

# DEPARTMENT OF CITY PLANNING

# RECOMMENDATION REPORT

# **City Planning Commission**

**Date:** July 27, 2023 Time: After 8:30 A.M.\*

Place: Van Nuys City Hall, Council Chamber, 2nd

floor.

This meeting may be available virtually, in hybrid format. Please check the meeting agenda approximately 72 hours before the

meeting for additional information.

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oards-hearings

or contact cpc@lacity.org

**Public Hearing:** Initial Hearing May 2, 2023;

Limited Hearing July 27, 2023

Appeal Status: The Density Bonus on-menu

incentives, Site Plan Review, and Project Permit Compliance are appealable to the City Council by any party. The Density Bonus off-menu waivers are not appealable. The Waiver of Development Standards is appealable by the applicant only.

**Expiration Date:** July 27, 2023

Multiple Approval: Yes

Case No.: CPC-2021-10345-DB-SPP-SPR-

WDI-VHCA

CEQA No.: ENV-2020-10346-CE

Incidental Cases: n/a

Related Cases: CPC-2017-3759-DB-SPR-SPP

Council No.: 4 – Nithya Raman

Plan Area: Sherman Oaks - Studio City -

Toluca Lake - Cahuenga Pass

Specific Plan: Ventura/Cahuenga Boulevard

Corridor

Redevelopment n/a

Plan:

Overlay: River Implementation Overlay

District (RIO)

Certified NC: Studio City

GPLU: General Commercial

Zone: C2-1VL-RIO

Applicant: Ezra Kest,

Universal City Guest Home, L.P.

Representative: Jonathan Riker, Venable LLP

PROJECT

**LOCATION:** 4260 North Arch Drive (and 11201 West Ventura Boulevard)

PROPOSED PROJECT:

The project involves the construction, use, and maintenance of a new multifamily residential building with 129 dwelling units, including 17 set aside for Very Low Income Households. The proposed building will have approximately 117,000 square feet of floor area and will reach a maximum height of 75 feet with stepbacks at the upper floors at the rear of the building. The proposed project will provide 145 parking spaces, 43 of which will be compact spaces. Parking is provided within a partially subterranean garage. The proposed project will provide a publicly accessible path between Arch Drive and the Los Angeles River path.

# REQUESTED ACTIONS:

- 1. A CEQA exemption pursuant to CEQA Guidelines, Section, 15332, Class 32 (Urban Infill), and that there is no substantial evidence demonstrating that an exception to a categorical exemption pursuant to CEQA Guidelines, Section 15300.2 applies;
- 2. Pursuant to Los Angeles Municipal Code (LAMC) Section 12.22-A,25(g) a Density Bonus for a housing development project totaling 129 dwelling units, including 17 units set aside for Very Low Income (VLI) Households, and requesting the following three incentives and two waivers of development standards:
  - a. An on-menu incentive to permit a Floor Area Ratio (FAR) of 3:1 for a project located on a Major Highway within 1,500 feet of a Transit Stop in lieu of the 1:1 FAR limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 6.B.3;
  - b. An on-menu incentive to permit up to a 20% increase in lot coverage to allow a maximum of 72% lot coverage in lieu of 60% lot coverage limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 7.B;
  - c. An off-menu incentive to permit 30-foot increase in building height to allow a maximum height of 75 feet in-lieu of the 45-foot building height limitation of the C2-1VL-RO Zone; and to allow building height to exceed of the transitional height limitations pursuant to LAMC Section 12.21.1-A,10;
  - d. A waiver of development standards to allow up to 43 of the 132 required parking spaces to be provided as compact spaces in-lieu of the compact parking limitations pursuant to LAMC 12.21-A,5(c); and
  - e. A waiver of development standards to permit a multi-family development with deviations from Commercial Corner Development Standards pursuant to LAMC 12.22-A,23(a) including deviations for height (LAMC 12.22-A,23(a)(1)) and landscape setbacks (LAMC 12.22-A,23(a)(10)(i));
- 3. Pursuant to LAMC Section 16.05, a Site Plan Review for a project with 50 or more dwelling units;
- 4. Pursuant to LAMC Section 11.5.7 C, a Project Permit Compliance Review for a project within the Ventura/Cahuenga Boulevard Corridor Specific Plan, and
- 5. Pursuant to LAMC Section 12.37 I.3, a Waiver of Dedication and Improvements to the Public Right of Way along Arch Drive and Ventura Boulevard.

#### **RECOMMENDED ACTIONS:**

- Determine, that based on the whole of the administrative record, the project is exempt from CEQA pursuant to CEQA Guidelines, Section 15332, Class 32 (Urban Infill), and there is no substantial evidence demonstrating that an exception to a categorical exemption pursuant to CEQA Guidelines, Section 15300.2 applies;
- Approve a Density Bonus for a residential-commercial development project consisting of 129 dwelling units, of which 17 units will be set aside for Very Low Income Households, and requesting the following incentives and waivers:

- a. An on-menu incentive to permit a Floor Area Ratio (FAR) of 3:1 for a project located on a Major Highway within 1,500 feet of a Transit Stop in lieu of the 1:1 FAR limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 6.B.3;
- An on-menu incentive to permit up to a 20% increase in lot coverage to allow a maximum of 72% lot coverage in lieu of 60% lot coverage limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 7.B;
- c. An off-menu incentive to permit 30-foot increase in building height to allow a maximum height of 75 feet in-lieu of the 45-foot building height limitation of the C2-1VL-RO Zone; and to allow building height to exceed of the transitional height limitations pursuant to LAMC Section 12.21.1-A,10;
- d. A waiver of development standards to allow up to 43 of the 132 required parking spaces to be provided as compact spaces in-lieu of the compact parking limitations pursuant to LAMC 12.21-A,5(c); and
- e. A waiver of development standards to permit a multi-family development with deviations from Commercial Corner Development Standards pursuant to LAMC 12.22-A,23(a) including deviations for height (LAMC 12.22-A,23(a)(1)) and landscape setbacks (LAMC 12.22-A,23(a)(10)(i)); and
- 3. **Approve**, pursuant to LAMC Section 11.5.7 C, a Project Permit Compliance Review for a project within the Ventura/Cahuenga Boulevard Corridor Specific Plan;
- **4. Approve**, pursuant to LAMC Section 16.05, a Site Plan Review for a project with 50 or more dwelling units;
- 5. **Approve**, pursuant to LAMC Section 12.37 I.3, a Waiver of Dedication and Improvements to the Public Right of Way along Arch Drive and Ventura Boulevard; and
- 6. **Adopt** the attached Conditions of Approval and Findings.

VINCENT P. BERTONI, AICP

Director of Planning

Heather Bleemers Senior City Planner Renata Ooms City Planner

**ADVICE TO PUBLIC:** \*The exact time this report will be considered during the meeting is uncertain since there may be several other items on the agenda. Written communications may be mailed to the *Commission Secretariat, Room 272, City Hall, 200 North Spring Street, Los Angeles, CA 90012* (Phone No. 213-978-1300). While all written communications are given to the Commission for consideration, the initial packets are sent to the week prior to the Commission's meeting date. If you challenge these agenda items in court, you may be limited to raising only those issues you or someone else raised at the public hearing agendized herein, or in written correspondence on these matters delivered to this agency at or prior to the public hearing. As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability, and upon request, will provide reasonable accommodation to ensure equal access to these programs, services and activities. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or other services may be provided upon request. To ensure availability of services, please make your request not later than three working days (72 hours) prior to the meeting by calling the Commission Secretariat at (213) 978-1300.

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# **PROJECT ANALYSIS**

#### **PROJECT SUMMARY**



Figure 1. Rendering of Proposed Development as seen from Arch Drive and Ventura Boulevard

The Project proposes the construction, use and maintenance of a new five-story multifamily residential building with 129 dwelling units, including 17 set aside for Very Low Income Households. In exchange for reserving a portion of the project for affordable housing, the applicant requests three Incentives for increases in Floor Area Ratio (FAR) (on-menu), lot coverage (on-menu) and height (off-menu) as well as two Waivers of Development Standards to provide additional compact parking spaces in lieu of standard spaces and to allow deviations from Commercial Corner Development Standards.

The proposed building, shown in the rendering in **Figure 1** above, will include approximately 117,000 square feet of floor area (FAR 3:1) and will reach a maximum height of 75 feet with stepbacks at the upper floors at the rear of the building. The project would provide a mix of 20 studio units, 73 one-bedroom units, and 36 two-bedroom units. A total of 13,800 square feet of open space would be provided, including an interior courtyard with a pool deck, private balconies, and indoor community amenity areas (recreation room, fitness room, co-working spaces). Parking is provided within a partially subterranean garage with 145 parking spaces. The basement level features a bicycle storage room with a bike work area.

The building will observe an 18-inch front yard, a rear yard of 18 feet, an eight-foot western side yard and a 15-foot eastern side yard. The easter side yard will feature a publicly accessible pedestrian path connecting Arch Drive and the Los Angeles River Path. The on-site path, shown in **Figure 2**, will be approximately 15-feet in width and will include landscaping, hardscaping, and sitting areas.

The building reaches a height of approximately 45 feet along the street frontage and vertical variations in building massing and materials break up the front facade along the Arch Drive frontage. Community amenities including a lobby with glazing and a front deck activate the street at the corner of Ventura Boulevard and Arch. The eastern portion of the street frontage is

treated with landscape planters and includes ground floor dwelling units. The garage takes ingress and egress access from a single driveway near the center of the street frontage.

The building reaches a height of approximately 45 feet along the street frontage and vertical variations in building massing and materials break up the front facade along the Arch Drive frontage. Community amenities including a lobby with glazing and a front deck activate the street at the corner of Ventura Boulevard and Arch. The eastern portion of the street frontage is treated with landscape planters and includes ground floor dwelling units. The garage takes ingress and egress access from a single driveway near the center of the street frontage.

The building has two wings, oriented around a central pool deck which is open to the sky and open at the rear, with views towards the Los Angeles River. Most of the open space is located on the pool deck, which will be programmed with amenities meant to encourage communal use by residents. There is a stairwell connecting the pool deck to the rear yard area which includes a path for walking as well as access to the LA River path. Several residential units include private patios and balconies. The rear facade steps back at upper levels as shown in the rending in **Figure 3**. The ground floor plan is shown in **Figure 4**.



**Figure 2:** (Left) Site plan showing 15-foot wide path to river. (Right) rendering of the on-site path connecting Arch Drive to the LA River path.



Figure 3: Rendering of northern side of proposed project abuting the Los Angeles River.



Figure 4: Ground Floor with lobby, front deck, pool deck, amenity rooms, and dwelling units.

#### **PROJECT BACKGROUND**

#### **Project Site**

The subject property is comprised of two gently sloping lots with a total lot area of 44,886 net square feet (1.03 acres) in the Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass Community Plan area. The property has a combined frontage of approximately 165 feet along the north side of Arch Drive, approximately 20 feet along the north side of Ventura Boulevard, and approximately 230 feet along the southern bank of the Los Angeles River.

The site has been vacant since 2018 when a former facility for the elderly received demolition permits and was demolished in conjunction with a previously approved construction project for this site. As part of the current application, the Los Angeles Housing Department (LAHD) determined that the subject site does not have a replacement unit requirement related to the demolished former facility for the elderly.

# **General Plan Land Use Designation and Zoning**

The project site is located within the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan, the Ventura/Cahuenga Boulevard Corridor Specific Plan, the Studio City/Cahuenga Pass Streetscape Plan, and the River Improvement Overlay District (RIO). The

Community Plan designates the subject property for General Commercial with corresponding zones of C1.5, C2, C4, CR, RAS3, RAS4, and P Zone. The site is zoned C2-1VL-RIO (See **Figure 5**) and is therefore consistent with the General Plan Land Use Designation.



Figure 5. Zoning of Project Site (in blue outline) and surrounding area. ZIMAS.



Figure 6. Aerial view of Project Site (in red outline) and Surrounding Area. Google Maps.

The site is located within the Neighborhood and General Commercial designation of the Ventura/Cahuenga Boulevard Corridor Specific Plan which includes development limitations and/or requirements that are more restrictive than the zoning code. The Studio City/Cahuenga Pass Streetscape Plan requires certain streetscape improvements, such as street trees, street lighting, street furniture, and sidewalk brickwork treatment. The site is also located within the River Improvement Overlay District, with the rear of the site adjoining the Los Angeles River.

The site is approximately 1.04 kilometers from the Hollywood Fault and is within a Liquefaction Area. The project site has not been identified as a historic resource by local, state or federal agencies and does not involve the demolition of a historic structure that was placed on a national, state, or local historic register prior to the submission of the application. The site was not found to be a potential historic resource based on the City's HistoricPlacesLA website or SurveyLA, the citywide survey of Los Angeles.

# **Surrounding Properties**

The project site is located in an urbanized area surrounded by various built-up land uses as shown in Figure 6. Properties to the east and southeast are zoned [Q]R4-1-RIO, designated for Medium Residential Land Uses and improved predominantly with a mix of two- to four-story multi-family buildings along Arch Drive. Approximately two properties are developed with 5-story multi-family buildings. The east adjoining property is a two-story, 12-unit, multi-family building (built in 1989). Properties to the west and southwest, are zoned C2-1VL-RIO, designated for General Commercial, and developed predominantly with a mix of commercial uses, including the west adjoining shopping center, Studio City Place, as well as stand-alone restaurant buildings, retail and office buildings. Directly across Ventura Boulevard are undeveloped hillside properties (mostly city owned). Properties to the north are zoned OS-1XI-RIO and developed with the Los Angeles River (LA County Flood Control) and further north are zoned R3-1-RIO and R1-1-RIO, developed with multi-family and single-family neighborhoods. Lastly, the east abutting property, across Arch Drive, is zoned PF-1XL-RIO, and is developed with a DWP power distributing Station No. 98, the building (constructed in 1960), is listed/identified on Survey LA, as a potential individual historic resource noted as an example of a post-World War II DWP Building. The DWP frontage on Arch Drive includes a drought tolerant landscape area with accessible decomposed granite pathways.

# **Previous Density Bonus Entitlement**

In 2020, the same applicant received approval for a Density Bonus project at this same site. The 2020 grant included approvals for the demolition of a vacant eldercare facility and the construction, use, and maintenance of a six-story mixed use building with 106 residential units and 1,201 square feet of ground floor commercial uses. Twelve units were reserved for Very Low Income Households. The building was approved for 64 feet in height (71 feet to top of stairwell), and included approximately 105,863 square-feet of floor area with one and one half levels of subterranean parking. The project included 123 parking spaces and 90 bicycle spaces.

The current proposal includes additional market rate and affordable units but maintains a similar building envelope, including maintaining lower building height along the street fronting building facade. See **Figure 7**.



Figure 7. Left: Previously approved project from 2020. Right: Currently proposed project.

#### Streets, Circulation, and Transit

<u>Arch Drive</u> to the southeast, is a Local Street, with a designated 60 foot wide right-of-way and 36 foot wide roadway. The street is currently improved with a 50 foot wide right-of-way, sidewalk, curb, and gutter. A 5-foot dedication is required as well as improvements to achieve an 18-foot half roadway with 12-foot wide sidewalk.

<u>Ventura Boulevard</u> to the south, is a Boulevard II, with a designated 110 foot wide right-of-way and 80-foot wide roadway. The street is currently improved with a 100 foot wide right-of-way, and sidewalk on the subject side. A 5-foot dedication is required and a 20-foot radius property

return at the intersection with Arch Drive, as well as any needed sidewalk and parkway improvements.

<u>Public Transit.</u> The site is approximately 0.7 mile from the Universal City/Studio City Metro Station and less than 100 feet from Metro Bus Route 240 (NextGen Rapid) at the corner of Arch Drive and Ventura Boulevard.

#### **Relevant Cases**

#### Subject Property:

<u>Case No. CPC-2017-3759-DB-SPR-SPP</u> - On February 27, 2020, the City Planning Commission approved the following entitlements, however, the grant was terminated at the request of the applicant prior to construction of the proposed building.

- 1. Density Bonus Compliance Review, for a project totaling 106 dwelling units, including 12 units reserved for Very Low Income Households with the following two Incentives:
  - a. An On-Menu Incentive to permit an FAR of 3:1 in lieu of 1:1.
  - b. An Off-Menu Incentive to increase height to 64 feet in lieu of 45 feet and in lieu of transitional height.
- 2. Site Plan Review for a project with 50 or more dwelling units.
- 3. Project Permit Compliance Review for a project within the Ventura/Cahuenga Boulevard Corridor Specific Plan.

<u>Certificate of Occupancy</u> - Issued September 2, 1971 for a two-story, 41,697 square foot, Assisted Living Facility, with 73 guest rooms and 49 required and provided parking spaces. The building has since been demolished.

CPC-2008-3125-CA (Ordinance No. 183,144 and 183,145) - On August 20, 2014, the Los Angeles River Improvement Overlay (RIO) District and River Design Guidelines was established for designated areas adjacent to the City's waterways with the following purposes: Assure that development within river adjacent areas are in accordance with design policies adopted in the City's General Plan Framework; Contribute to the overall environmental and ecological health of the City's watersheds; Establish a positive interface between River adjacent property and River parks and/or greenways; Promote pedestrian, bicycle and other multimodal connections to the River and its surrounding neighborhoods; Provide native habitat and support local species; Provide an aesthetically pleasing environment for pedestrians and bicyclists accessing the River area; Provide public access to the River at least every one-half mile; Promote the river identity of river adjacent communities; Support the Low Impact Development Ordinance, the City's Irrigation Guidelines, and the Standard Urban Stormwater Maintenance Program.

<u>Surrounding Properties</u>: There are no Density Bonus cases within 1,500 feet of the subject site. The following are Waiver of Dedication and Improvement and Specific Plan Project Permit Compliance cases within 1,000 feet of the subject site and filed within the past five years.

<u>Case No. ZA-2023-1634-CUB-SPP-WDI:</u> On June 22, 2023, the Zoning Administrator approved the following entitlements for 11263 - 11325 West Ventura Boulevard: a Conditional Use Permit to allow the sale of beer and wine for off-site consumption in conjunction with a proposed grocery market; a Project Permit Compliance Review for conformance with the Ventura/Cahuenga Boulevard Corridor Specific Plan; and a Waiver of Dedication and Improvement to waive the required dedication and improvements of a five-foot dedication along Ventura Boulevard, a designated Boulevard II.

Case No. ZA-2021-647-SPP-SPPA-CUB-WDI: On June 28, 2021, the Zoning Administrator approved the following entitlements for 11263 - 11325 West Ventura Boulevard: a Conditional Use Permit to allow the sale of beer and wine for off-site consumption in conjunction with a grocery market; a Project Permit Compliance Review for conformance with the Ventura/Cahuenga Boulevard Corridor Specific Plan; a Project Permit Adjustment to allow a 14 percent increase of 1,150 square feet of Wall SIgn Area in lieu of the 1,013 square feet allowed by the Ventura/Cahuenga Boulevard Corridor Specific Plan; and a Waiver of Dedication and Improvement to waive the required dedication and improvements of a five-foot dedication along Ventura Boulevard, a designated Boulevard II.

<u>Case No. DIR-2018-73-SPP:</u> On February 8, 2018, the Director of Planning approved a Project Permit Compliance Review for 11110 and 11112 Ventura Boulevard, Suite A, to permit a change of use from office/studio to medical offices on the ground floor and to convert an existing garage into floor area, resulting in an increase in parking requirement, interior and exterior improvements and new signage.

<u>Case No. DIR-2017-1098-SPP:</u> On May 26, 2017, the Director of Planning approved a Project Permit Compliance Review for 11288 Ventura Boulevard to permit the installation of a master sign program for a commercial shopping center on a 13,875 square foot lot.

<u>Case No. DIR-2016-4099-SPP:</u> On July 27, 2017, the Director of Planning approved a Project Permit Compliance Review for 11211-11261 West Ventura Boulevard to permit the establishment of a main sign plan for a shopping center (Studio Clty Place) on a 3.4 acre commercial site.

<u>Case No. DIR-2015-4094-SPP</u>: On November 30, 2015, the Director of Planning approved a Project Permit Compliance Review for 11288 Ventura Coulvare #C and #D to permit the change of use from a nail salon / retail to restaurant in order to expand a neighboring restaurant use. The project also includes a parking deficiency of six spaces and a new wall and window signs.

<u>Case No. DIR-2014-2954-SPP:</u> On September 26, 2014, the Director of Planning approved a Project Permit Compliance Review for 11239 Ventura Boulevard to permit the installation of two wall signs, the refacing of a legal non-conforming pole sign and the installation of window signs.

