall confirm payment of development impact fees or the establishment of the CFD and approval of the special tax have occurred prior to issuance of building permits.	Plan Check	Prior to Issuance of Building Permits	Applicant
SC PS-2: Prior to the issuance of building permits, the applicant shall pay school facility development impact fees to the Monrovia Unified School District. Proof of payment shall be provided to the City of Monrovia. **Requirement and Timing**: Development impact fees shall be paid prior to issuance of building permits. **Monitoring**: City staff shall confirm payment of development impact fees prior to issuance of building permits.	Plan Check	Prior to Issuance of Building Permits	Applicant
MM PS-1: Parkland Dedication Fee. Prior to the issuance of building permits, the applicant shall pay an in-lieu park impact fee to provide for parkland resources consistent with General Plan policy of three acres of parkland per 1,000 residents, or a CFD shall be established along with the approval of the special tax set at the amount established by the City. This fee either shall be paid directly to the City or shall be incorporated into a Community Facilities District fee to be paid by the applicant. **Requirement and Timing:** The in-lieu fee shall be paid to the City, or the establishment of the CFD along with the approval of the special tax set at the amount established by the City shall occur prior to issuance of building permits. **Monitoring:** City staff shall confirm payment of the in-lieu fee or the establishment of the CFD and the approval of the special tax prior to issuance of building permits or the recording of the final parcel map.	Plan Check	Prior to Issuance of Building Permits or the Recording of the Final Parcel Map	Applicant
Traffic			
MM T-1: The City of Monrovia has conducted an Area Traffic Study and is devising a Development Impact Fee (DIF) program to address the cumulative effects of major development projects on the transportation system in the vicinity of the Monrovia	Plan Check	Prior to Recordation of the Final Map	Applicant

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
Gold Line Station. The DIF will include each project's fair share cost of the traffic study and the recommended mitigation measure(s) identified for that project's specific impact(s). If the City Council adopts the DIF, it shall be paid prior to recording the Final Map or the amount of the DIF included in the bonds. Payment or bonding of the DIF shall fully satisfy the project's mitigation obligation for those improvements covered by the DIF. If the City Council does not adopt a DIF but does approve an Area Traffic Study that commits future applicants to pay fair share fees and obligates the City to spend those fees on specified improvements, the project will not pay a DIF, but will be responsible for their fair share as a fee in-lieu of improvements for mitigating the specific impacts identified in the project's Traffic Study. **Requirements and Timing**: The costs of those improvements or fee-in-lieu-of mitigation shall be paid prior to the Final Map recording, or a bond equal to the determined amount shall be posted prior to the Final Map recording. **Monitoring:** City staff shall confirm payment of either the costs of those improvements or fee-in-lieu of mitigation prior to recordation of the Final Map.			
Utilities and Service Systems			
MM UT-1. Prior to issuance of building permits or the approval of a final map, whichever occurs first, the applicant shall agree to the conditions as outlined herein and provide the following: a) provide a "Can and Will Serve" letter by the City of Monrovia's Department of Public Works to provide wastewater service to the development indicating the feasibility and conditions of providing service to the development, and b) identify and show on the site plans and tentative map the proposed layout and design of the development and how it will accomplish City Department of Public Works' conditions of approval for the development. **Requirements and Timing:** A Can and Will serve letter for wastewater service shall be obtained prior to issuance of building permits or approval of a final map, whichever occurs first. **Monitoring:** City staff shall confirm issuance of the Can and Will Serve letter for wastewater service prior to issuance of building permits or approval of a final map, whichever occurs first.	Plan Check	Prior to Issuance of Building Permits or Approval of the Final Map, whichever comes first	Applicant
MM UT-2. The applicant for development shall pay fair-share in-lieu fees for completion of upgrades to the nearby water system to support the development. Improvements will include the addition of one booster pump and upgrade of 980 feet of pipeline along Magnolia Avenue between Duarte Road and Evergreen Avenue. **Requirement and Timing:** In lieu fees shall be paid prior to issuance of building permits. **Monitoring:** City staff shall confirm payment of in lieu fees prior to issuance of building permits.	Plan Check	Prior to Issuance of Building Permits	Applicant
MM UT-3. Prior to issuance of building permits or the approval of a final map, whichever occurs first, the applicant shall agree to the conditions as outlined herein and provide the following: a) provide a "Can and Will Serve" letter by the City of Monrovia's Department of Public Works to provide water service to the development	Plan Check	Prior to Issuance of Building Permits or Approval of the Final Map,	Applicant

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)
indicating the feasibility and conditions of providing service to the development, and b) identify and show on the site plans and tentative map the proposed layout and design of the development and how it will accomplish City Department of Public Works' conditions of approval for the development. **Requirements and Timing:** A Can and Will serve letter for water service shall be obtained prior to issuance of building permits or approval of a final map, whichever occurs first. **Monitoring:** City staff shall confirm issuance of the Can and Will Serve letter for water service prior to issuance of building permits or approval of a final map, whichever occurs first.		whichever comes first	
SC UT-1: Applicants shall comply with the City of Monrovia Construction and Demolition (C&D) Disposal and Recycling Program. The Program includes submitting a C&D Recycling Program Permit Application and a Waste Management Plan to the Public Works Department Environmental Services Division and diverting 50 percent of the total construction and demolition debris generated by the development. **Requirements and Timing:** Applicants shall submit Waste Management Plans to the City Department of Public Works Environmental Services Division for review and approval prior to issuance of demolition permits. The Waste Management Plan shall be implemented and adhered to throughout construction. **Monitoring:** City Department of Public Works Environmental Services Division shall review and approve of Waste Management Plans prior to issuance of demolition permits; City staff shall confirm approval of the Waste Management Plan prior to issuance of building permits and shall confirm compliance with the Waste Management Plan prior to sign off on construction.	Plan Check & Site Inspection	Prior to Issuance of Demolition Permits, During Construction, & Prior to Sign-Off on Construction	Applicant