# **Requested Actions**

The applicant is requesting:

- a **Density Bonus** with incentives and waivers of certain development standards to facilitate the development of the proposed project. Staff recommends that the project be approved with all requested incentives and waivers as follows:
  - a. An on-menu incentive to permit a **Floor Area Ratio** (FAR) of 3:1 for a project located on a Major Highway within 1,500 feet of a Transit Stop in lieu of the 1:1 FAR limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan;
  - An on-menu incentive to permit up to a 20% increase in lot coverage to allow a maximum of 72% lot coverage in lieu of 60% lot coverage limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan;

- c. An off-menu incentive to permit 30-foot increase in building **height** to allow a maximum height of 75 feet in-lieu of the 45-foot height limitation of the C2-1VL-RO Zone; and to allow building height to exceed of the transitional height limitations;
- d. A waiver of development standards to allow up to 43 of the parking spaces to be provided as **compact parking spaces** in-lieu of 16 compact spaces; and
- e. A waiver of development standards to permit a multi-family development with deviations from **Commercial Corner Development Standards** including deviations for height and landscape setbacks; and
- 2. A **Site Plan Review** entitlement, Pursuant to LAMC Section 16.05, for a development project resulting in an increase of 50 or more residential dwelling units.
- 3. A **Project Permit Compliance Review** for a project within the Ventura/Cahuenga Boulevard Corridor Specific Plan.
- 4. A Waiver of Dedication and Improvements to the Public Right of Way along Arch Drive and Ventura Boulevard such that 2-foot dedications are provided on both rights of way in lieu of the otherwise required 5-foot dedications. This request was added following the public hearing and in response to the Studio City Neighborhood Council's request to ensure that the curb alignment be maintained as it is today and that no road widening would occur.

As detailed in the Findings, the incentives for increased FAR, lot coverage and height are required to provide for affordable housing costs. As detailed in the Findings for Waiver of Development Standards, the Code requirements for parking space sizes and Commercial Corner Development Standards would have the effect of physically precluding construction of the proposed project. The incentives and waivers will financially and physically accommodate the construction of affordable units in the 129-unit development.

#### **Density Bonus / Affordable Housing Incentive Program**

In accordance with California Government Code Section 65915 and LAMC Section 12.22 A,25, in exchange for setting aside a minimum percentage of the project's units for affordable housing, the project is eligible for a density bonus, reduction in parking, and incentives and waivers allowing for relief from development standards. The applicant has requested to utilize the provisions of City and State Density Bonus laws as follows:

<u>Density</u>. The subject property is zoned C2-1VL-RIO, which limits density to one dwelling unit per 400 square feet of lot area. The subject property has a total lot area of 44,866.8 square feet, and as such, the permitted by-right density on the subject property is 112.2 units (113 rounded up for base density). In exchange for reserving a portion of the project toward affordable housing, the applicant is entitled to a maximum 35 percent by-right density bonus equivalent to a total of 153 units. The applicant is only seeking a 14% percent density bonus to allow for a total of 129 dwelling units in exchange for setting aside 17 units for Very Income Households (15 percent of the base density).

<u>Automobile Parking</u>. AB 2345 made changes to the parking provisions in Density Bonus law. For all Density Bonus projects, the maximum parking ratio that can be required for two- and three-bedroom units is 1.5 spaces per unit and 2.5 spaces per unit for four or more bedrooms. Zero- and one-bedroom units will continue to require one space. The new parking ratios effectively replaced the ratios provided in LAMC 12.22 A.25(d)(1). The project is required to

provide a total of 132 residential parking spaces (after subtracting 15 spaces for a by-right 10% bicycle parking replacement). The project has elected to provide 145 total spaces (with 43 spaces provided as compact parking spaces, in lieu of 16 compact spaces). Electric Vehicle charging stations will be installed on a total of 15 spaces (10% of total provided spaces) and 29 spaces will be ready for future EV installation (20% of total provided spaces).

<u>Incentives</u>. Pursuant to the LAMC and California Government Code Section 65915, the applicant is entitled to three incentives in exchange for reserving a minimum of 15 percent of the base density for Very Low Income households. The proposed project will set aside 17 units, which is equal to more than 15 percent of the base number of units, for Very Low Income households. Accordingly, Staff has recommended that the project be granted three incentives as follows:

- a. **Floor Area Ratio (On-Menu).** The Ventura/Cahuenga Boulevard Corridor Specific Plan designates the subject site with the "Neighborhood and General Commercial" Plan Designation. Pursuant to the Section 6.B.3 of the Specific Plan, the maximum FAR for "Neighborhood and General Commercial" is 1:1. The net lot area of the subject property is 44,886.8 square feet and the maximum floor area of the underlying 1:1 FAR is 43,936 square feet. Qualifying density bonus projects can qualify for an on-menu Incentive of 3:1 FAR if the project site is within 1,500 feet of a rapid bus stop¹. In this case, the site is located less than 100 feet from Metro Bus Route 240 (NextGen Rapid) at the corner of Arch Drive and Ventura Boulevard. The On-Menu Density Bonus Incentive to increase the maximum FAR to 3 to 1 would allow for 131,808 square feet of floor area. The proposed project has a floor area of 116,312 square feet (an FAR of 2.7:1). Approval of the incentive would permit exceptions to zoning requirements that result in building design or construction efficiencies that facilitate affordable housing costs.
- b. Lot Coverage (On-Menu). Specific Plan Section 7.B limits log coverage in Neighborhood and General Commercial Plan Designation Areas. Buildings and structures in these areas shall cover no more than 60 percent of the lot area. Qualifying density bonus project may request an on-menu incentive to permit up to a 20% increase in lot coverage. The applicant requests, and Planning recommends approval of an incentive to allow allow a maximum of 72% lot coverage in lieu of 60% lot coverage limitation pursuant to the Specific Plan.
- c. **Height (Off-Menu).** The subject C2 zoned property is within a 1VL height district which limits building height to 45 feet. Additionally, commercially zoned lots which abut R1 or less restrive zones are subject to transitional height limitations pursuant to LAMC Section 12.21.1.A.10. Within 200 feet of an R1 zoned lot the following height restrictions apply: maximum of 25 feet within 49 feet of the R1 lot, maximum of 33 feet within 50-99 feet of the R1 lot, and maximum of 61 feet within 100-199 feet of an R1 lot. The subject property abuts the Los Angeles River which is zoned OS-1XL-RIO and thus is subject to transitional height.

The on-menu Density Bonus Incentive for height allows for an increase in 11 feet. Staff recommends granting an off-menu incentive to allow an increase in the maximum height by 30 feet for a maximum height of 75 feet (five stories) and to deviate from the transitional height requirement to instead require that the building height limit shall be stepped-back at a 45 degree angle as measured from a horizontal plane originating 25 feet above grade at the property line of the adjoining lot in OS Zone.

<sup>&</sup>lt;sup>1</sup> Qualifying density bonus projects can qualify for an on-menu Incentive of 3:1 FAR if the project site is within 1,500 feet of a rapid bus stop. This is based on the definition for Transit Stop in the Density Bonus Ordinance 12.22.25 (b) that reads: "A Metro Rapid Bus stop located along a Metro Rapid Bus route; or, for a HousingDevelopment Project consisting entirely of Restricted Affordable Units, any bus stop located along a Metro Rapid Bus route."

<u>Waiver of Development Standards</u>. Per California Government Code Section 65915(e)(1) and Section 12.25 A.25(g) of the LAMC, a project that provides at least 15 percent of the base density for Very Low Income households qualifies for three incentives, and may also request other "waiver(s) or reduction(s) of development standards that will have the effect of physically precluding the construction of a development meeting the [affordable set-aside percentage] criteria...at the densities or with the concessions or incentives permitted under [State Density Bonus Law]". In addition to the three recommended incentives, staff has recommended that the project be granted two Waivers of Development Standards, as follows:

- a. Compact Parking Spaces. The project requires a minimum of 132 vehicle parking spaces (after replacing 15 spaces with bicycle parking) and is provided 145. Pursuant to LAMC Section 12.21 A.5. (c), only parking stalls in excess of one parking stall per dwelling unit may be designed as compact parking stalls to accommodate compact cars. For the subject 129 unit project, only 16 of the 145 provided parking spaces may be provided as compact stalls. The applicant is requesting a waiver to allow a larger portion of the spaces to be provided as compact. The applicant requests, and Planning recommends, that up to 43 of the parking spaces may be provided as compact parking spaces in lieu 16 spaces.
- b. Commercial Corner Development Standards. Although the subject project does not include commercial uses, it is subject to commercial corner standards based on its C2 zoning and the adjacent OS zone. Commercial Corner regulations include numerous development standards, many of which are not applicable to this project as there are no commercial uses on site. However, standards do include a 45-foot height limitation and requirements for a five-foot landscape buffer at the property line. The applicant has already requested a deviation from height as a Density Bonus incentive. The applicant proposes yards and setback areas that comply with the Specific Plan, including an 18-inch front yard setback which precludes providing a five foot landscape buffer. The applicant also proposes a 15-foot easterly side yard to accommodate a required pedestrian path which is proposed with a combination of hardscaping and landscaping. The applicant has requested, and Planning recommends approval of a waiver of development standards to permit the multi-family development deviations from Commercial Corner Development Standards including deviations for height and landscape setbacks.

#### **Waiver of Dedications**

Following the May 2023 Public Hearing. the applicant added a request to waive a portion of the required dedications. The request was in response to the Studio City Neighborhood Council's suggestion to maintain the curb alignment as it is today. The intent of the request is to waive the portion of the dedication related to widening the roadway along Arch Drive and provide only the portion of the dedication needed to bring the sidewalk up to standard dimensions.

The requirement for Arch Drive is to dedicate five feet to complete a 30-foot half right-of-way in accordance with Local Street standards to widen the existing 15-foot half roadway by 3-feet to provide an 18-foot wide half roadway and widen the existing 10-foot wide sidewalk by 2-feet to provide a 12-foot sidewalk. The applicant has requested to waive the 3-foot portion of the 5-foot required dedication related to the widening of the roadway and proposes instead to dedicate 2-feet of private property to widen the sidewalk from 10 to 12-feet.

The requirement for Ventura Boulevard (Boulevard II) is to dedicate five feet to complete a 55-foot half right-of-way and a 20-foot radius property line return at the intersection with Arch Drive. As shown in **Figure 9**, the majority of the project fronts Arch Drive and the curved corner of the site fronts Ventura Boulevard. The applicant requests a waiver of dedication to provide a

2-foot dedication in lieu of the full 5-foot dedication to align with the requested dedication along Arch Drive.

The applicant proposes to implement all required improvements to the sidewalk and roadway such as bringing roadway and sidewalk surfacing into good repair, constructing a landscaped parkway on Arch Drive to match the adjacent sidewalk and parkway to the east, and constructing an access ramp at the intersection with Ventura Boulevard to comply with ADA requirements.

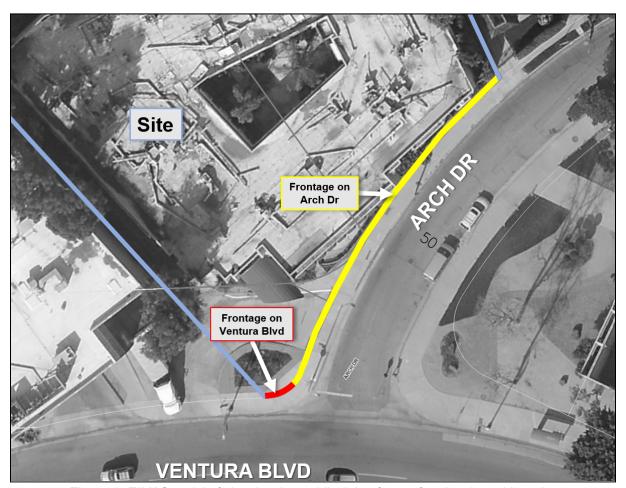


Figure 9. ZIMAS aerial of site showing public right of ways fronting the subject site.

#### **Housing Replacement**

Pursuant to Government Code Section 65915(c)(3) and State Assembly Bills 2222 and 2556, applicants of Density Bonus projects filed as of January 1, 2015 must demonstrate compliance with the housing replacement provisions which require replacement of rental dwelling units that either exist at the time of application for a Density Bonus project, or have been vacated or demolished in the five-year period preceding the application of the project. This applies to all pre-existing units that have been subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of lower or very low income; subject to any other form or rent or price control; or occupied by Low or Very Low Income households. On August 22, 2022, the Los Angeles Housing Department (LAHD) determined that there are no replacement requirements for this site.

#### **PUBLIC HEARING**

A public hearing on this matter was held by the Hearing Officer virtually on May 2, 2023. Comments from the hearing are documented in Public Hearing and Communications, Page P-1.

#### **ISSUES AND CONSIDERATIONS**

# **Urban Design Studio's Professional Volunteer Program (PVP)**

The proposed project was reviewed by the PVP in October 2022. The PVP appreciated the building massing; the angled balconies with vertical picket railings which add interest; the generous, well-considered lobby/lounge/co-working space; the connection of the lobby to the partly sheltered outdoor area in the front yard; and the landscaping and retention of many perimeter trees.

Critiques focused on access to the river and lower rear yard from the pool deck. PVP stated that the promenade below the pool deck which overlooks the Los Angeles River could be a terrific space but it is remote from the circulation paths. PVP suggested providing a direct accessible connection to the lower level from the pool deck or corridor ends.

The applicant provided revised plans in response to PVP comment, providing a stairwell at the rear of the pool deck down to the promenade which overlooks the river and provides pedestrian access to the river path. The project has been conditioned to include this connective element.

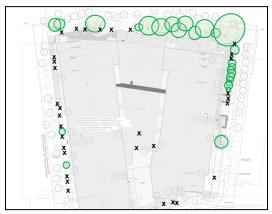
#### **Trees**

The subject property has zero existing street trees, 41 existing on-site trees, and 10 existing trees located off-site near the rear of the property. A Tree Report Survey was completed in June 2023 and is attached as an Exhibit to this Report. None of the 51 on- or off-site trees are protected by the Los Angeles Protected Tree Ordinance.<sup>2</sup> Nonetheless, the proposed project plans to preserve 50% of the trees (16 on-site trees and all 10 nearby offsite trees) as detailed in **Table 1** and shown in **Figure 9**.

Table 1: Trees

Tree Category	Total Trees	Trees Preserved
Street Trees	zero	n/a
On-Site - Protected	zero	n/a
On-Site - Non-Protected	41	16
Off-Site - nearby	10	10

<sup>&</sup>lt;sup>2</sup> Pursuant to LAMC Section 46.01 "Protected Tree" means any of the following Southern California indigenous tree species, which measures four inches or more in cumulative diameter, four and one-half feet above the ground level at the base of the tree. Protected species: (a) Oak tree, Valley Oak (Quercus lobata), California Live Oak (Quercus agrifolia), or any other oak genus indigenous to California excluding Scrub Oak (Quercus berberidifolia). (b) Southern California Black Walnut (Juglans californica) (c) Western Sycamore (Platanus racemosa) (d) California Bay (Umellularia californica).



**Figure 9.** Existing trees to be maintained shown with a green circle. Trees to be removed shown with an "X."

#### **CONCLUSION**

The project implements the goals and policies of the Community Plan by providing additional housing, including affordable housing, to the neighborhood and complying with the Specific Plan and RIO requirements.

Based on the public hearing and information submitted to the record, staff recommends that the City Planning Commission approve the Density Bonus, Specific Plan Project Permit Compliance, Site Plan Review, and Waiver of dedication and improvement for a five-story, residential building with 129 units (reserving 17 units, for Very Low Income households, equivalent to 15% of the base) as shown in **Figure 10** below.



Figure 10. Rendering of Proposed project from Ventura Boulevard at Arch Drive.

# **CONDITIONS OF APPROVAL**

Pursuant to Sections 12.22 A.25, 16.05, 11.5.7 and 12.37 of the Los Angeles Municipal Code, the following conditions are hereby imposed upon the use of the subject property:

# **Development Conditions**

- 1. **Site Development.** Except as modified herein, the project shall be in substantial conformance with the plans dated March 13, 2023, submitted by the Applicant, stamped "Exhibit A," and attached to the subject case file.
- 2. **Residential Density.** The project shall be limited to a maximum density of 129 dwelling units including Density Bonus Units.
- 3. Affordable and Income Restricted Units.
  - a. A minimum of 17 dwelling units, that is at least 15 percent of the base dwelling units permitted in the C2-1VL-RIO Zone, shall be reserved as Very Income units, as defined by the State Density Bonus Law per Government Code Section 65915(c)(2).
  - b. Changes in Restricted Units. Deviations that increase the number of restricted affordable units or that change the composition of units or change parking numbers shall be consistent with LAMC Section 12.22 A.25.
- 4. Housing Requirements. Prior to issuance of a building permit, the owner shall execute a covenant to the satisfaction of the Los Angeles Housing Department (LAHD) to make at least 15 percent of the base number of dwelling units available to Very Low Income Households, for sale or rental as determined to be affordable to such households by LAHD for a period of 55 years. In the event the applicant reduces the proposed density of the project, the number of required set-aside affordable units may be adjusted. consistent with LAMC Section 12.22 A.25, to the satisfaction of LAHD, and in consideration of the project's Housing Crisis Act of 2019 (SB 8) Replacement Unit Determination, dated August 22, 2022. Enforcement of the terms of said covenant shall be the responsibility of LAHD. The project shall comply with the Guidelines for the Affordable Housing Incentives Program adopted by the City Planning Commission and with any monitoring requirements established by the LAHD. The project shall also comply with any other requirements stated in project's SB 8 Determination, including but not limited to replacement unit requirements and requirements regarding relocation, right of return, and right to remain for occupants of protected units.

# 5. Incentives (On-Menu)

- a. **Floor Area Ratio**. The project shall be permitted a maximum floor area ratio of 3:1 for a project located on a Major Highway within 1,500 feet of a Transit Stop in lieu of the otherwise permitted 1:1 FAR limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 6.B.3.
- b. **Lot Area.** The project shall be permitted up to a 20% increase in lot coverage to allow a maximum of 72% lot coverage in lieu of 60% lot coverage limitation pursuant to the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 7.B.

### 6. Incentives (Off-Menu)

**a. Height.** A 30-foot increase in building height to allow a maximum height of 75 feet in-lieu of the 45-foot building height limitation of the C2-1VL-RO Zone; and to allow building height to exceed of the transitional height limitations pursuant to LAMC Section 12.21.1-A,10.

# 7. Waivers of Development Standards

- a. **Compact Parking Spaces.** The project shall be permitted to provide up to 43 of the 132 required parking spaces as compact spaces in-lieu of the compact parking limitations pursuant to LAMC 12.21-A,5(c); and
- b. **Side Yard.** The subject multi-family development shall be not be required to comply with the Commercial Corner Development Standards pursuant to LAMC 12.22-A,23(a) including limitations for height (LAMC 12.22-A,23(a)(1)) and landscape setbacks (LAMC 12.22-A,23(a)(10)(i)).

# 8. **Parking**.

- a. **Automobile Parking for Residential Uses.** Minimum residential automobile parking requirements shall be provided consistent with AB2345 and California Government Code Section 65915(p) to provide one on-site parking space for each zero and one-bedroom unit, 1.5 on-site parking spaces for each two- to three-bedroom units, 2.5 on-site parking spaces for each four and more bedroom units.
- b. **Unbundled Parking.** Required parking may be sold or rented separately from the units, with the exception of all Restricted Affordable Units which shall include any required parking in the base rent or sales price, as verified by LAHD.
- c. Adjustment of Parking. In the event that the composition of residential units changes (i.e. the number of bedrooms), or the applicant selects another Parking Option (including Bicycle Parking Ordinance) and no other Condition of Approval or incentive is affected, then no modification of this determination shall be necessary, and the number of parking spaces shall be re-calculated by the Department of Building and Safety based upon the ratios set forth pursuant to California Government Code Section 65915(p).
- d. **Bicycle Parking.** Bicycle parking shall be provided consistent with LAMC Section 12.21 A.16.
- e. **Electric Vehicle Parking.** All electric vehicle charging spaces (EV Spaces) and electric vehicle charging stations (EVCS) shall comply with the regulations outlined in Sections 99.04.106 and 99.05.106 of Article9, Chapter IX of the LAMC.
- 9. **Circulation.** The applicant shall be allowed no more than one driveway and shall submit a parking and driveway plan to the Los Angeles Department of Transportation (LADOT) for approval.

# **Site Plan Review Conditions**

10. **Massing.** Building massing shall include variations as shown in Exhibit A.

- 11. **Materials**. A variety of high-quality exterior building materials, consistent with Exhibit A, shall be used. Substitutes of an equal quality shall be permitted, to the satisfaction of the Department of City Planning.
- 12. **Pool Deck connection to LA River.** A stairwell or other direct access route from the pool deck to the lower rear yard area and gate to the Los Angeles River shall be provided as shown in Exhibit A. Alternative direct access shall be reviewed by Planning.
- 13. **Graffiti.** All graffiti on the site shall be removed or painted over to match the color of the surface to which it is applied within 24 hours of its occurrence.
- 14. **Mechanical Equipment.** All mechanical equipment on the roof shall be screened from view. The transformer(s), if located at-grade and facing the public right-of-way, shall be screened with landscaping and/or materials consistent with the building façade on all exposed sides (those not adjacent to a building wall).
- 15. **Maintenance.** The subject property (including all trash storage areas, associated parking facilities, walkways, common open space and exterior walls along the property lines) shall be maintained in an attractive condition and shall be kept free of trash and debris.

# 16. Landscaping.

- a. All open areas not used for buildings, driveways, parking areas, recreational facilities or walks shall be attractively landscaped, including an automatic irrigation system, and maintained in accordance with a landscape plan prepared by a licensed landscape architect or licensed architect, and submitted for approval to the Department of City Planning.
- b. Landscaping shall conform to LAMC Section 13.17 F,1 ("RIO" River Improvement Overlay District) and 75 percent of the newly landscaped area shall be planted with any combination of the following as shown in Exhibit A: native trees, plants and shrubs, or species defined as WatershedWise, or species listed in the Los Angeles County River Master Plan Landscaping Guidelines and Plant Palettes.

#### c. Tree Wells and other Planters.

- i. The minimum depth of tree wells on the rooftop or any other location where planters are used shall be as follows:
  - (1) Minimum depth for trees shall be 42 inches.
  - (2) Minimum depth for shrubs shall be 30 inches.
  - (3) Minimum depth for ground cover shall be 18 inches.
- ii. The minimum amount of soil volume for tree wells on the rooftop or any other location where planters are used shall be based on the size of the tree at maturity:
  - (1) 600 cubic feet for a small tree (less than 25 feet tall at maturity).
  - (2) 900 cubic feet for a medium tree (25-40 feet tall at maturity).
  - (3) 1,200 cubic feet for a large tree (more than 40 feet tall at maturity).
- 17. **Street Trees.** Plant Street trees at all feasible planting locations within dedicated streets as directed and required by the Bureau of Street Services, Urban Forestry Division. ALI tree plantings shall be installed to current tree planting standards when the City has

- previously been paid for tree plantings. The contractor shall notify Urban Forestry Division at 213-847-3077 upon completion of construction for tree planting direction and instructions.
- 18. **Tree preservation.** The applicant shall provide Urban Forestry with a tree protection plan to ensure the trees being maintained on- and nearby off-site per the Tree Report (Exhibit C.2) are sufficiently protected during construction from root zone compaction, and physical damage.
- 19. **Exterior Lighting.** Outdoor lighting shall additionally comply with the following provisions of LAMC section 13.17 F,3:
  - a. All site and building mounted lighting shall be designed such that it produces a maximum initial luminance value no greater than 0.20 horizontal and vertical foot candles at the site boundary, and no greater than 0.01 horizontal foot candles 15 feet beyond the site. No more than 5.0 percent of the total initial designed lumens shall be emitted at an angle of 90 degrees or higher from nadir (straight down).
  - b. All low pressure sodium, high pressure sodium, metal halide, fluorescent, quartz, incandescent greater than 60 watts, mercury vapor, and halogen fixtures shall be fully shielded in such a manner as to not exceed the limitations in (a.), above.
- 20. **Rear Fencing and Gating.** Fencing and gating within 10 feet of the Los Angeles River corridor shall comply with the following provisions of LAMC Section 13.17 F,4:
  - a. All fences located within 10 feet of the river corridor shall be consistent with the fence designs identified in the Los Angeles County River Master Plan LandscapeGuidelines.
  - b. All fences located less than 10 feet from the river shall be no higher than 6 feet in height. All fences located at the 10 foot landscape buffer setback line shall not exceed 10 feet in height.
  - c. All gates or fences located within 10 feet of the river or a river frontage road shall be consistent with the gate designs identified in the Los Angeles County River Master Plan Landscape Guidelines. The gate height shall be consistent with the adjacent fence height and the gate shall be designed so as not to encroach into the river or public right-of-way when opened.
- 21. **River Access and River Front Door.** A pedestrian path connecting Arch Drive to the Los Angeles River shall be maintained along the eastern side of the property as shown in Exhibit A. The project shall maintain a door or gate which provides access from private property to the Los Angeles River.
- 22. **Parking.** With the exception of vehicle and pedestrian entrances, fresh air intake grilles, and metal security grilles, all vehicle parking shall be enclosed along all sides of the building.
- 23. **Trash.** All trash collection and storage areas shall be located on-site and not visible from the public right-of-way. Trash and recycle receptacles shall be stored within a fully enclosed portion of the building at all times.

- 24. **Solar.** The project shall dedicate a minimum of 15 percent of the total roof area will be reserved for the future installation of a photovoltaic system, in substantial conformance with the plans stamped "Exhibit A", and comply with the Los Angeles Municipal Green Building Code, Section 99.05.211, to the satisfaction of the Department of Building and Safety.
- 25. A minimum 20-foot reservoir space is required between any security gate or parking space and the property line, or to the satisfaction of LADOT.
- 26. A two-way driveway width of W=28 feet is required for all driveways, or to the satisfaction of LADOT.
- 27. A parking area and driveway plan should be submitted to the Citywide Planning Coordination Section of the Los Angeles Department of Transportation for approval prior to submittal of building permit plans for plan check by the Department of Building and Safety. Transportation approvals are conducted at 6262 Van Nuys Blvd., Room 320, Van Nuys, CA 91401.
- 28. Prior to the issuance of the Certificate of Occupancy, street lighting improvement plans shall be submitted for review and the owner shall provide a good faith effort via a ballot process for the formation or annexation of the property within the boundary of the development into a Street Lighting Maintenance Assessment District.
- 29. Construct new street light: one (1) on Arch Dr. If street widening per BOE improvement conditions, relocate and upgrade street light: one (1) on Arch Dr.

# Specific Plan Project Permit Compliance Conditions

- 30. **Landscaping.** The project shall comply with the following landscaping requirements as required per Specific Plan Sections 7.A.3 and 7.D.3.
  - a. As shown in Exhibit A, the project shall provide a minimum 18-inch landscaped front yard setback as required per the Ventura/Cahuenga Boulevard Corridor Specific Plan Section 7.A.3
  - b. At least 60 percent of any building setback in excess of the required 18-inch landscaped setback, shall be landscaped and the remainder shall be finished to City standards for sidewalks, or finished with other paving materials, including concrete pavers, brick masonry pavers.
- 31. **Certification of Landscape Installation.** Prior to obtaining a Certificate of Occupancy, the project architect, landscape architect, or engineer shall certify in a letter to the Department of City Planning and to the Department of Building and Safety that the approved landscape plan has been implemented.
- 32. **Signs.** No signs are being requested as part of this grant. Any future onsite signage shall be reviewed for compliance with the Ventura/Cahuenga Boulevard Corridor Specific Plan by the Valley Project Planning Bureau staff before an administrative clearance can be provided.
- 33. **Streetscape Improvement.** Prior to the issuance of a certificate of occupancy, and in addition to all other requirements of the Department of Building and Safety, the property owner shall submit public right-of-way plans to the Department of Public Works (per

Section 9.A. of the Specific Plan) that all required landscape and relevant streetscape elements of the Studio City Streetscape Plan (Media Sub-District) have been implemented as follows:

a. Funding for Traffic Calming. The developer shall reimburse the City for the costs of traffic calming measures to be implemented at the intersection of Ventura Boulevard and Arch Drive by making a deposit to cover the material and construction costs, plus additional funding for worker overtime pay, for a total of \$55,000. This deposit would be made to LADOT's Fund 523 prior to issuance of the Certificate of Occupancy.

#### Lighting Fixtures and Street Lighting

- b. All modern 40-foot roadway street lighting poles and fixtures shall be painted "Spring Street Green" per Section 5.2.2. Street lighting features shall be arranged to avoid future conflicts with street trees.
- c. Any pedestrian lighting provided shall be in compliance with the Studio City Streetscape Plan Section 5.2.1 to the satisfaction of the Bureau of Street Lighting.

#### Public Art

- d. All projects subject to the 1% Cultural Arts fee are required to submit an application to the Cultural Affairs Department to place some public work of art, acceptable to the Cultural Affairs Department, onsite within public view, or within the public right-of-way when permitted by the Department of Public Works.
- e. All public art within the Studio City (Sub-Media) Streetscape Plan shall be compatible with the General Theme centering on the imagery associated with movie and television studios.
- f. Any public art shall be highly integrated with other 3-Dimensional elements of the streetscape, in particular, street trees, but also, paving patterns, building facades, and on-site landscaping.

#### Sidewalk Paving Patterns

g. Refer to Section 5.4.3 to 5.4.6 of the Studio City Streetscape Plan for sidewalk paving details to the satisfaction of the Bureau of Engineering.

#### Curbs and Gutters

h. The curbs should be constructed integral with the gutter using natural color concrete, not colored concrete. Gutters are to be standard, unless an alternative design is approved by the Department of Public Works.

# Street Furniture

- i. Any proposed street furniture such as benches, bicycle racks, bus shelters, fountains, kiosks, newspaper stands, pot and planters, trash receptacles shall comply with the Studio City Streetscape Plan Section 5.3.
- 34. **Project Impact Assessment Fee.** Prior to Planning clearance, the applicant shall meet with the Department of Transportation (DOT) for assessment of this new mixed use project. A "Project Impact Assessment" (PIA) fee may be required and paid to the satisfaction of DOT for the purpose of funding the Specific Plan improvements and services, as well as pedestrian improvements which are intended to mitigate the cumulative impacts of new developments within the Specific Plan area. (Note: PIA fees

to be paid are subject to change due to increases to the Annual Indexing as determined by the DOT.)

# **Waiver of Dedication and Improvement Conditions**

- 35. **Arch Drive.** The project shall be permitted to provide a minimum 2-foot dedication in order to widen the sidewalk to 12 feet in lieu of the otherwise required 5-foot dedication. No road widening shall be required. All corner radius dedications are still required. All improvements are still required.
- 36. **Ventura Boulevard.** The project shall be permitted to provide a minimum 2-foot dedication in lieu of the otherwise required 5-foot dedication. No road widening shall be required. All corner radius dedications are still required. All improvements are still required.

#### **Administrative Conditions**

- 37. **Final Plans.** Prior to the issuance of any building permits for the project by the Department of Building and Safety, the applicant shall submit all final construction plans that are awaiting issuance of a building permit by the Department of Building and Safety for final review and approval by the Department of City Planning. All plans that are awaiting issuance of a building permit by the Department of Building and Safety shall be stamped by Department of City Planning staff "Final Plans". A copy of the Final Plans, supplied by the applicant, shall be retained in the subject case file.
- 38. **Notations on Plans.** Plans submitted to the Department of Building and Safety, for the purpose of processing a building permit application shall include all of the Conditions of Approval herein attached as a cover sheet, and shall include any modifications or notations required herein.
- 39. **Building Plans.** A copy of the first page of this grant and all Conditions and/or any subsequent appeal of this grant and its resultant Conditions and/or letters of clarification shall be printed on the building plans submitted to the Development Services Center and the Department of Building and Safety for purposes of having a building permit issued.
- 40. **Corrective Conditions.** The authorized use shall be conducted at all times with due regard for the character of the surrounding district, and the right is reserved to the City Planning Commission, or the Director pursuant to Section 12.27.1 of the Municipal Code, to impose additional corrective conditions, if, in the Commission's or Director's opinion, such conditions are proven necessary for the protection of persons in the neighborhood or occupants of adjacent property.
- 41. **Approvals, Verification and Submittals**. Copies of any approvals, guarantees or verification of consultations, reviews or approval, plans, etc., as may be required by the subject conditions, shall be provided to the Department of City Planning for placement in the subject file.
- 42. **Code Compliance.** All area, height and use regulations of the zone classification of the subject property shall be complied with, except wherein these conditions explicitly allow otherwise.
- 43. **Department of Building and Safety.** The granting of this determination by the Director of Planning does not in any way indicate full compliance with applicable provisions of

the Los Angeles Municipal Code Chapter IX (Building Code). Any corrections and/or modifications to plans made subsequent to this determination by a Department of Building and Safety Plan Check Engineer that affect any part of the exterior design or appearance of the project as approved by the Director, and which are deemed necessary by the Department of Building and Safety for Building Code compliance, shall require a referral of the revised plans back to the Department of City Planning for additional review and sign-off prior to the issuance of any permit in connection with those plans.

- 44. **Department of Water and Power.** Satisfactory arrangements shall be made with the Los Angeles Department of Water and Power (LADWP) for compliance with LADWP's Rules Governing Water and Electric Service. Any corrections and/or modifications to plans made subsequent to this determination in order to accommodate changes to the project due to the under-grounding of utility lines, that are outside of substantial compliance or that affect any part of the exterior design or appearance of the project as approved by the Director, shall require a referral of the revised plans back to the Department of City Planning for additional review and sign-off prior to the issuance of any permit in connection with those plans.
- 45. **Covenant.** Prior to the issuance of any permits relative to this matter, an agreement concerning all the information contained in these conditions shall be recorded in the County Recorder's Office. The agreement shall run with the land and shall be binding on any subsequent property owners, heirs or assign. The agreement must be submitted to the Department of City Planning for approval before being recorded. After recordation, a copy bearing the Recorder's number and date shall be provided to the Department of City Planning for attachment to the file.
- 46. **Definition.** Any agencies, public officials or legislation referenced in these conditions shall mean those agencies, public offices, legislation or their successors, designees or amendment to any legislation.
- 47. **Enforcement.** Compliance with these conditions and the intent of these conditions shall be to the satisfaction of the Department of City Planning and any designated agency, or the agency's successor and in accordance with any stated laws or regulations, or any amendments thereto.
- 48. **Expedited Processing Section.** Prior to the clearance of any conditions, the applicant shall show proof that all fees have been paid to the Department of City Planning, Expedited Processing Section.
- 49. **Indemnification and Reimbursement of Litigation Costs.** Applicant shall do all of the following:
  - a. Defend, indemnify and hold harmless the City from any and all actions against the City relating to or arising out of, in whole or in part, the City's processing and approval of this entitlement, including <u>but not limited to</u>, an action to attack, challenge, set aside, void, or otherwise modify or annul the approval of the entitlement, the environmental review of the entitlement, or the approval of subsequent permit decisions, or to claim personal property damage, including from inverse condemnation or any other constitutional claim.
  - b. Reimburse the City for any and all costs incurred in defense of an action related to or arising out of, in whole or in part, the City's processing and approval of the

entitlement, including but not limited to payment of all court costs and attorney's fees, costs of any judgments or awards against the City (including an award of attorney's fees), damages, and/or settlement costs.

- c. Submit an initial deposit for the City's litigation costs to the City within 10 days' notice of the City tendering defense to the Applicant and requesting a deposit. The initial deposit shall be in an amount set by the City Attorney's Office, in its sole discretion, based on the nature and scope of action, but in no event shall the initial deposit be less than \$50,000. The City's failure to notice or collect the deposit does not relieve the Applicant from responsibility to reimburse the City pursuant to the requirement in paragraph (ii).
- d. Submit supplemental deposits upon notice by the City. Supplemental deposits may be required in an increased amount from the initial deposit if found necessary by the City to protect the City's interests. The City's failure to notice or collect the deposit does not relieve the Applicant from responsibility to reimburse the City pursuant to the requirement in paragraph (ii).
- e. If the City determines it necessary to protect the City's interest, execute an indemnity and reimbursement agreement with the City under terms consistent with the requirements of this condition.

The City shall notify the applicant within a reasonable period of time of its receipt of any action and the City shall cooperate in the defense. If the City fails to notify the applicant of any claim, action, or proceeding in a reasonable time, or if the City fails to reasonably cooperate in the defense, the applicant shall not thereafter be responsible to defend, indemnify or hold harmless the City.

The City shall have the sole right to choose its counsel, including the City Attorney's office or outside counsel. At its sole discretion, the City may participate at its own expense in the defense of any action, but such participation shall not relieve the applicant of any obligation imposed by this condition. In the event the Applicant fails to comply with this condition, in whole or in part, the City may withdraw its defense of the action, void its approval of the entitlement, or take any other action. The City retains the right to make all decisions with respect to its representations in any legal proceeding, including its inherent right to abandon or settle litigation.

For purposes of this condition, the following definitions apply:

"City" shall be defined to include the City, its agents, officers, boards, commissions, committees, employees, and volunteers.

"Action" shall be defined to include suits, proceedings (including those held under alternative dispute resolution procedures), claims, or lawsuits. Actions include actions, as defined herein, alleging failure to comply with <u>any</u> federal, state or local law.

Nothing in the definitions included in this paragraph are intended to limit the rights of the City or the obligations of the Applicant otherwise created by this condition.

#### **FINDINGS**

#### **DENSITY BONUS/AFFORDABLE HOUSING INCENTIVES COMPLIANCE FINDINGS**

- 1. Pursuant to Section 12.22 A.25 of the LAMC and Section 65915 of the California Government Code, the Commission shall approve a density bonus and requested incentive(s) and/or waiver(s) unless the Commission finds that:
  - a. The incentive(s) do not result in identifiable and actual cost reductions to provide for affordable housing costs, as defined in California Health and Safety Code Section 50052.5 or Section 50053 for rents for the affordable units.

The record does not contain substantial evidence that would allow the Director to make a finding that the requested incentives do not result in identifiable and actual cost reductions to provide for affordable housing costs per State Law. The California Health & Safety Code Sections 50052.5 and 50053 define formulas for calculating affordable housing costs for very low, low, and moderate income households. Section 50052.5 addresses owner-occupied housing and Section 50053 addresses rental households. Affordable housing costs are a calculation of residential rent or ownership pricing not to exceed 25 percent gross income based on area median income thresholds dependent on affordability levels.

Based on the set-aside of 15 percent of the base density for Very Low Income households, the applicant is entitled to three incentives under both Government Code Section 65915 and the LAMC. The three requests for, increased FAR, lot coverage, and height qualify as the proposed development incentives.

Floor Area Ratio (On-Menu). The Ventura/Cahuenga Boulevard Corridor Specific Plan designates the subject site with the "Neighborhood and General Commercial" Plan Designation. Pursuant to the Section 6.B.3 of the Specific Plan, the maximum FAR for "Neighborhood and General Commercial" is 1:1. The net lot area of the subject property is 44,886.8 square feet and the maximum floor area of the underlying 1:1 FAR is 43,936 square feet. Qualifying density bonus projects can qualify for an on-menu Incentive of 3:1 FAR if the project site is within 1,500 feet of a rapid bus stop<sup>3</sup>. In this case, the site is located less than 100 feet from Metro Bus Route 240 (NextGen Rapid) at the corner of Arch Drive and Ventura Boulevard. The On-Menu Density Bonus Incentive to increase the maximum FAR to 3 to 1 would allow for 131,808 square feet of floor area. The proposed project has a floor area of 116,312 square feet for an FAR of 2.7:1. The additional floor area will allow the developer to expand the building envelope so the additional units can be constructed, and the overall space dedicated to residential units is increased. The additional floor area will increase the market rate rent revenue that will support the operational costs of the affordable units, allows for design efficiencies, and allows certain fixed costs of construction to be shared among more floor area thereby reducing the per-square-foot cost of the development. The additional market rate units which can be constructed within the additional floor area will offset the cost of the affordable units.

<sup>&</sup>lt;sup>3</sup> Qualifying density bonus projects can qualify for an on-menu Incentive of 3:1 FAR if the project site is within 1,500 feet of a rapid bus stop. This is based on the definition for Transit Stop in the Density Bonus Ordinance 12.22.25 (b) that reads: "A Metro Rapid Bus stop located along a Metro Rapid Bus route; or, for a HousingDevelopment Project consisting entirely of Restricted Affordable Units, any bus stop located along a Metro Rapid Bus route."

Lot Coverage (On-Menu). The Ventura/Cahuenga Boulevard Corridor Specific Plan Section 7.B limits log coverage in Neighborhood and General Commercial Plan Designation Areas. Buildings and structures in these areas shall cover no more than 60 percent of the lot area. Qualifying density bonus projects may request an on-menu incentive to permit up to a 20% increase in lot coverage. The applicant requests, and Planning recommends approval of, an incentive to allow a maximum of 72% lot coverage in lieu of 60% lot coverage limitation pursuant to the Specific Plan. The larger building footprint will allow the developer to expand the building envelope so the additional units can be constructed within fewer floors, and the overall space dedicated to residential units is increased on each floor. The additional market rate units which can be constructed within the larger floors will offset the cost of the affordable units.

**Height (Off-Menu).** The subject C2 zoned property is within a 1VL height district which limits building height to 45 feet. Additionally, commercially zoned lots which abut R1 or less restrive zones are subject to transitional height limitations pursuant to LAMC Section 12.21.1.A.10. Within 200 feet of an R1 zoned lot the following height restrictions apply: maximum of 25 feet within 49 feet of the R1 lot, maximum of 33 feet within 50-99 feet of the R1 lot, and maximum of 61 feet within 100-199 feet of an R1 lot. The subject property abuts the Los Angeles River which is zoned OS-1XL-RIO and thus is subject to transitional height.

The on-menu Density Bonus Incentive for height allows for an increase in 11 feet. Staff recommends granting an off-menu incentive to allow an increase in the maximum height by 30 feet for a maximum height of 75 feet (five stories) and to deviate from the transitional height requirement to instead require that the building height limit shall be stepped-back at a 45 degree angle as measured from a horizontal plane originating 25 feet above grade at the property line of the adjoining lot in OS Zone.

The proposed increase in 30 feet and relaxed transitional height requirement allow for two additional residential levels and the construction of floor area on the upper levels; and thus the construction of that additional floor area and the rents from that additional floor area will support the units reserved for Very Low Income Households. The additional height allows for the additional market rate floor area to be constructed which will help subsidize the operational costs of the affordable units. Therefore, the incentive is supported.

b. The incentive(s) and/or waiver(s) would have a specific adverse impact upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low-income and moderate-income households. Inconsistency with the zoning ordinance or the general plan land use designation shall not constitute a specific, adverse impact upon the public health or safety (Government Code Section 65915(d)(B) and 65589.5(d)).

There is no evidence that the proposed Incentives or waivers will have a specific adverse impact. A "specific adverse impact" is defined as "a significant, quantifiable, direct and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete" (LAMC Section 12.22 A.25(b)).

There is no substantial evidence in the record that any of the Incentives or waivers will have a specific adverse impact upon public health and safety or the physical environment, or any real property that is listed in the California Register of Historical Resources. The project does not involve a contributing structure in a designated Historic Preservation Overlay Zone or on the City of Los Angeles list of Historical-Cultural Monuments. Finally, according to ZIMAS, the project is not located on a substandard street in a Hillside area or a Very High Fire Hazard Severity Zone. The project will be required to comply with all applicable regulations for development in liquefaction areas and thus will not present any specific adverse impacts upon public health or safety. Therefore, there is no substantial evidence that the proposed project, and thus the requested Incentives or waivers, will have a specific adverse impact on the physical environment, on public health and safety or the physical environment, or on any Historical Resource. Based on the above, there is no basis to deny the requested Incentives or waivers.

c. The waiver[s] or reduction[s] of development standards will not have the effect of physically precluding the construction of a development meeting the [affordable set-aside percentage] criteria of subdivision (b) at the densities or with the concessions or incentives permitted under [State Density Bonus Law]" (Government Code Section 65915(e)(1))

A project that provides 15 percent of the base density for Very Low Income households is entitled to three Incentives under both Government Code Section 65915 and the LAMC and may request other "waiver[s] or reduction[s] of development standards that will have the effect of physically precluding the construction of a development meeting the [affordable set-aside percentage] criteria" as outlined by State Density Bonus law. The applicant proposes to set aside 17 units for Very Low Income households, equal to more than 15 percent of the base density of the site. As such, the requests for a deviation from compact parking limitations and commercial corner development regulations are recommended as waivers of development standards. Without the requested waivers, the existing development standards would preclude the development of the proposed density bonus units and project amenities for the reasons stated as follows.

Compact Parking Spaces. The project requires a minimum of 132 vehicle parking spaces (after replacing 15 spaces with bicycle parking) and is provided 145. Pursuant to LAMC Section 12.21 A.5. (c), only parking stalls in excess of one parking stall per dwelling unit may be designed as compact parking stalls to accommodate compact cars. For the subject 129 unit project, only 16 of the 145 provided parking spaces may be provided as compact stalls. The applicant is requesting a waiver to allow a larger portion of the spaces to be provided as compact. The applicant requests, and Planning recommends, that up to 43 of the parking spaces may be provided as compact parking spaces in lieu 16 spaces.

The waiver will allow the project to accommodate parking within a smaller garage area, allowing the project to build out the base and bonus unit count, and FAR incentive within the lot coverage limitations as granted in the Density Bonus Incentives. Adherence to parking space requirements would physically preclude the full build-out of the base and bonus density, and requested incentives, within the limited allowable building footprint.

Commercial Corner Development Standards. Although the subject project does not include commercial uses, it is subject to Commercial Corner standards based on its C2 zoning and the adjacent OS zone. Commercial Corner regulations include numerous development standards, many of which are not applicable to this project as there are no commercial uses on site. However, standards that do apply include a 45-foot height limitation and a requirement for a five-foot landscape buffer at the property line. The applicant has already requested a deviation from height as a Density Bonus incentive. The applicant proposes yards and setback areas that comply with the Specific Plan, including an 18-inch front yard setback which precludes providing a five foot landscape buffer. The applicant also proposes a 15-foot easterly side yard to accommodate a required pedestrian path which is proposed with a combination of hardscaping and landscaping. The applicant has requested, and Planning recommends approval of a waiver of development standards to permit the multi-family development deviations from Commercial Corner Development Standards including deviations for height and landscape setbacks.

The height limit and the five foot landscape buffer (which would require the building be further setback from property lines) have the effect of limiting the building envelope, would prevent the floor area that encroaches in these areas, and thus would prevent full construction of the proposed floor area and unit count of the project. The Commercial Corner Development Standards would have the effect of physically precluding construction of a development providing 129 dwelling units, of which a minimum of 17 units will be set aside for Very Low Income households, with the incentives requested.

The waivers for compact parking and commercial corner standards enable the project to increase the overall space dedicated to residential use, thereby allowing the project to be built to its requested FAR and requested height while also observing alternative transitional height at the rear of the project. These waivers support the applicant's project at the density and with the incentives proposed.

d. The Incentives and/or waiver(s) are contrary to State/federal law.

There is no substantial evidence in the record indicating that the requested Incentives or waivers are contrary to any State or federal laws.

# **SITE PLAN REVIEW FINDINGS**

2. The project is in substantial conformance with the purposes, intent and provisions of the General Plan, applicable community plan, and any applicable specific plan.

The elements of the General Plan establish policies that provide for the regulatory environment in managing the City and for addressing concerns and issues. There are twelve elements of the General Plan. The majority of the policies derived from these elements are in the form of code requirements of the Los Angeles Municipal Code. Except for those entitlements requested herein, the project does not propose to deviate from any of the requirements of any of the requirements of the Los Angeles Municipal Code. The General Plan is divided into 35 Community Plans.

The project site is located within the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan, one of 35 Community Plans which together form the land use element of the General Plan. The Community Plan designates the subject property for General Commercial with corresponding zones of C1.5, C2, C4, CR, RAS3, RAS4, and P

Zone, and per Footnote 2, Height District 1VL. The site is zoned C2-1VL-RIO and is therefore consistent with the General Plan Land Use Designation. The site is also within the Ventura/Cahuenga Boulevard Corridor Specific Plan, the Studio City/Cahuenga Pass Streetscape Plan, and the River Improvement Overlay District (RIO).

The proposed project is consistent with the following goals, objectives, and policies of the **Community Plan:** 

- Goal 1 A safe, secure, and high quality residential environment for all economic, age, and ethnic segments of the community.
- Objective 1-2 To locate new housing in a manner which reduces vehicular trips and makes it accessible to services and facilities.
- Policy 1-2.2 Encourage multiple residential development in commercial zones.
- Objective 1-4 To promote and ensure the provision of adequate housing for all persons regardless of income, age or ethnic background.
- Policy 2-1.2 Protect commercially planned/zoned areas outside pedestrian oriented areas from encroachment by residential only development.

The project is a new residential building with 129 residential units in a commercial zone will increase housing opportunities and will provide 17 units reserved for Very Low Income Households. The project site is located adjacent to a commercial shopping center and within close proximity to the commercial area of Vineland Avenue and Ventura Boulevard. The project is also across the street from a bus stop and is within close proximity additional bus transit lines on Ventura Boulevard and as well as less than one mile from the Universal City/Studio City Metro Red Line Station. Additionally, the project site is adjacent to the Los Angeles River, which is planned for a multimodal bike and pedestrian path and open space and recreational use via the Los Angeles County River Master Plan. As such, the project presents opportunities for a reduction in vehicular trips and is providing housing in close proximity to jobs, as wells as increasing the availability of housing for different groups and income levels. As such, the project substantially complies with the housing goals and objectives of the General and Community Plan.

The proposed project is consistent with the Goals, Objectives, and Policies of the **General Plan's Housing Element 2021 – 2029** adopted in November 2021 as described below.

- Objective 1.2: Facilitate the production of housing, especially projects that include Affordable Housing and/or meet Citywide Housing Priorities.
- Policy 1.2-1: Expand rental and for-sale housing for people of all income levels. Prioritize housing developments that result in a net gain of Affordable Housing and serve those with the greatest needs.
- Objective 1.3: Promote a more equitable distribution of affordable housing opportunities throughout the city, with a focus on increasing Affordable Housing in Higher Opportunity Areas and in ways that further Citywide Housing Priorities.

Policy 1.3-1: Prioritize housing capacity, resources, policies and incentives to include Affordable Housing in residential development, particularly near transit, jobs, and in Higher Opportunity Areas.

The proposed project would result in the construction of a new five-story residential development with 129 dwelling units. The project would provide 112 market-rate units and set aside 17 units for Very Low Income households. In addition, the project would accommodate a variety of household sizes with a unit mix ranging from studio to two-bedroom units. The project's location in a walkable and bikeable area of Studio City would allow individuals to connect to essential services and centers, including major employment centers, schools, and grocery markets. Surrounding the project site are a mix of residential and commercial uses. As such, the proposed project would complement the surrounding community while expanding housing opportunities in a multimodal, high opportunity area.

The proposed project is also consistent with the Goals, Objectives, and Policies, of the **General Plan's Mobility Element**, also known as Mobility Plan 2035, which provides policies with the ultimate goal of developing a balanced transportation network for all users. The project supports the following policies of the Mobility Element:

Policy 3.3: Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.

Policy 5.2: Support ways to reduce vehicle miles traveled (VMT) per capita.

The project's proximity to the future Los Angeles River bicycle and pedestrian path, and public transit lines on Ventura Boulevard provides residents access to various modes of transportation. The proposed project is located in a commercial area with many nearby conveniences, necessities, and retail within walking distance. The combination of nearby commercial businesses and access to various modes of transportation provide residents and workers access to work centers, destinations, and other neighborhood services locally and across Los Angeles. Therefore, the project supports the reduction of VMT per capita, connecting individuals to public transportation infrastructure.

As detailed above, the proposed project is in substantial conformance with the purposes, intent and provisions of the Community Plan and General Plan. The project is consistent with the applicable general plan designation and policies as well as with applicable zoning designation and regulations.

3. The project consists of an arrangement of buildings and structures (including height, bulk and setbacks), off-street parking facilities, loading areas, lighting, landscaping, trash collection, and other such pertinent improvements that is or will be compatible with existing and future development on adjacent properties and neighboring properties.

The arrangement of the proposed development is consistent and compatible with existing and future development in neighboring properties. The subject site is located within the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan at the corner of Ventura Boulevard and Arch Drive. Ventura Boulevard is commercially zoned and developed with commercial uses while Arch Drive is zoned for multifamily uses and is developed with two to five story multifamily buildings. The proposed project includes the construction of a

residential building with 129 residential units, inclusive of 17 units set aside for Very Low Income Households.

# Height, Bulk, Setbacks

The subject property within the 1VL height district allows for a maximum height of 45 feet (within three stories for buildings with commercial uses). However, the proposed project's off-menu density bonus incentive to increase its maximum height by 30 feet, as such, the project proposes a maximum height of 75 feet within five stories. Additionally, the project abuts an OS zone and thus is subject to transitional height requirements. However, the proposed project's off-menu density bonus incentive includes an alternative transitional height metric similar to what is offered for Tier 2 TOC projects.

The Specific Plan allows for a maximum FAR of 1:1; however, as permitted through the Density Bonus program and LAMC Section 12.22-A,25, Housing Developments may qualify for an FAR of up to 3:1 in exchange for setting aside a portion of the proposed residential units toward affordable housing. The project's total floor area ratio approximately 2.7:1, equating to approximately 131,808 square feet of floor area.

The proposed building is providing the required setbacks pursuant to the Specific Plan which requires an 18 inch front yard setback for landscaping and the required rear and side yards. The project will maintain more than the required 8 foot side yard and will provide an 18 foot rear yard.

The site has been designed to locate a 15-foot wide publicly accessible path along the eastern property edge which allows for both a wider setback area between the proposed building at the neighboring multifamily bundling and for the retention of many mature perimeter trees which buffer and provide privacy between the two residential buildings. As viewed from the street frontage and river's side, there is varied articulation due to the design, thus the relatively flat facades and massing occurs along the east and west sides of the project adjacent to an existing commercial shopping center and apartment building. The preservation of mature trees along the east and north property line as conditioned, will help to provide a natural screening for the adjacent apartment building as well as help to reduce the visual mass and bulk of the project. The rear of the building also includes building step backs and articulation due to open courtyard areas in between the building segments, which also helps to break up building mass and height. As noted, the building has a varied front yard setback.

# Off-Street Parking Facilities

The project is required to provide a minimum of 132 parking spaces consistent with Density Bonus provisions. The project includes a total of 145 parking spaces (43 of which will be compact spaces as part of a Density Bonus Waiver). The project provides 90 bicycle parking spaces consistent with the requirements of the LAMC. All parking is located underground, within a partially subterranean garage, and will not be visible from the street or from adjacent properties. One ingress and egress driveway along Arch Drive is provided. Therefore, for the reasons stated above, the off-street parking facilities will be compatible with the existing and future developments in the neighborhood.

# **Lighting**

Lighting for the proposed project has been conditioned to be designed and installed with shielding, such that the light source cannot be seen from adjacent residential properties, the public right-of-way, nor from above. Therefore, the lighting will be compatible with the existing and future developments in the neighborhood.

#### On-Site Landscaping

The project includes landscaping and hardscaping at both the front and rear of the property, within a central pool deck courtyard and within the side yards and along the provided pathway connecting Arch Drive to the Los Angeles River. The applicant has elected to maintain 16 of the total 41 on-site trees and all 10 of the nearby off-site trees located along the Los Angeles River path. Landscaping will provide a buffer between the prospeed budding and the existing lower scale multi family residential use to the east. Landscaping and hardscaping will provide scenic community amenities for residents to enjoy. The project as proposed in Exhibit A and conditioned meets the landscape requirements of the LAMC, the Specific Plan, and the River Improvement Overlay zone (RIO). The Specific Plan requires an 18-inch landscaped front yard with additional landscaping required for any front yard of greater depth and the project has been proposed and conditioned to comply with this requirement. The RIO requires a 10-foot landscape buffer abutting the Los Angeles River area and requires that 75% of provided landscaped area be compatible with plant palettes identified in the Los Angeles River Master Plan. THe project as proposed and conditioned meets the RIO landscaping requirements. Therefore, as designed and conditioned, the on-site landscaping of the proposed project will be compatible with the existing and future developments in the neighborhood.

#### **Trash Collection**

The project will include centralized on-site trash collection for both refuse and recyclable materials, in conformance with the LAMC. Compliance with these regulations will allow the project to be compatible with existing and future development. Additionally, all trash and recycling areas are conditioned to be enclosed and not visible to the public. Trash collection will occur within trash rooms on the ground floor and basement level. The trash rooms are not visible from the public right-of-way. Therefore, as proposed and conditioned, the project is compatible with existing and future development on neighboring properties.

As described above, the project consists, of an arrangement of buildings and structures (including height, bulk, and setbacks), off-street parking facilities, loading areas, lighting, landscaping, trash collection, and other such pertinent improvements that will be compatible with existing and future development on adjacent and neighboring properties.

# 4. The residential project provides recreational and service amenities to improve habitability for its residents and minimize impacts on neighboring properties.

The project includes a generous amount of common open space, on-site amenities, as well as private open space for many of the dwelling units. The project is providing a total of 13,800 square feet of open space equivalent to the minimum required for the project. A central interior courtyard (open to the sky) with a pool deck faces the Los Angeles River and is buffered from abutting uses as it is located between the two building wings. Private balconies and indoor community amenity areas (recreation room, fitness room, co-working spaces) are also provided at the rear of the bundling at the front southwest corner of the building nearest the abuting commercial uses. Trees provide a buffer between private patios

and the abutting residential uses. The onsite amenities would provide residents a space for gathering, socialization, recreation, and relaxation without impacting neighboring properties. Lastly, the project includes public and private access to the Los Angeles River, which will further enhance accessibility to future outdoor recreation, such as walking along the river side, thus reducing the need to have to drive somewhere for outdoor recreation and exercise.

The project would also accommodate off-street parking within a partially subterranean parking area. Long-term and short-term bicycle parking would also be accommodated within the project's enclosed bike storage rooms and on the sidewalk fronting. Residents would have access to a bike workstation.

The project is located in a commercial area (Ventura Boulevard in Studio City) with many businesses and multimodal amenities including local bus and rail lines and future planned bike infrastructure. Inorder to improve pedestrian safety in front of the site, the applicant has elected to provide funding for a traffic calming measure for the Arch Drive crosswalk at Ventura Boulevard. Funding for traffic calming will support pedestrian safety for residents and neighbors alike.

Therefore, as proposed, and conditioned, the project provides a variety of recreational and service amenities to improve habitability for the residents while minimizing impacts on neighboring properties.

# PROJECT PERMIT COMPLIANCE REVIEW FINDINGS FOR THE VENTURA/CAHUENGA BOULEVARD CORRIDOR SPECIFIC PLAN FINDINGS

5. The project incorporates mitigation measures, monitoring measures when necessary, or alternatives identified in the environmental review, which would mitigate the negative environmental effects of the project, to the extent physically feasible.

Mitigation measures are not necessary for the subject project, and there are no potentially significant negative environmental effects associated with the project. It has been determined the project is Categorically Exempt from the environmental review pursuant to State CEQA Guidelines Section 15332 Class 32. There is no substantial evidence demonstrating that an exception to a categorical exemption pursuant to CEQA Guidelines, Section 15300.2 applies.

6. The project substantially complies with the applicable regulations, findings, standards, and provisions of the specific plan, as follows:

**Section 5.C:** Uses. The proposed use of residential, is not restricted in this area of the Specific Plan, and thus are allowed.

**Section 6.B.:** Floor Area Ratio (FAR). The project is located in a Neighborhood and General Commercial Land Use Designation of the Specific Plan which restricts the FAR to 1:1. The Specific Plan specifies in Section 4 that the FAR is based on the buildable area of the lot (area after required setbacks). The project is being granted a FAR increase from 1:1 to 3:1 pursuant Density Bonus LAMC Section 12.22 A.25 for setting aside 15 units for Very Low Income Households, which would allow a total cumulative square footage of 105,863.

**Section 7.A.:** Yards. Specific Plan Section 7.A.1.a. designates Ventura Boulevard (and Arch Drive) as the front yard. The project is providing a minimum 18-inch landscaped setback as required. The the front building segments are staggered due to the building design and

curved frontage, resulting in a varied setback for each building segment providing additional space for landscaping and an open space area at the southwestern corner of the site. Per Section 7.A.1.d., owners of all lots adjacent to the Los Angeles River are required to make provisions for public access to the river when the bike path and any open space along the river is built. Additionally, a 10-foot landscape buffer is required for all rear yards adjacent to the river's edge. In this case, the project includes a dedicated 15-foot wide public access walkway along the east property line from Arch Drive to the river and a 10-foot rear landscape buffer as required.

**Section 7.B.**: Lot Coverage. The Specific Plan Section 7.B.2 limits lot coverage onsite to 60 percent. The project is proposing a lot coverage of approximately 72 percent as an On-Menu Density Bonus incentive.

**Section 7C:** Driveways. The project will include one two-way driveway, located approximately in the center of the Arch Drive frontage. Any existing driveway access will be removed. As such, the project does not propose multiple driveways where the linear frontage of the lot is less than 250 feet.

**Section 7A and 7D:** Landscaping. As per the Conditions of Approval, the project is providing a minimum 18-inch landscaped setback as required per Section 7.A.3 as well as additional 60 percent of landscaping in excess of the front yard minimum per Section 7.D.3. As conditioned, the project complies with the landscaping requirements.

**Section 7E:** Height. Specific Plan Section 7.E.1.a.3. limits the height to 45 feet which includes any rooftop projections that would otherwise be permitted per LAMC 12.21.1. The C2-1VL zone permits a building height up to 45 feet, not including rooftop projections. The project is proposing a 75-foot height to the parapet of the roof, as an Off-Menu incentive.

**Section 7F:** Parking. The Specific Plan does not regulate residential parking requirements.

**Section 8:** Signs. No signs are being requested as part of this grant. Any future sign request must comply with the requirements of the Ventura/Cahuenga Specific Plan as conditioned.

**Section 14:** Studio City Streetscape Plan. The project is conditioned to comply with the Studio City (Media Sub-District) Streetscape Plan (and Section 9.A.of the Specific Plan), such as with regard to street maintenance, sidewalk paving patterns, and any proposed street furniture. Additionally, in order to improve pedestrian safety in front of the site, the applicant has elected to provide funding for a traffic calming measure for the Arch Drive crosswalk at Ventura Boulevard. Funding for traffic calming will support pedestrian safety for residents and neighbors alike and implements the intent of the Streetscape Plan.

#### WAIVER OF DEDICATION AND IMPROVEMENT FINDINGS

7. The dedication is not necessary to meet the City's mobility needs for the next 20 years based on guidelines the Streets Standards Committee has established; or the dedication or improvement requirement is physically impractical.

A five-foot dedication is required for Arch Drive in order to complete a 30-foot half right-of-way (in accordance with Local Street standards) to widen the existing 15-foot half roadway by 3-feet to provide an 18-foot wide half roadway and widen the existing 10-foot wide sidewalk by 2-feet to provide a 12-foot sidewalk. The applicant has requested to waive the 3-foot portion of the dedication related to the widening of the roadway and proposes instead to dedicate 2-feet of private property to widen only the sidewalk from 10 to 12 feet.

Arch Drive is an approximately 0.3 mile street segment which serves only to provide local access to approximately 30 multifamily residential buildings on the block north of Ventura. Arch drive does not connect to other streets or right of way. As such, a roadway widening is not needed to meet vehicle mobility needs of the future. The current 15-foot half roadway width provides for a travel lane, street parking. However, the dedication of two (2) additional feet in order to construct a wider sidewalk is necessary to meet pedestrian mobility goals.

The dedication requirement for Ventura Boulevard (Boulevard II) is five feet to complete a 55-foot half right-of-way and a 20-foot radius property line return at the intersection with Arch Drive. The applicant requests a waiver of dedication to provide a 2-foot dedication in lieu of the full 5-foot dedication to align with the requested dedication along Arch Drive. The majority of the project fronts Arch Drive and the curved corner of the site fronts Ventura Boulevard. The nature of the lot and corner configuration that make the dedication on Ventura Boulevard impractical. The request to waive 3-feet of the 5-foot dedication inorder to allow conformity to the Arch Drive street segment is warranted and does not prohibit the achievement of the city's mobility goals.

Of additional note, the applicant added the above request to waive portions of the required dedications in response to the Studio City Neighborhood Council's suggestion to maintain the curb alignment as it is today. The intent of the request is to waive the portion of the dedication related to widening the roadway along Arch Drive and provide only the portion of the dedication needed to bring the sidewalk up to standard dimensions. The applicant proposes to implement all required improvements to the sidewalk and roadway such as bringing roadway and sidewalk surfacing into good repair, constructing a landscaped parkway on Arch Drive to match the adjacent sidewalk and parkway to the east, and constructing an access ramp at the intersection with Ventura Boulevard to comply with ADA requirements. As such the waiver of a portion of the dedication required on Arch Drive and Ventura Boulevard is appropriate.

#### **ENVIRONMENTAL FINDINGS**

- **8. Flood Hazard Findings.** The National Flood Insurance Program rate maps, which are a part of the Flood Hazard Management Specific Plan adopted by the City Council by Ordinance No. 172,081, have been reviewed and it has been determined that this project is located in Zone C, areas determined to be outside of a flood zone.
- 9. CEQA Findings. The proposed project qualifies for a Class 32 Categorical Exemption because it conforms to the definition of "In-fill Projects". The project can be characterized as in-fill development within urban areas for the purpose of qualifying for Class 32 Categorical Exemption as a result of meeting five established conditions and if it is not subject to an Exception that would disqualify it. The Categorical Exception document dated November 30, 2021 and attached to the subject case file provides the full analysis and justification for project conformance with the definition of a Class 32 Categorical Exemption.

#### PUBLIC HEARING AND COMMUNICATIONS

#### **PUBLIC HEARING**

A public hearing for Case No. CPC-2021-10345-DB-SPP-SPR-WDI-VHCA was held by the Hearing Officer on May 2, 2023 in a virtual format. The purpose of the hearing was to receive public testimony on behalf of the City Planning Commission as the decision maker on the case. The public hearing was attended by the applicant's representatives, a representative from Council District 4 and members of the public.

#### **Applicant Presentation**

The applicant's representative, Jonathan Riker, presented an overview of the project including a description of the site, neighborhood, proposed building, proposed Los Angeles River access path, entitlements requested, zoning and other regulations, and comparison to the previously approved Density Bonus project on the site.

#### **Council Office**

Mashael Majid, a representative of Council District 4, stated support for the 129 unit project with 17 Very Low Income units.

#### **Public Testimony**

Five members of the public spoke at the public hearing.

#### Speaker #1

- Scott Mandell, President of the Studio City Neighborhood Council (SCNC)
- Read the letter and motion from the Neighborhood Council into the record.

#### Speaker #2

- Josh Christensen, with Southwest Mountain States Regional Council of Carpenters
- Requested local hire and wage provisions
- The project has impacts. Workforce requirements reduce environmental impacts. Local hire can reduce air quality impacts.

#### Speaker #3

- **Barry Johnson**, local resident
- Point out that in the previous incarnation of this project, Ventura and and Vineland did have a rapid bus that qualified as a TOC, but that that rapid line has been discontinued, and that the project no longer qualifies for TOC. Closest are further away than 1,500 feet. Any incentives the project has due to proximity to TOC qualifier needs to be corrected.
- No widening, No sidewalk widening, stay aligned. SCNC has said this about every property and has been 99% successful. Do not want curbs going in and out because the street Loses parking and it makes ADA compliance difficult.
- State law authorizes divisions from SP but i just want to say that this is not a mandate, it is not a mandate to the CPC either. That is why our SCNC brought up the 45 feet + 11 feet for a total of 56 feet in height as a maximum.

#### Speaker #4

- No name given.
- Used to be a lot of trees on the property, trees on the eastern side should be protected.

#### Speaker #5

- **Lisa Sarkin**, identified herself as the former president of the SCNC and a member of the Specific Plan review board. LISA Sarkin
- Hope the developer is aware that the lot next door fell into the river bed.
- Concern about tree preservation and trimming
- Question about bike parking.

#### **Applicant's Response**

Mr. Riker addressed concerns raised during public comment, providing the following responses:

- Height: Height incentive is critical. The step backs meet the spirit of transitional height requirements. We need the additional height to include all of the units, including the affordable units. Applicant showed a diagram of height visibility from Arch Drive.
- The Design does not maximize the density that is allowed under Density Bonus.
- Trees: planning to preserve the trees on eastern property line. The 15-foot wide path connecting Arch Drive to the LA River is located along the eastern property edge and allows us to maintain additional existing mature trees.

#### **Staff Questions and Applicant's Response**

- Describe the roof decks: Roof decks located at the 4th and 5th levels, and are intended to help with the stepback design.
- Describe tree preservation efforts: Project does not propose removal of all the existing on-site trees, many are maintained. Residents who have observed tree activity on site may be referring to trees that were removed/trimmed by the Fire Marshal.
- Is there ADA accessible access to the LA River trail from Arch Drive? Applicant's team has worked hard on providing ADA access. The project provides ADA access along all private property proportions of the publicly accessible trail they are providing. The hillside leading from their property edge down to LA river trail/pathway is very steep, ADA access down to the pathway itself may not be feasible but the Applicant's team will continue to work with LADBS Disabled Access to address these issues.
- Instruct the applicant to work with our Housing Unit and the Staff Planner to confirm that the FAR incentive which relies on transit proximity is properly being applied. Applicant will need to confirm eligibility.

#### WRITTEN COMMUNICATION

Planning received comment letters on the proposed project, including:

- A letter from the Studio City Neighborhood Council stating opposition to the project unless itemized recommendations and concerns are addressed.
- One support letter from a local resident.
- CEQA comments from two groups: Supporters Alliance for Environmental Responsibility ("SAFER") represented by Lozeau Drury LLP and the Southwest Mountain States

Regional Council of Carpenters ("The Carpenters" or "SWMSRCC"), represented by Mitchell M. Tsai, Attorney At Law.

Comment letters are described in detail below and are attached in Exhibit D of this Report.

#### Studio City Neighborhood Council (SCNC)

In a memo dated April 19, 2023, the SCNC stated opposition to the project unless the following concerns are met:

- 1. Total height of the building is not over 56 feet.
- 2. The City's transitional height requirement is enforced.
- 3. The project does not qualify for the transit-proximate FAR increase to 3:1.
- 4. No roadway or sidewalk widening. Curb lines and sidewalks align with adjacent curb lines and sidewalks on either side of the Property.
- 5. The official address for the entire Property is 4260 N. Arch Drive, as promised by the applicant. No Ventura Boulevard address.

#### The SCNC also points out:

- 6. Although State Law authorizes the requested deviations from the Specific Plan, this is in no way a mandate.
- 7. Previous Letter of Determination (CPC-2017-3759-DB-SPR-SPP) from 2020 grants an On-Menu Incentive to increase height from 45 to 64 feet (71 feet to top of the stairwell) which is lower in height than current request.
- 8. Previous Letter of Determination (CPC-2017-3759-DBB-SPR-SPP) from 2020 requires compliance with the 60% lot coverage maximum of the Specific Plan which is lower than the 70% currently requested.
- 9. (CEQA) The cumulative effect of all the more than 10 projects on Ventura Boulevard in Studio City simultaneously in stages of development is not addressed.

# NOT FOR CONSTRUCTION

# Exhibit A of the Staff Report for Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA

# Received by the Department of City Planning on March 13, 2023





WEIGHT

**SHEET INDEX DESIGN TEAM** UNIVERSAL CITY GUEST HOME, L.P. 5150 OVERLAND AVENUE, CULVER CITY, CA 90230 EMILY TAYLOR P: (310) 280-5766 E: ETAYLOR@GOLDRICHKEST.COM ARCHITECT **LAHMON ARCHITECTS** 3834 WILLAT AVENUE, SHEET NO. CULVER CITY, CALIFORNIA 90232 **GENERAL** MARK LAHMON G0.00 P: (424) 299 4666 E: INFO@LAHMONARCH.COM W: WWW.LAHMONARCH.COM LAND USE ATTORNEY VENABLE LLP 2049 CENTURY PARK EAST, SUITE 2300, LOS ANGELES, CA 90067 JOHNATHAN H. RIKER P: (310) 229 9612 E: JRIKER@VENABLE.COM W:WWW.VENABLE.COM LANDSCAPE ARCHITECT KSA LANDSCAPE DESIGN STUDIO 6150 WASHINGTON BLVD, CULVER CITY, CA 90232 JAKE PATTON P: (310) 574 4460 X232 E: J.PATTON@KSA-LA.COM W: WWW.KSA-LA.COM 1983 WEST 190TH STREET, SUITE 200 TORRANCE, CA 90504 DES MAHONEY **SURVEY** P: (310) 592-1503 E: DMAHONEY@BREEN.COM W: WWW.BREEN.COM STRUCTURAL ENGINEER/ SHORING/ CIVIL LFA ENGINEERING 319 MAIN STREET EL SEGUNDO, A 90245 JOHN LABIB P: (213) 239-9600 E: JOHN@LABIBSE.COM **ARCHITECTURAL** 

LIGHTING

SHEET CONTENTS 2 7 9 SHEET CONTENTS LT0.10 SITE LIGHTING PLAN LT1.04 NORTH SIDE LIGHTING PLAN SHEET INDEX, PROJECT TEAM, ABBREVIATIONS, SYMBOLS FIRST FLOOR LIGHTING PLAN • • • LT1.11 TITLE SHEET AND PROJECT INFO FIRST FLOOR LIGHTING PLAN • • • LT1.13 FIRST FLOOR CEILING PLAN AREA DIAGRAMS **ZONING DIAGRAMS** SECOND FLOOR LIGHTING PLAN ● ● LT1.20 • • • LT1.21 SECOND FLOOR LIGHTING PLAN OPEN SPACE DIAGRAMS **BUILDING CODE DIAGRAMS** THIRD FLOOR LIGHTING PLAN THIRD FLOOR LIGHTING PLAN EGRESS DIAGRAMS FOURTH FLOOR LIGHTING PLAN EGRESS DIAGRAMS • LT1.40 EXTERIOR OPENING DIAGRAMS • LT1.41 FOURTH FLOOR LIGHTING PLAN • • LT1.50 FIFTH FLOOR LIGHTING PLAN GENERAL NOTES • LT1.51 CONSTRUCTION NOTES FIFTH FLOOR LIGHTING PLAN T.O ROOF LIGHTING PLAN SECURITY NOTES • • LT1.91 **ACCESSIBILITY NOTES** ROOFTOP LIGHTING PLAN **ACCESSIBILITY NOTES** NORTH AND SOUTH BUILDING ELEVATIONS • LT2.01 ACCESSIBILITY NOTES • LT2.02 EAST & WEST BUILDING ELEVATIONS 11A SIGNAGE & ELEVATOR DETAILS LT2.04 BUILDING ELEVATIONS COURTYARDS FIRST FLOOR ENLARGED AMENITIES LIGHTING PLAN 11A PARKING & MISC DETAILS • • LT5.01 11A BATHROOM & KITCHEN DETAILS • • 19 LADBS ACCESSIBILITY BULLETINS • • LANDSCAPE ARCHITECTURAL LADBS ACCESSIBILITY BULLETINS LADBS ACCESSIBILITY BULLETINS COVER SHEET • • L0.0 SUPPORTING DOCUMENTS GENERAL NOTES ACOUSTICAL REPORT OVERALL LANDSCAPE RENDERED PLAN ACOUSTICAL REPORT GROUND LEVEL HARDSCAPE PLAN • • • GROUND LEVEL IRRIGATION PLAN CAL GREEN RESIDENTIAL/NON RESIDENTIAL TITLE 24 REPORTS GROUND LEVEL PLANTING PLAN • LP1.0 • • • LP2.0 PLANTING IMAGES SITE SURVEY • • • SHORING • • • SH-1 SITE SURVEY SHORING PLAN SITE SURVEY GENERAL NOTES, DESIGN CRITERIA, DETAILS & SCHEDULE TYPICAL DETAILS TYPICAL DETAILS **ELEVATIONS** • • SH-5 **ELEVATIONS & SECTIONS** TITLE SHEET EROSION CONTROL AND DEMOLITION PLAN LARR # 23835 • • SH-6 **BOE SPECIAL ORDER #03-0201 AND TIEBACK REQUIREMENTS** ROUGH GRADING PLAN PRECISE GRADING PLAN • • SH-8 SOILS APPROVAL LETTER LOW IMPACT DEVELOPMENT PLAN • • 9 UTILITY PLAN • • STRUCTURAL **GENERAL NOTES** GENERAL NOTES AXO REFERENCE - SOUTH TO NORTH S0.11 TYPICAL DETAILS CONCRETE S0.12 TYPICAL DETAILS CONCRETE AXO REFERENCE- NORTH TO SOUTH ARCHITECTURAL SITE PLAN • • • S0.13 TYPICAL DETAILS CONCRETE PARTIAL SITE SECTION • • S0.14 TYPICAL DETAILS CONCRETE PARTIAL SITE SECTION • • S0.21 TYPICAL DETAILS MASONR' **BASEMENT 2 FLOOR PLAN** TYPICAL DETAILS STEEL • • • S0.31 **BASEMENT 2 SLAB PLAN** • • S0.32 TYPICAL DETAILS STEEL **BASEMENT 1 FLOOR PLAN** • • • S0.41 TYPICAL DETAILS WOOD BASEMENT 1 SLAB PLAN • • S0.42 TYPICAL DETAILS WOOD FIRST FLOOR PLAN • • • S0.43 TYPICAL DETAILS WOOD TYPICAL DETAILS WOOD FIRST FLOOR SLAB PLAN • • S0.44 FIRST FLOOR REFLECTED CEILING PLANS TYPICAL DETAILS WOOD • • S0.45 ENLARGED COURTYARD PLAN • • S0.46 TYPICAL DETAILS WOOD SECOND FLOOR PLAN • • • S0.51 TYPICAL DETAILS STEEL ELEVATION GUIDE RAIL • • S0.61 SECOND FLOOR REFLECTED CEILING PLAN TYPICAL DETAILS ROOF EQUIPMENT THIRD FLOOR PLAN • • • S0.71 TYPICAL DETAILS ROOF TIE BACK ANCHORS THIRD FLOOR REFLECTED CEILING PLAN TYPICAL DETAILS WOOD SHEAR WALLS • • S0.81 THIRD FLOOR BALCONY/ DECK DRAINAGE PLAN • • S0.82 TYPICAL DETAILS WOOD SHEAR WALLS FOURTH FLOOR PLAN • • • S0.91 TYPICAL DETAILS TIEDOWNS & HOLDOWNS FOURTH FLOOR REFLECTED CEILING PLAN ● ● EB-1 **EARTHBOUND TIEDOWNS** FOURTH FLOOR BALCONY/ DECK DRAINAGE PLAN **EARTHBOUND TIEDOWNS** FIFTH FLOOR PLAN • • • S0.101 TYPICAL DETAILS ANCHORS IN CONC & CMU • • S1.01 FIFTH FLOOR REFLECTED CEILING PLAN FOUNDATION PLAN FIFTH FLOOR BALCONY/ DECK DRAINAGE PLAN PARKING 2 ADDITIONAL REINFORCING PLAN (NORTH-SOUTH) • • \$1.01A FIFTH FLOOR BALCONY/ DECK DRAINAGE PLAN PARKING 2 ADDITIONAL REINFORCING PLAN (EAST-WEST) • • S1.01B **ROOF PLAN** LEVEL P1 FRAMING PLAN **BUILDING ELEVATIONS** • • • S1.04A PARKING 1 ADDITIONAL REINFORCING PLAN (NORTH-SOUTH) PARKING 1 ADDITIONAL REINFORCING PLAN (EAST-WEST) **BUILDING ELEVATIONS** • • • S1.04B **BUILDING ELEVATIONS** • • S1.11 1ST FLOOR FRAMING PLAN COURTYARD ELEVATIONS 1ST FLOOR ADDITIONAL REINFORCING PLAN (NORTH-SOUTH) BUILDING SECTIONS 1ST FLOOR ADDITIONAL REINFORCING PLAN (EAST-WEST) **BUILDING SECTIONS** 1ST FLOOR TIEDOWN & POST FRAMING PLAN 2ND FLOOR FRAMING PLAN PARTIAL BUILDING SECTIONS • • S1.21 • • S1.31 3RD FLOOR FRAMING PLAN PARTIAL BUILDING SECTIONS 4TH FLOOR FRAMING PLAN UNIT TYPE A1.0, A1.1 FLOOR PLANS & REFLECTED CEILING PLANS • \$1.41 UNIT TYPE A2 FLOOR PLAN & REFLECTED CEILING PLAN • • S1.51 5TH FLOOR FRAMING PLAN UNIT TYPE B1.0, B1.1 FLOOR PLANS & REFLECTED CEILING PLANS • • \$1.61 ROOF FRAMING PLAN MAT SLAB DETAILS UNIT TYPE B1.2, B2 FLOOR PLANS & REFLECTED CEILING PLANS MAT SLAB DETAILS UNIT TYPE B3, B4 FLOOR PLANS & REFLECTED CEILING PLANS UNIT TYPE B5, B6 FLOOR PLANS & REFLECTED CEILING PLANS • • S3.11 CONCRETE PILE DETAILS • • S3.21 BASEMENT WALL DETAILS UNIT TYPE B7, B8 FLOOR PLANS & REFLECTED CEILING PLANS UNIT TYPE C1 FLOOR PLAN & REFLECTED CEILING PLAN • • S3.22 **BASEMENT WALL DETAILS** • • S3.31 UNIT TYPE C2 FLOOR PLAN & REFLECTED CEILING PLAN CONCRETE COLUMN DETAILS • • S3.41 UNIT TYPE C3, C4 FLOOR PLANS & REFLECTED CEILING PLANS TYPICAL DETAILS CONCRETE SHEAR WALL UNIT TYPE C5, C6 FLOOR PLANS & REFLECTED CEILING PLANS CONCRETE SLAB DETAILS UNIT TYPE C7.0 FLOOR PLAN & REFLECTED CEILING PLAN • • S4.02 CONCRETE SLAB DETAILS UNIT TYPE C7.2, C7.3 FLOOR PLANS & REFLECTED CEILING PLANS • • \$4.11 TYPICAL DETAILS CONCRETE ONE WAY UNIT TYPE C7.4, C8 FLOOR PLANS & REFLECTED CEILINGS PLANS • • \$4.21 TYPICAL DETAILS CONCRETE BEAM UNIT TYPE C9, C10 FLOOR PLANS & REFLECTED CEILING PLANS • • \$4.31 TYPICAL DETAILS RESIDENTIAL UNIT BATHROOMS - FLOOR PLANS & ELEVATIONS • • S4.32 TYPICAL DETAILS RESIDENTIAL UNIT BATHROOMS - FLOOR PLANS & ELEVATIONS • S4.33 TYPICAL DETAILS STEEL MOMENT FRAME ELEVATIONS RESIDENTIAL UNIT KITCHENS - FLOOR PLANS & ELEVATIONS • • S5.00 • • S5.01 RESIDENTIAL UNIT KITCHENS - FLOOR PLANS & ELEVATIONS TYPICAL DETAILS STEE RESIDENTIAL UNIT KITCHENS - FLOOR PLANS & ELEVATIONS • • S5.02 TYPICAL DETAILS STEE STEEL MOMENT FRAMES - STANDARD QUALITY ASSURANCE ENLARGED LOBBY PLAN • • S5.11 ENLARGED LOBBY RCP • • S5.12 STEEL MOMENT FRAMES - STANDARD QUALITY ASSURANCE STEEL MOMENT FRAMES - STANDARD QUALITY ASSURANCE ENLARGED FITNESS MEZZANINE PLAN AND RCP ENLARGED LOBBY ELEVATIONS WOOD SECTIONS & DETAILS • S6.01 **WOOD SECTIONS & DETAILS ENLARGED LOBBY ELEVATIONS** • S6.02 ENLARGED BASEMENT LOBBY PLAN WOOD SECTIONS & DETAILS • S6.11 ENLARGED BASEMENT LOBBY RCP **ENLARGED COMMON AREA BATHROOMS ENLARGED COMMON AREA KITCHENS**  MECHANICA STAIR ONE PLANS TITLE 24 COMPLIANCE FORMS - SHEET ONE STAIR ONE SECTIONS TITLE 24 COMPLIANCE FORMS - SHEET TWO STAIR TWO PLANS & SECTIONS TITLE 24 COMPLIANCE FORMS - SHEET THREE M-EN-3 MECHANICAL GENERAL NOTES, SYMBOLS LEGEND & SHEET STAIR PLANS & SECTIONS **ELEVATOR PLANS & SECTIONS** MECHANICAL SCHEDULES & CALCULATIONS **ELEVATOR DETAILS** MECHANICAL SITE PLAN TRASH CHUTE & VESTIBLE PLANS & SECTIONS M-2.01 MECHANICAL PARKING LEVEL 2 FLOOR PLAN DOOR SCHEDULE & TYPES M-2.02 MECHANICAL PARKING LEVEL 1 FLOOR PLAN WINDOW SCHEDULE & TYPES • • • M-2.10 MECHANICAL FIRST FLOOR PLAN STOREFRONT SCHEDULE M-2.20 MECHANICAL SECOND FLOOR PLAN MATERIAL SCHEDULES • M-2.30 MECHANICAL THIRD FLOOR PLAN EQUIPMENT AND LIGHTING FIXTURE SCHEDULES • • M-2.40 MECHANICAL FOURTH FLOOR PLAN COLUMN AND BEAM ASSEMBLIES MECHANICAL FIFTH FLOOR PLAN HORIZONTAL ASSEMBLIES MECHANICAL ROOF PLAN • • M-2.60 VERTICAL ASSEMBLIES AND PARTITIONS - CONCRETE • • M-3.1 MECHANICAL ENLARGED UNIT PLANS - SHEET ONE VERTICAL ASSEMBLIES AND PARTITIONS - WOOD • • M-3.2 MECHANICAL ENLARGED UNIT PLANS - SHEET TWO LIGHT GAUGE METAL FRAMING • • M-3.3 MECHANICAL ENLARGED UNIT PLANS - SHEET THREE LIGHT GAUGE METAL CEILING FRAMING MECHANICAL ENLARGED UNIT PLANS - SHEET FOUR LIGHT GAUGE METAL CEILING FRAMING • • M-3.5 MECHANICAL ENLARGED UNIT PLANS - SHEET FIVE MISCELLANEOUS DETAILS • • M-5.1 MECHANICAL DETAILS EXTERIOR WALL FRAMING DETAILS HORIZONTAL & VERTICAL ASSEMBLIES INTERSECTION DETAILS • • 20 HORIZONTAL & VERTICAL ASSEMBLIES INTERSECTION DETAILS • • PLUMBING (EXTERIOR) PLUMBING GENERAL NOTES, SYMBOLS LEGEND, & SHEET INDEX EXTERIOR WALL FINISH DETAIL • • P-0.2 PLUMBIING SCHEDULES BELOW GRADE WATERPROOFING DETAILS • • P-0.3 PLUMBING CALCULATIONS BELOW GRADE WATERPROOFING DETAILS • • P-1.0 PLUMBING SITE PLAN PLANTER DETAILS • • P-2.01 PLUMBING PARKING LEVEL 1 FLOOR PLAN PLANTER DETAILS P-2.02.1 PLUMBING PARKING LEVEL 2 WASTE & VENT PIPING PLAN FLASHING DETAILS • • P-2.02.2 PLUMBING PARKING LEVEL 1 WATER & GAS PIPING PLAN FLASHING DETAILS P-2.10 PLUMBING FIRST FLOOR PLAN FLASHING DETAILS P-2.20 PLUMBING SECOND FLOOR PLAN ROOF DETAILS P-2.30 PLUMBING THIRD FLOOR PLAN **ROOF DETAILS** • • P-2.40 PLUMBING FOURTH FLOOR PLAN DOOR DETAILS • • P-2.50.1 PLUMBING FIFTH FLOOR WASTE & VENT PIPING PLAN DOOR DETAILS P-2.50.2 PLUMBING FIFTH FLOOR WATER & GAS PIPING PLAN DOOR & WINDOW FLASHING DETAILS • • P-2.60 PLUMBING ROOF PLAN WINDOW DETAILS • • P-3.1 PLUMBING ENLARGED UNIT PLANS - SHEET ONE STOREFRONT DETAILS - CENTER GLAZED • • P-3.2 PLUMBING ENLARGED UNIT PLANS - SHEET TWO • • STOREFRONT DETAILS - EXT GLAZED • • P-3.3 PLUMBING ENLARGED UNIT PLANS - SHEET THREE MISC METALS - GUARDRAILS • • P-3.4 PLUMBING ENLARGED UNIT PLANS - SHEET FOUR MISC METALS - GATE • • P-3.5 PLUMBING ENLARGED UNIT PLANS - SHEET FIVE P-4.1.1 PLUMBING WASTE & VENT RISER DIAGRAM - SHEET ONE STAIR DETAILS CONCRETE & METAL MISCELLANEOUS METAL • • P-4.1.2 PLUMBING WASTE & VENT RISER DIAGRAM - SHEET TWO COURTYARD TRELLIS P-4.1.3 PLUMBING WASTE & VENT RISER DIAGRAM - SHEET THREE CASEWORK DETAILS • • P-4.2.1 PLUMBING HOT & COLD WATER RISER DIAGRAM - SHEET ONE

specified projects and shall not be duplicated. SHEET NO. **SHEET CONTENTS** disclosed, or used without the prior written consent P-4.2.2 PLUMBING HOT & COLD WATER RISER DIAGRAM - SHEET TWO of Lahmon Architects. PLUMBING HOT & COLD WATER RISER DIAGRAM - SHEET THREE PLUMBING STORM RISER DIAGRAM - SHEET ONE PLUMBING STORM RISER DIAGRAM - SHEET TWO • • P-4.3.2 PLUMBING GAS RISER DAIGRAMS - SHEET ONE PLUMBING GAS RISER DIAGRAMS - SHEET TWO • • P-5.1 PLUMBING DETAILS - SHEET ONE PLUMBING DETAILS - SHEET TWO • • 31 ELECTRICAL ELECTRICAL GENERAL NOTES, TERMS & ABBREVIATION & SHEET • E-0.1 ELECTRICAL LIGHTING FIXTURE SCHEDULE, NOTES & SYMBOLS • ELECTRICAL SITE UTILITY SITE PLAN ELECTRICAL PARKING LEVEL 1 FEEDER ROUTING PLAN ELECTRICAL FIRST FLOOR FEEDER ROUTING PLAN ELECTRICALSECOND FLOOR FEEDER ROUTING PLAN ELECTRICAL THIRD FLOOR FEEDER ROUTING PLAN **ELECTRICAL FOURTH FLOOR FEEDER ROUTING PLAN** ELECTRICAL FIFTH FLOOR FEEDER ROUTING PLAN ELECTRICAL PARKING LEVEL 1 FLOOR PLAN ■ ELECTRICAL PARKING LEVEL 1 EMERGENCY PHOTOMETRIC PLAN ELECTRICAL PARKING LEVEL 2 FLOOR PLAN ELECTRICAL PARKING LEVEL 1 EMERGENCY PHOTOMETRIC PLAN

• ELECTRICAL FIRST FLOOR PLAN ELECTRICAL PARKING LEVEL 1 EMERGENCY PHOTOMETRIC PLAN

• • ELECTRICAL SECOND FLOOR PLAN ELECTRICAL SECOND FLOOR EMERGENCY PHOTOMETRIC PLAN ELECTRICAL THIRD FLOOR PLAN ELECTRICAL THIRD FLOOR EMERGENCY PHOTOMETRIC PLAN ELECTRICAL FOURTH FLOOR PLAN ELECTRICAL FOURTH FLOOR EMERGENCY PHOTOMETRIC PLAN ELECTRICAL FIFTH FLOOR PLAN ELECTRICAL FIFTH FLOOR EMERGENCY PHOTOMETRIC PLAN ELECTRICAL ROOF PLAN ELECTRICAL ROOF EMERGENCY PHOTOMETRIC PLAN **ELECTRICAL ENLARGED UNIT PLANS - SHEET ONE ELECTRICAL ENLARGED UNIT PLANS - SHEET TWO** ELECTRICAL ENLARGED UNIT PLANS - SHEET THREE **ELECTRICAL ENLARGED UNIT PLANS - SHEET FOUR** ELECTRICAL ENLARGED UNIT PLANS - SHEET FIVE ELECTRICAL ENLARGED UNIT PLANS - SHEET SIX ELECTRICAL ENLARGED UNIT PLANS - SHEET SEVEN **ELECTRICAL ENLARGED UNIT PLANS - SHEET EIGHT** ELECTRICAL ENLARGED UNIT PLANS - SHEET NINE ELECTRICAL ENLARGED UNIT PLANS - SHEET TEN **ELECTRICAL ENLARGED UNIT PLANS - SHEET ELEVEN** ELECTRICAL ENLARGED UNIT PLANS - SHEET TWELVE **ELECTRICAL ENLARGED UNIT PLANS - SHEET THIRTEEN** ELECTRICAL SINGLE LINE DIAGRAM - SHEET ONE ELECTRICAL SINGLE LINE DIAGRAM - SHEET TWO ELECTRICAL SINGLE LINE DIAGRAM - SHEET THREE ELECTRICAL COMMUNICATION AND DAS EMERGENCY RISER **ELECTRICAL PANEL SCHEDULE - SHEET ONE** ELECTRICAL DETAILS - SHEET ONE • • ELECTRICAL DETAILS - SHEET TWO TITLE 24 COMPLIANCE FORMS - SHEET ONE TITLE 24 COMPLIANCE FORMS - SHEET TWO TITLE 24 COMPLIANCE FORMS - SHEET THREE EBM0.01 EBM1.91 COMPOSITE ROOF PLAN EBM2.01 EXTERIOR ELEVATIONS EBM2.02 EXTERIOR ELEVATIONS EBM2.03 EXTERIOR ELEVATIONS COURTYARDS EBM9.01 DETAILS (310) 280-5766 PROJECT: GENERAL NOTES, ABBREVIATIONS, AND LEGENDS GUIDELINES AND SPECIFICATIONS OVERALL LV PLAN - PARKING 2 FLOOR PLAN OVERALL LV PLAN - PARKING 1 FLOOR PLAN OVERALL LV PLAN - FIRST FLOOR OVERALL LV PLAN - SECOND FLOOR OVERALL LV PLAN - THIRD FLOOR OVERALL LV PLAN - FOURTH FLOOR OVERALL LV PLAN - FIFTH FLOOR OVERALL LV PLAN - ROOF PLAN COURTYARD ENLARGED PLAN 4260 N. ARCH DRIVE STUDIO CITY, CA 91604 LOBBY ENLARGED PLAN FITNESS ROOM ENLARGED PLAN & RCP COMMUNITY ROOM, THEATER PLAN & RCP UNIT TYPE A1.0, A1.1 FLOOR PLANS UNIT TYPE A2 FLOOR PLAN UNIT TYPE B1.0, B1.1 FLOOR PLAN UNIT TYPE B1.2, B2 FLOOR PLAN UNIT TYPE B3, B4 FLOOR PLAN UNIT TYPE B5, B6 FLOOR PLAN UNIT TYPE B7, B8 FLOOR PLAN UNIT TYPE C1 FLOOR PLAN UNIT TYPE C2 FLOOR PLAN UNIT TYPE C3, C4 FLOOR PLAN UNIT TYPE C5, C6 FLOOR PLAN UNIT TYPE C7.0 FLOOR PLAN UNIT TYPE C7.2, C7.3 FLOOR PLAN LV3.14 UNIT TYPE C7.4, C8 FLOOR PLAN UNIT TYPE C9, C10 FLOOR PLANS • • SITE PLAN PROJECT NOTES SITE INSPECTION NOTES AND REQUIREMENTS FINISH SCHEDULE AND EQUIPMENT LIST POOL PLAN AND SECTIONS **EQUIPMENT ROOM PLAN AND REQUIREMENTS EQUIPMENT CUT SHEETS CONSTRUCTION DETAILS** CONSTRUCTION DETAILS SP4.0 ACCESSIBILITY PLAN AND NOTES XX NOT YET USED A8.08 SUSPENDED CEILING TOTAL SHEETS: 387 • • • • KEY PLAN: • • • •

ARCHITECT: 3834 WILLAT AVENUE, CULVER CITY, CA 90232 (T) 424.299.4666 The design, drawings, and written material in these documents of service are the sole property of Lahmon Architects. All design and related information contained herein are for use on the

**UNIVERSAL CITY** GUEST HOME, L.P.

5150 OVERLAND AVENUE CULVER CITY, CA 90230

**APARTMENTS** 

PZA SUBMITTAL

REVISION LIST:

DESCRIPTION

SHEET TITLE:

PROJECT NO.

AS SHOWN

SHEET INDEX, PROJECT TEAM, ABBREVIATIONS, SYMBOLS

SHEET NO.

CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:28:27 PM

# THE CRESCENT APARTMENTS

# 4260 N. ARCH DRIVE STUDIO CITY, CA 91604

#### **AREA ANALYSIS** SPACE (PER BUILDING CODE) CODE) AREA (LABC) (LAMC) BASEMENT 2 SBFL 0 SF 1,284 SF 0 SF 280 SF ELEVATOR 0 SF 0 SF 2020 LABC (AMENDED FROM CBC 2019) 0 SF PARKING 30,145 SF 30,145 SF STAIR 2 0 SF 2020 LAGREEN (AMENDED FROM CALGREEN 2019) 32,702 SF 436 SF 32,554 SF 2020 LAFC (AMENDED FROM CFC 2019) BASEMENT 1 SBFL 2020 LAMC (AMENDED FROM CMC 2019) 2020 LAEC (AMENDED FROM CEC 2019) BLDG STORAGE 482 SF 482 SF 482 SF 2020 LAPC (AMENDED FROM CPC 2019) 691 SF 691 SF DOG WASH 145 SF 145 SF 0 SF ELECTRICAL 92 SF 0 SF 44 SF 0 SF 83 SF 5 STORIES OF TYPE III-A OVER TWO STORIES OF TYPE I-A SUBTERRANEAN PARKING 143 SF MAINT. SHOP 143 SF MECHANICAL METER ROOM 183 SF 139 SF MULTI PURPOSE 424 SF PARKING 25,123 SF 25,123 SF POOL EQUIP 137 SF SUBTERRANEAN PARKING LEVELS; S-2 OCCUPANCY SERVER 36 SF 0 SF ABOVE-GRADE APARTMENTS; R-2 OCCUPANCY WITH OCCUPIED ROOFS ON LEVELS 4 & 5 STAIR 2 463 SF 463 SF TRASH 1 195 SF 195 SF 0 SF 30,068 SF 30,068 SF DEFERRED SUBMITTAL DOCUMENTS SHALL BE PREPARED UNDER THE DIRECTION OF THE CONTRACTOR AND 1ST FLR SBFL SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT AND/OR ENGINEER. THE DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL THEN BE SUBMITTED TO THE ARCHITECT 2 BD 6 5,679 SF 5,679 SF AND/OR ENGINEER FOR REVIEW AND COORDINATION. FOLLOWING REVIEW BY THE DESIGN PROFESSIONAL, THE BLDG STORAGE 273 SF CONTRACTOR SHALL FORWARD THE DOCUMENTS TO THE CITY FOR REVIEW AND APPROVAL, WITH A NOTATION CORRIDOR 2 3,026 SF 3,026 SF INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. 0 SF 0 SF EXT COVERED 1,984 SF PLANS AND/OR CALCULATIONS FOR THE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED IN A TIMELY MANNER FITNESS 915 SF THAT ALLOWS A MINIMUM 30 WORKING DAYS FOR INITIAL PLAN REVIEW. ALL COMMENTS RELATED TO THE 35 SF 35 SF DEFERRED SUBMITTAL MUST BE ADDRESSED TO THE SATISFACTION OF THE PLAN CHECKER DIVISION PRIOR TO LOBBY 2,598 SF 2,598 SF APPROVAL OF THE SUBMITTAL ITEMS. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. POOL 905 SF 0 SF 0 SF 0 SF 1,730 SF PLANS FOR FIRE SPRINKLERS MUST BE SUBMITTED TO, AND APPROVED BY, FIRE PLAN CHECK BEFORE THIS REC-ROOM 466 SF SHAFT 0 SF 0 SF STAIR STUDIO 4 1,869 SF 1,869 SF SEPERATE PERMIT REQUIRED: 46 SF 46 SF $\circ \; \mathsf{ELEVATORS}$ 23,934 SF o MECHANICAL 2ND FLR SBFL o ELECTRICAL PLUMBING 2 BD 6 5,652 SF CORRIDOR 1 2,796 SF 2,796 SF 35 SF 369 SF • THIS PROJECT MAY BE REQUIRED TO PROVIDE A DISTRIBUTED ANTENNA SYSTEM REC-ROOM 1 SHAFT 0 SF STAIR 438 SF 438 SF STUDIO 5 2,413 SF 2,413 SF 44 SF 44 SF 21,376 SF 20,939 SF 21,648 SF 3RD FLR SBFL 2 BD 6 5,538 SF 5,538 SF CORRIDOR 3,023 SF 3,023 SF 3,023 SF 35 SF 35 SF 35 SF 0 SF STAIR 2 0 SF STUDIO 5 2,328 SF 2,328 SF 2,328 SF TRASH 1 46 SF 46 SF 25,357 SF 25,077 SF 24,636 SF 4TH FLR SBFL 2 BD 8 7,867 SF 7,867 SF 2,824 SF 35 SF 35 SF 35 SF 0 SF 0 SF SHAFT 273 SF STAIR STUDIO 5 2,330 SF 2,330 SF 2,330 SF TRASH 1 46 SF 46 SF 46 SF 23,812 SF 23,273 SF 22,835 SF 5TH FLR SBFL 2 BD 10 10,489 SF 10,489 SF 10,489 SF CORRIDOR 2,539 SF 2,539 SF 2,539 SF 35 SF 35 SF 0 SF ROOF DECK 0 SF SHAFT 0 SF STAIR 2 STUDIO 461 SF 461 SF 461 SF TRASH 1 46 SF 46 SF 46 SF 21,142 SF 20,539 SF 20,101 SF 06 T.O. ROOF 20,580 SF 0 SF 0 SF 205,731 SF 176,820 SF 116,312 SF

**BUILDING CODE SUMMARY** 

**APPLICABLE CODES:** 

MECHANICAL CODE:

ELECTRICAL CODE:

**CONSTRUCTION TYPE (BUILDING CODE)** 

**BUILDING OCCUPANCY (BUILDING CODE)** 

PLUMBING CODE:

**DEFERRED SUBMITTALS** 

EQUIPMENT IS INSTALLED.

• FIRE SPRINKLER SYSTEM

**DEFERRED ITEMS:** 

O DEMOLITION

REVOCABLE PERMIT

○ SIGNAGE

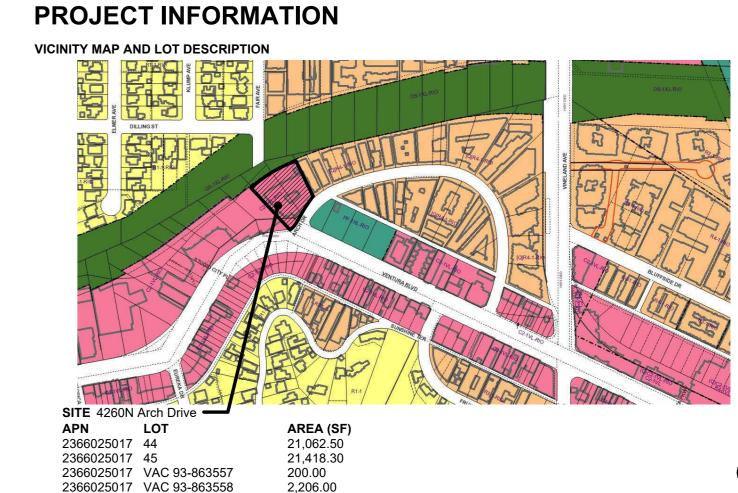
**BUILDING CODE:** 

**GREEN CODE:** 

FIRE CODE:

BUILDING AREA PER CONSTRUCTION TYPE PE		BUILDING AREA PER OCCUPANCY TYP		
CONSTRUCTION TYPE (PER BUILDING CODE)	AREA	OCCUPANCY (PER BUILDING CODE)		AREA
BASEMENT 2 SBFL		BASEMENT 2 SBFL		
IA	32,554 SF		S-2	32,554 SF
BASEMENT 1 SBFL		BASEMENT 1 SBFL		
IA	30,068 SF		В	569 SF
1ST FLR SBFL			R-2	886 SF
IIIA	23,934 SF		S-2	28,613 SF
2ND FLR SBFL		1ST FLR SBFL		
IIIA	21,376 SF		A-3	3,979 SF
3RD FLR SBFL			R-2	19,682 SF
IIIA	25,077 SF		S-2	273 SF
4TH FLR SBFL		2ND FLR SBFL		
IIIA	23,273 SF		A-3	781 SF
5TH FLR SBFL			R-2	20,595 SF
IIIA	20,539 SF	3RD FLR SBFL		
	176,820 SF		R-2	25,077 SF
		4TH FLR SBFL		
			R-2	23,273 SF
		5TH FLR SBFL		
			R-2	20.539 SF

176,820 SF



**LOT LEGAL DESCRIPTION** 

GROSS TOTAL LOT AREA (ZIMAS 44,886.80

THE LAND REFERRED TO IN THIS COMMITMENT IS SITUATED IN THE CITY OF LOS ANGELES. COUNTY OF LOS ANGELES, THE STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS: LOTS 44 AND 45 OF TRACT 4852, OF THE CITY OF LOS ANGELES, AS PER MAP RECORDED IN BOOK 53 PAGES 49 AND 50 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, EXCEPT FROM SAID LOT 44 THAT PORTION THEREOF DESCRIBED IN PARCEL 293, IN THE FINAL DECREE OF CONDEMNATION ENTERED IN LOS ANGELES COUNTY SUPERIOR COURT, CASE NO. 539872, A CERTIFIED COPY THEREOF BEING RECORDED APRIL 20, 1949 IN BOOK 29888 PAGE 334 OFFICIAL RECORDS. ALSO EXCEPT FROM SAID LOT 45 THAT PORTION THEREOF DESCRIBED IN PARCEL 304, IN THE FINAL DECREE OF CONDEMNATION ENTERED IN LOS ANGELES COUNTY SUPERIOR COURT CASE NO. 542717 A CERTIFIED COPY THEREOF BEING RECORDED DECEMBER 6, 1949 IN BOOK 31652 PAGE 113 OFFICIAL RECORDS. TOGETHER WITH THAT PART OF THAT PORTION OF VENTURA BOULEVARD, ADJOINING LOT ON THE SOUTH, WHICH WAS VACATED BY RESOLUTION OF THE COUNCIL OF THE CITY OF LOS ANGELES, UNDER RESOLUTION NUMBER 92-01581, A CERTIFIED COPY OF WHICH WAS RECORDED MAY 6, 1993 AS INSTRUMENT NUMBER 93-863557, TITLE TO WHICH WOULD PASS WITH A LEGAL CONVEYANCE OF SAID LOTS 44 AND 45 OF SAID TRACT 4852 REFERT TO DOCUMENT 9311390044 ON SHEET G0.61.

PROJECT DESCRIPTION PROPOSED PROJECT: 5-STORY NEW RESIDENTIAL BUILDING CONSISTING OF 129 DWELLING UNITS. 5 STORIES OF

TYPE IIIA CONSTRUCTION OVER 2 STORIES OF TYPE IA SUBTERRANIAN PARKING.

LEGAL INFORMATION

SPECIFIC PLAN:

SHERMAN OAKS - STUDIO CITY -TOLUCA LAKE -CAHUENGA PASS AREA PLANNING COMISSION: SOUTH VALLEY NEIGHBORHOOD COUNCIL: STUDIO CITY COUNCIL DISTRICT: CD 2 - PAUL KREKORIAN VENTURA/CAHUENGA BOULEVARD, CORRIDOR SPECIFIC PLAN

REFER TO 5/G0.10

01 LAMC 12.22.A.25 - DENSITY BONUS: 'THE PROJECT' IS PROVIDING 15% OF THE "BASE DENSITY" (I.E., 113 UNITS, AS CALCULATED BY THE DENSITY BONUS REGULATIONS) AS AFFORDABLE FOR VERY LOW INCOME TENANTS, WHICH COMES OUT TO 17 UNITS (113 X 0.15 = 16.95, ROUNDED UP TO 17).

#1: AN ON-MENU INCENTIVE TO PERMIT A FLOOR AREA RATIO OF 3:1 IN LIEU OF 1:1 PER SECTION 6.B.3 OF THE VENTURA/CAHUENGA BOULEVARD CORRIDOR SPECIFIC PLAN AND TO PERMIT A DENSITY OF BONUS OF X1.25 #2: AN ON-MENU INCENTIVE TO ALLOW FOR 70% OF LOT COVERAGE IN LIEU OF 60% PER SECTION 7-B.2 OF THE VENTURA-CAHUENGA CORRIDOR SPECIFIC PLAN REFER TO 4/G0.10 #3: AN OFF-MENU INCENTIVE TO INCREASE THE ALLOWABLE HEIGHT FROM

(I) 45 FEET TO 75 FEET TO THE TOP OF THE PARAPET (76 FEET TO THE TOP OF THE STAIRWELL) AS REQUIRED PURSUANT TO SECTION 7.E.1.A.1.I. OF THE VENTURA/CAHUENGA BOULEVARD CORRIDOR SPECIFIC PLAN. REFER TO 3/G0.10 (II) TRANSITIONAL HEIGHT PER OFF MENU DENSITY BONUS: THE BUILDING HEIGHT LIMIT SHALL BE STEPPED-BACK AT A 45 DEGREE ANGLE AS MEASURED FROM A HORIZONTAL PLANE ORIGINATING 25 FEET ABOVE GRADE AT THE PROPERTY LINE OF THE ADJOINING LOT TO THE OS ZONE, IN LIEU OF 25 FEET WITHIN 18 FEET TO 49 FEET OF THE REAR PROPERTY LINE, A HEIGHT OF 33 FEET WITHIN 50 TO 99 FEET OF THE REAR PROPERTY LINE, AND A HEIGHT OF 61 FEET WITHIN 100 TO 199 FEET

#1:WAIVER FROM COMMERCIAL COMER REGULATIONS REQUIRING CONDITIONAL USE APPROVAL FOR

REQUIREMENTS OF LAMC SECTION 12.21.1 A.10, PURSUANT TO LAMC SECTION 12.22 A.25.

OF THE REAR PROPERTY LINE ABUTTING TO THE OS ZONE IN LIEU OF THE TRANSITIONAL HEIGHT

#2 WAIVER FROM LAMC SEC. 12.21 A.5.(C) TO ALLOW 43 OF THE 132 REQUIRED PARKING SPACES TO BE COMPACT

#### **ZONING: LOT AREA, FAR, DENSITY, HEIGHT**

T AREA	44,886.8 SF (PER ZIMAS)		<b>BUILDABLE AREA</b> 43,936 SF (REFER TO 1/G0.10 FOR BUILDABLE LOT AREA C.					
NSITY				FAR				
SE:	44,886.8 SF /(400) PER: ZIMAS	112.2		BASE: (1:1) - C2- 43,936.0 SF * 1	1VL-RIO	4	43,936 SF	
CENTIVE:	LAMC 12.22.A.25(C)			INCENTIVE: (3:1) - LAMC 12.22.A.25				
	113 X (1.35) = 152.55	153		43,936.0 SF * 3		1	31,808 SF	
ROPOSED:		129		PROPOSED:		1	16,312 SF	
				HEIGHT				
				BASE:	45' - 0" (N	NO LIMIT	)	
				INCENTIVE:	75' - 0" (	5 STORI	ES)	
				PROPOSED:	75' - 0" (	(5 STORI	ES)	

# **ZONING: SETBACKS**

BUILDING SETBACKS		
PER SPECIFIC PLAN: VENTURA/CAHUENGA BOULEVARD, CORRIDOR SPECIFIC PLAN	FRONT YARD (ARCH STREET)	1' - 6"
PER ZONE: C2-1VL-RIO	SIDE YARD (WEST)	8' - 0"
PER ZONE: C2-1VL-RIO	SIDE YARD (EAST)	8' - 0"
PER ZONE: C2-1VL-RIO	REAR YARD (LA RIVER)	18' - 0

(SEE LIST OF PROPOSED INCENTIVES ABOVE)

REQ OPEN SPACE SI

7,300.0 SI

4,500.0 SI

100.0 SF

125.0 SF

# **ZONING: LOT COVERAGE**

BASE ALLOWED LOT COVERAGE PER VENTURA/CAHUENGA BOULEVARD CORRIDOR SPECIFIC PLAN: 60% - 26,932 SF MAX ALLOWED LOT COVERAGE PER ON-MENU INCENTIVE 70% - 31,420 SF **RESIDENTIAL UNIT MIX** 

···-			
1 BD	1 BED, 1 BATH	73	47,7
2 BD	2 BED, 2 BATH	36	35,2
STUDIO	0 BED, 1 BATH	20	9,4
		129	92,363
ZONING: OPEN SPACE - LAMC S	EC 12.21		

1 BED, 1 BATH

0 BED, 1 BATH

2 BED, 2 BATH 36

### OPEN SPACE REQUIRED

MAX INTERIOR OPEN	SDACE: 12 900 S	CE * 0 25 -	2 450 00 SE	129 13,8	00.0 SF
OPEN SPACE PROVIDE		or 0.25 <b>-</b>	3,430.00 SF		
TYPE	NAME	COUNT	AREA	AREA OF INTERIOR COMMON SP	ACE
1ST FLR SBFL					
COMMON OPEN SPACE	OPEN SPACE	2	8,947.1 SF		0.0 SF
PRIVATE OPEN SPACE	PATIO	9	450.0 SF		0.0 SF
REC ROOM	FITNESS	1	851.0 SF	85	51.0 SF
REC ROOM	REC ROOM	1	586.6 SF	58	86.6 SF
2ND FLR SBFL					
PRIVATE OPEN SPACE	BALCONY	8	400.0 SF		0.0 SF
REC ROOM	FITNESS	1	615.2 SF	6	15.2 SF
3RD FLR SBFL					
PRIVATE OPEN SPACE	BALCONY	12	600.0 SF		0.0 SF
PRIVATE OPEN SPACE	PATIO	2	100.0 SF		0.0 SF
4TH FLR SBFL					
PRIVATE OPEN SPACE	BALCONY	8	400.0 SF		0.0 SF
PRIVATE OPEN SPACE	PATIO	4	200.0 SF		0.0 SF
5TH FLR SBFL					
PRIVATE OPEN SPACE	BALCONY	12	600.0 SF		0.0 SF
PRIVATE OPEN SPACE	PATIO	1	50.0 SF		0.0 SF
			13,800.0 SF	2,08	52.8 SF

# **PARKING SUMMARY**

VEHICULAR PARKING RESIDENTIAL PARKING SPACES RE	EQUIRED	PERS	UANT TO AB 2345 (REF	ER TO G0.61)
TYPE	DESCRIPTION	COUNT	SPACES/UNIT	SPACES REQUIRED
1 BD	1 BED, 1 BATH	73	1	73
2 BD	2 BED, 2 BATH	36	1.5	54
STUDIO	0 BED, 1 BATH	20	1	20
		129		147
			-10% BICYC	LE SWAP - 15
			TOTAL RI	EQUIRED: <u>132</u>
				TOTA

PARKING SPACES PROVIDED

PARKING SPACES BREAKDOWN ACCESSIBLE PARKING (101-150) (1 VAN) EV CHARGER: 30% OF TOTAL SPACES: 10% EVCS INSTALLED 20% FUTURE 145 \* 0.2 = 29 PROVIDED **SHORT TERM PARKING** (0-25 1per10 = <u>2.5</u>; 26-129(-25) 1per15=<u>6.93</u> = <u>**9.43**</u> +BIKE SWAP 4\*15\*0.1 =6+9.43=<u>15.43</u> LONG TERM PARKING (0-25 1per1 = 25; 26-129(-25) 1per1.5=69.33 = 94.33 +BIKE SWAP 4\*15\*0.9=54+94.33=**148.33 GUEST PARKING** 

NO GUEST PARKING REQUIRED OR PROVIDED.

PROJECT FUNDING

THE PROJECT IS PRIVATELY FUNDED AND IS NOT RECEIVING A CREDIT INCENTIVE.

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specified projects and shall not be duplicated,

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disclosed, or used without the prior written consent

CONSULTANT:

UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

PROJECT:

THE CRESCENT **APARTMENTS** 

PZA SUBMITTAL

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

REVISION LIST:

PROJECT NO. AS SHOWN

TITLE SHEET AND PROJECT INFO

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UNIVERSAL CITY GUEST HOME, L.P.

# 5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

BUILDING FLOOR AREA AREA (LABC) (LAMC)

436 SF

482 SF 691 SF

143 SF

0 SF 424 SF 0 SF 0 SF

0 SF 1,885 SF

8,590 SF 5,679 SF

273 SF

1,984 SF

915 SF

466 SF 0 SF 0 SF 1,869 SF

46 SF 25,480 SF

2,796 SF

412 SF 35 SF 369 SF

1,284 SF 280 SF 0 SF

482 SF 691 SF 145 SF 92 SF 44 SF 367 SF 83 SF 143 SF 254 SF 183 SF

139 SF 424 SF

25,123 SF 137 SF 36 SF 463 SF 195 SF 30,068 SF

5,679 SF 273 SF 3,026 SF 0 SF

915 SF 35 SF 2,598 SF 0 SF 0 SF

46 SF 23,934 SF

2,413 SF 2,413 SF 2,413 SF 44 SF 44 SF 44 SF 21,648 SF 21,376 SF 20,939 SF

25,357 SF

2,328 SF 2,328 SF 46 SF 46 SF 25,077 SF 24,636 SF

2,330 SF 2,330 SF 46 SF 46 SF 23,273 SF 22,835 SF

7,867 SF 2,824 SF

9,734 SF 7,867 SF 2,824 SF 35 SF 0 SF 0 SF 437 SF

10,489 SF 10,489 SF 10,489 SF 2,539 SF 2,539 SF 2,539 SF 35 SF 35

 20,580 SF
 0 SF
 0 SF

 20,580 SF
 0 SF
 0 SF

 205,731 SF
 176,820 SF
 116,312 SF

30,145 SF 409 SF 32,554 SF

32,702 SF

482 SF 691 SF

145 SF

195 SF 30,068 SF

PROJECT:

## THE CRESCENT **APARTMENTS**

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

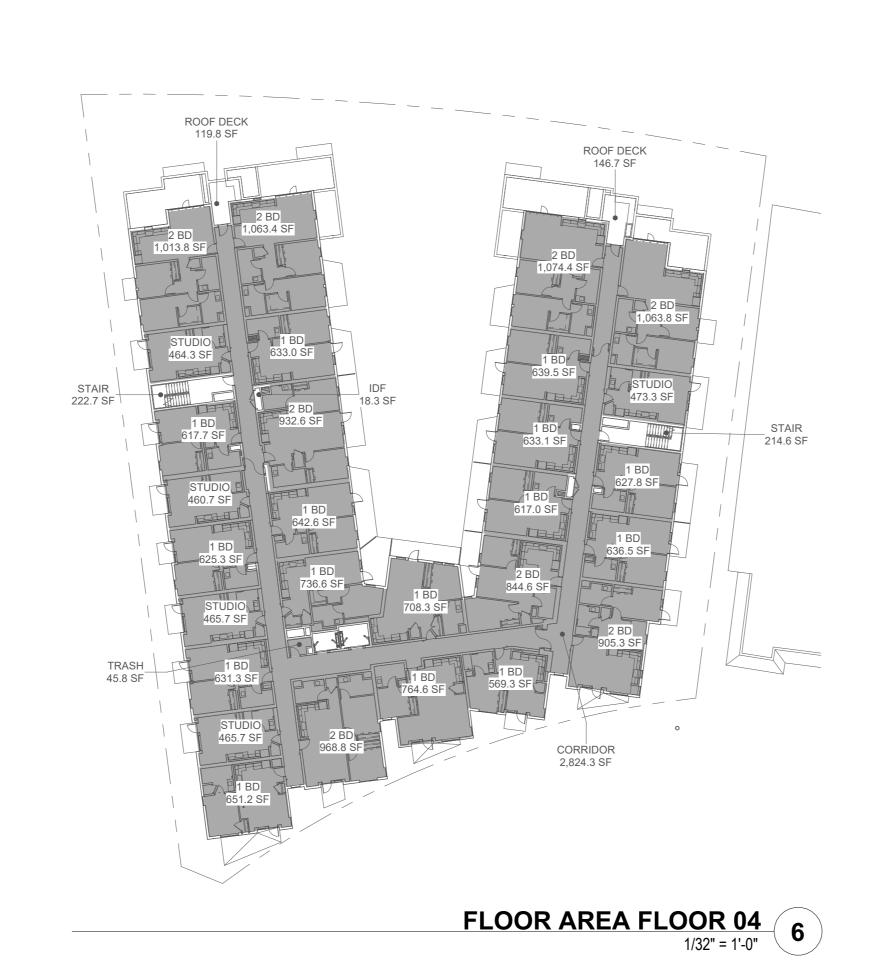
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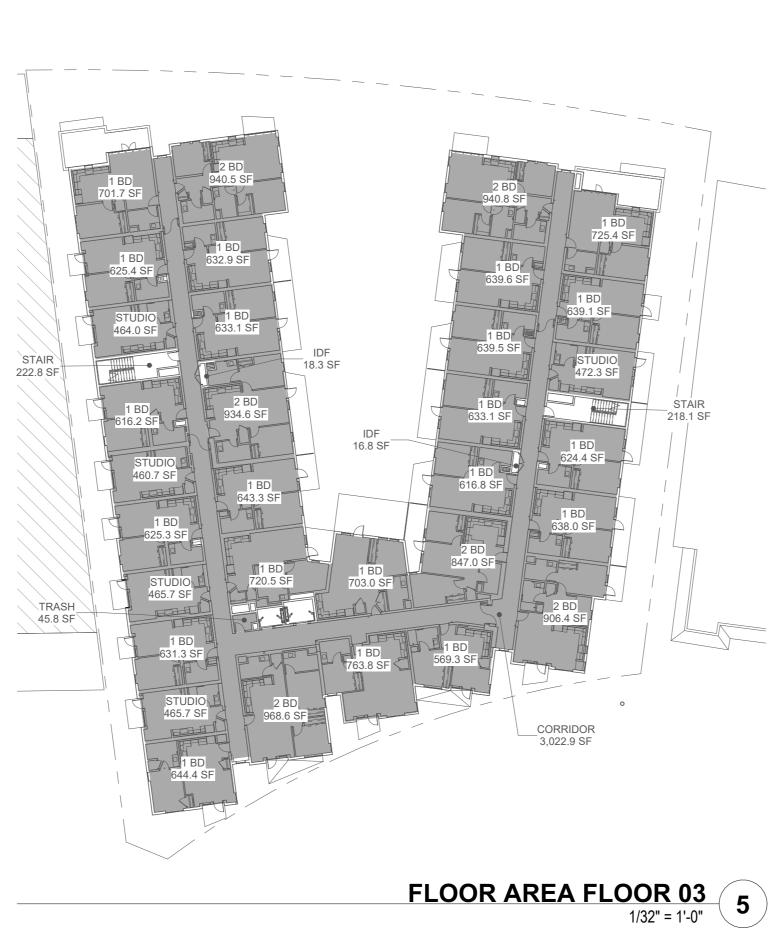
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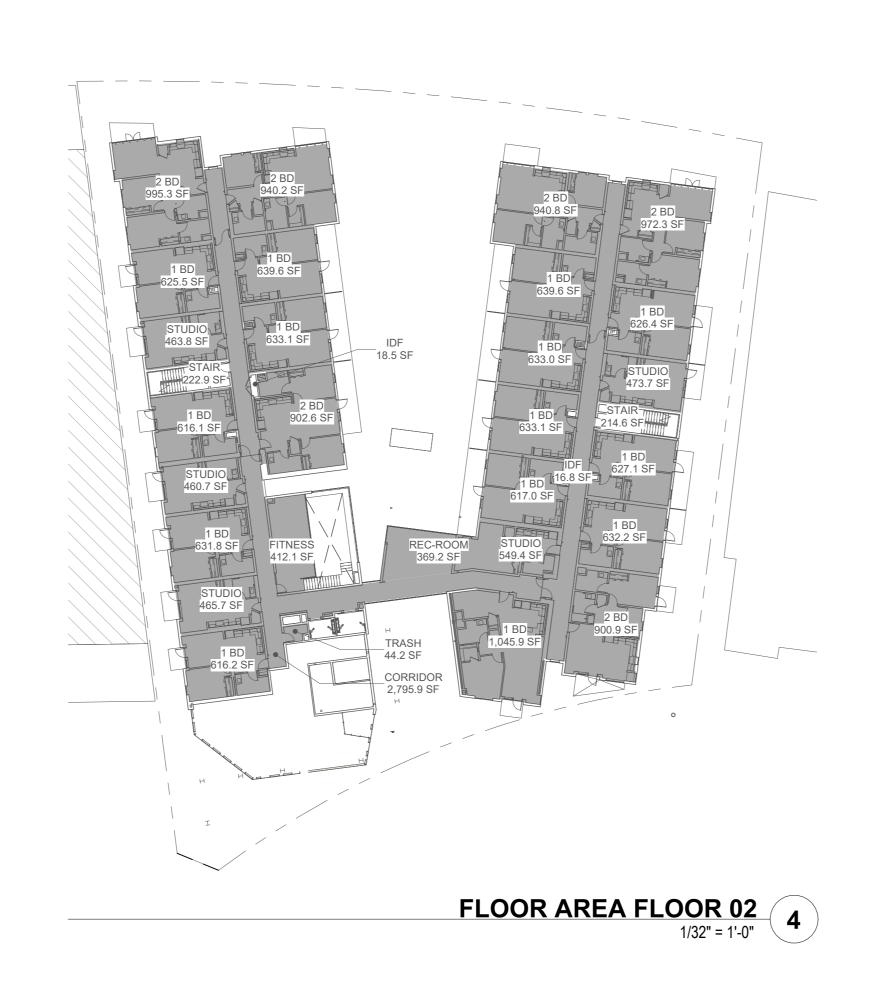
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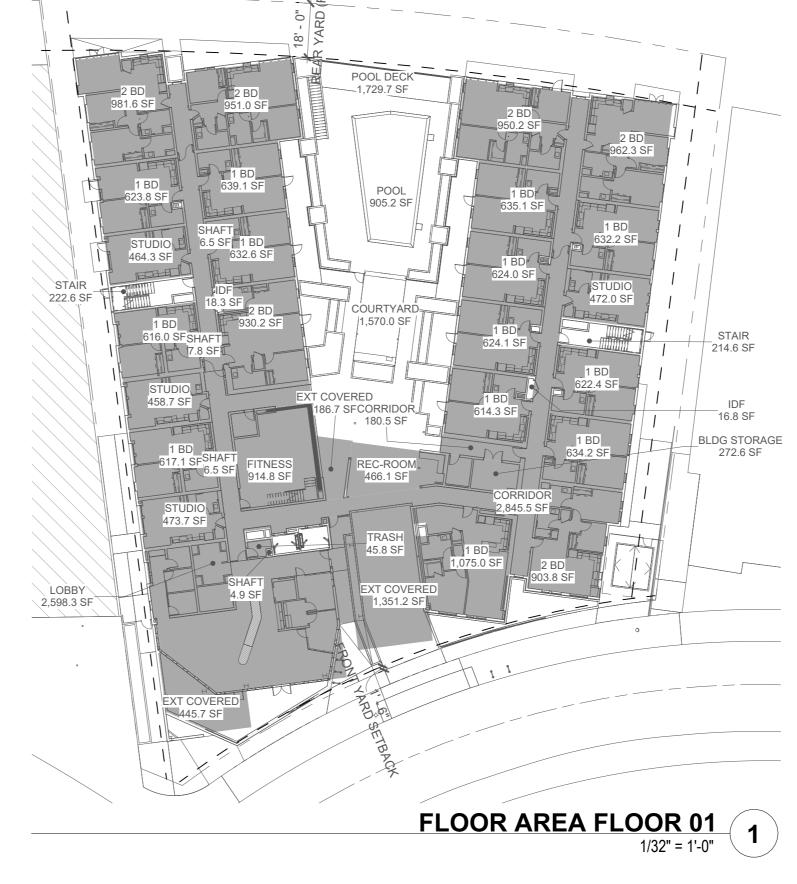
AREA DIAGRAMS

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**LEGEND** 

**AREA ANALYSIS** 

BASEMENT 1 SBFL

1ST FLR SBFL

2ND FLR SBFL

3RD FLR SBFL

4TH FLR SBFL

5TH FLR SBFL

06 T.O. ROOF

PART OF FLOOR AREA

EXCLUDED FROM FLOOR AREA

ELEVATOR PARKING 1 STAIR 2

DOG WASH

ELECTRICAL

MAINT. SHOP MECHANICAL

MPOE MULTI PURPOSE

BLDG STORAGE

FITNESS 1

IDF 2

LOBBY 1

POOL 1

POOL DECK 1

STAIR 2
STUDIO 4
TRASH 1

STAIR 2 STUDIO 5 TRASH 1

STAIR 2
STUDIO 5
TRASH 1

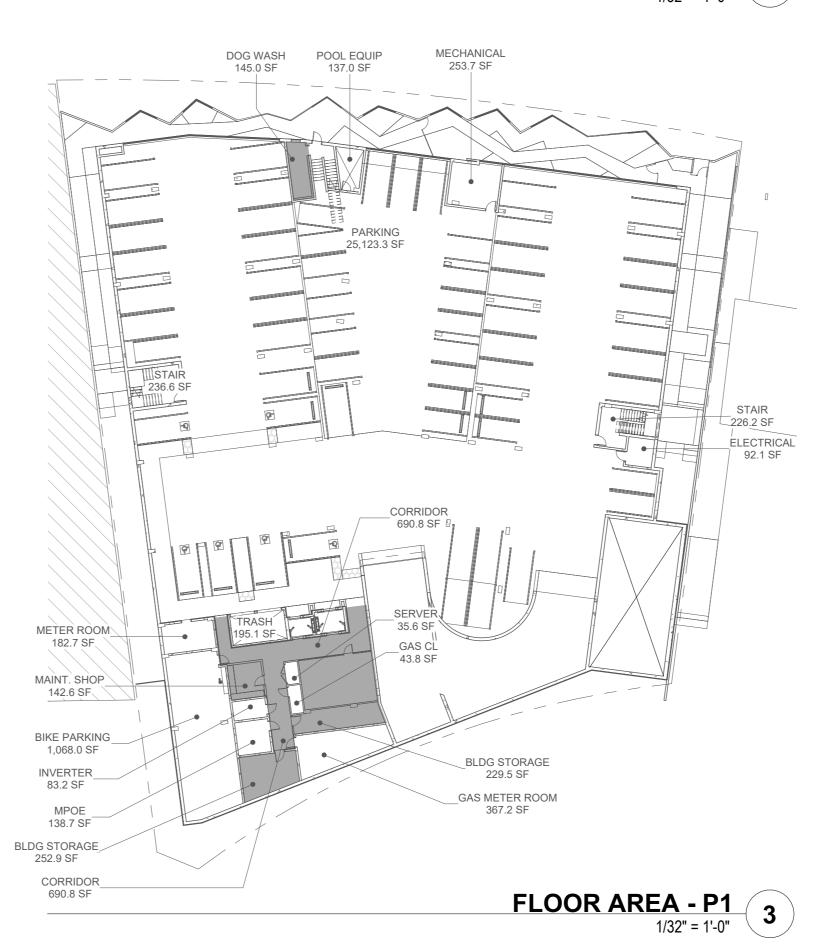
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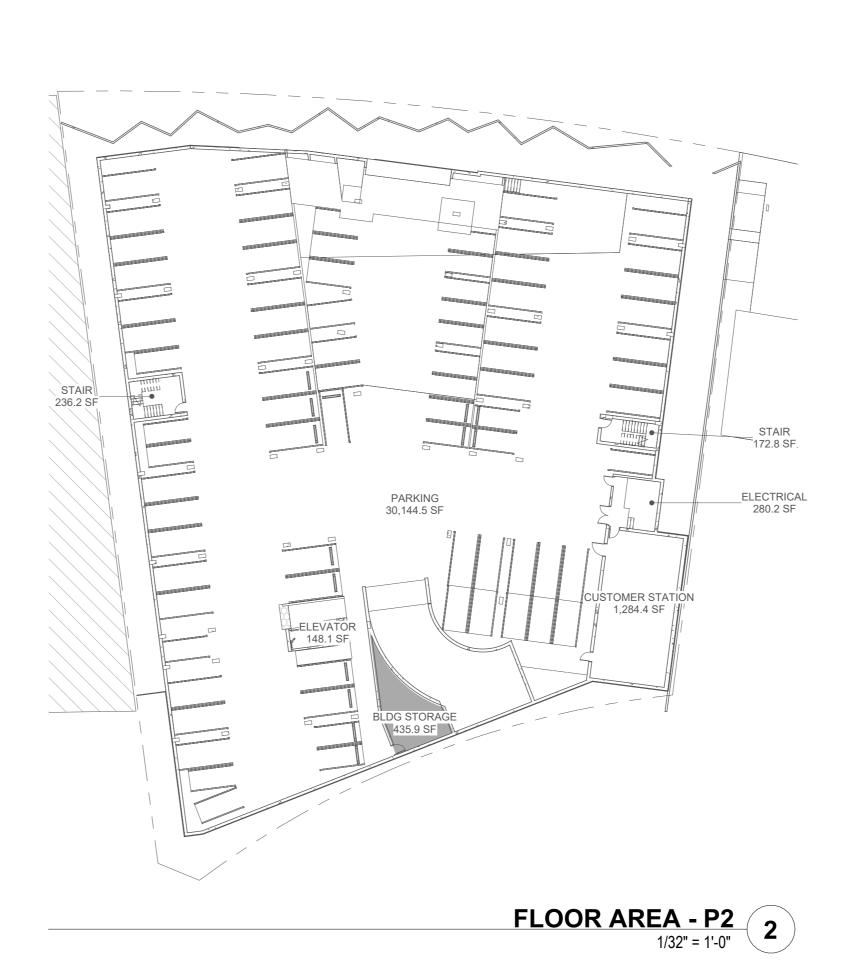
SHAFT 12
STAIR 2
STUDIO 5
TRASH 1

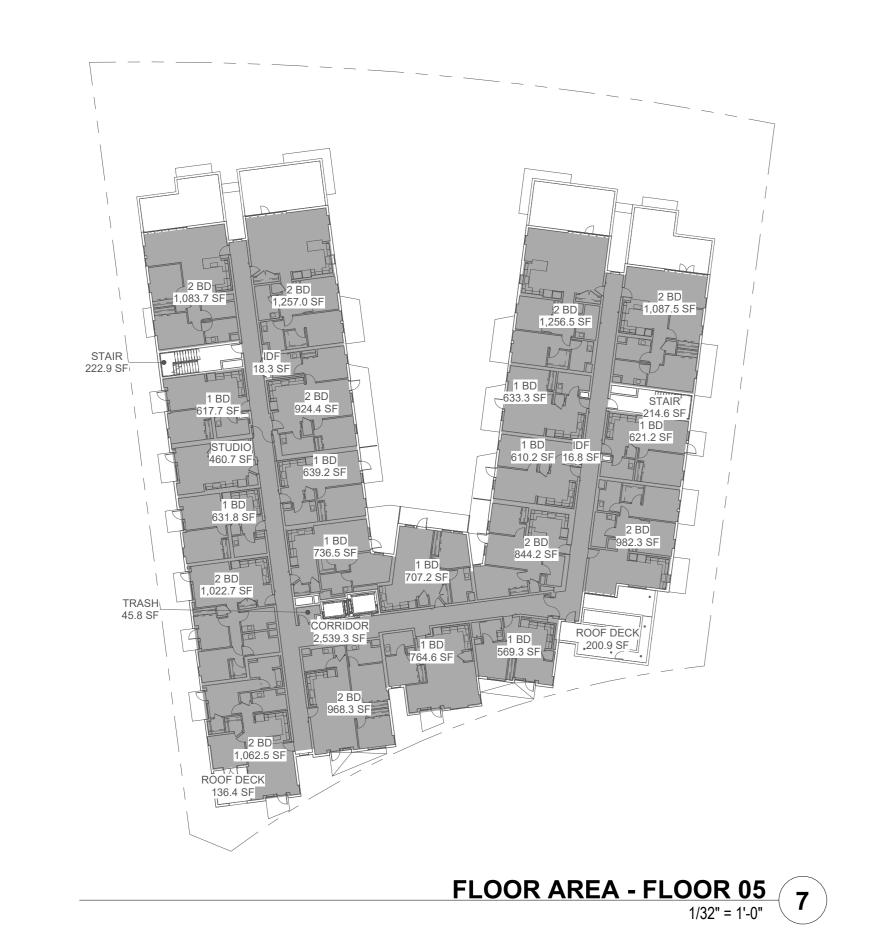
STAIR 2
STUDIO 1
TRASH 1

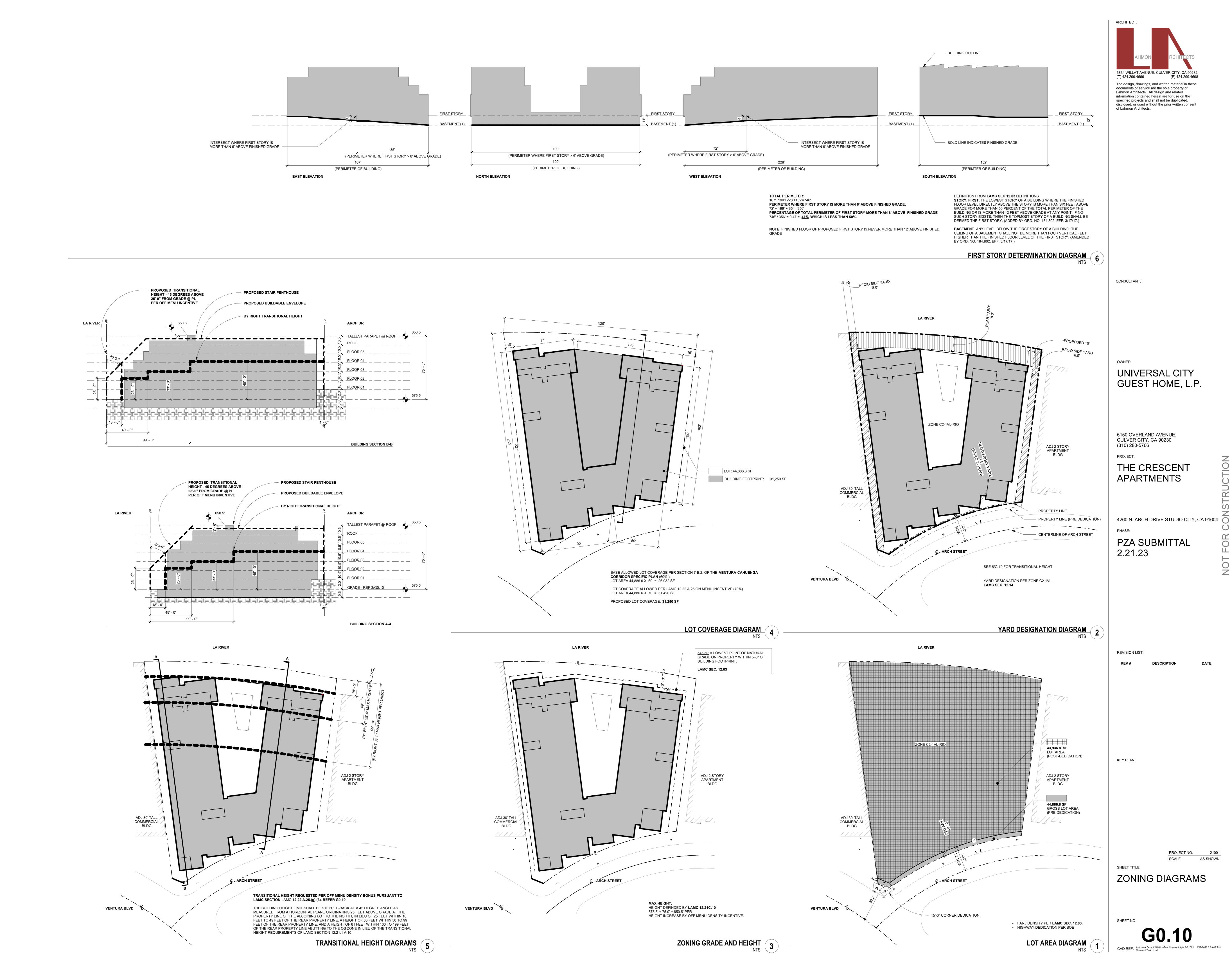
POOL EQUIP 1
SERVER 1
STAIR 2
TRASH 1

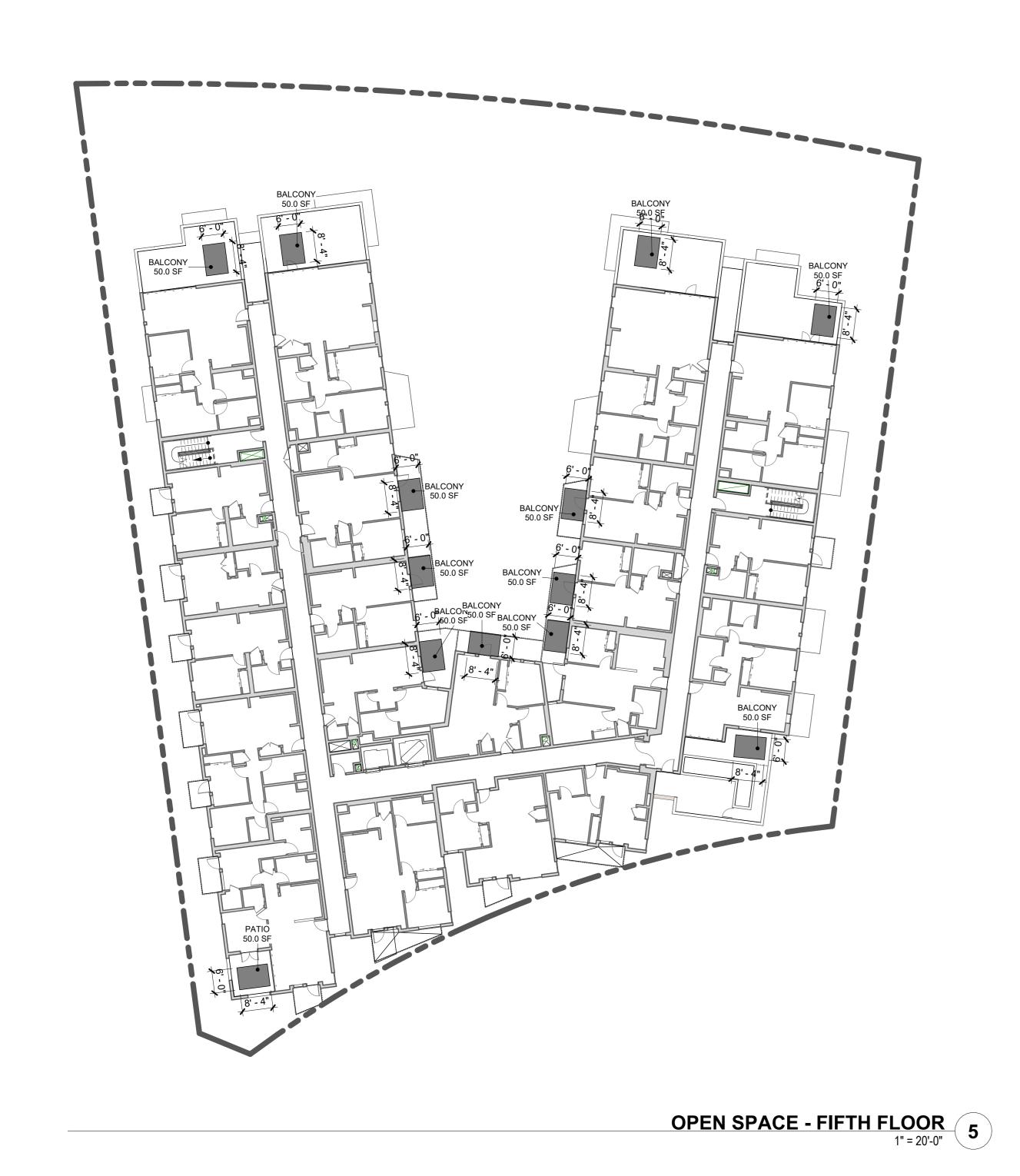
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SPACE (PER BUILDING
S CODE) CODE)

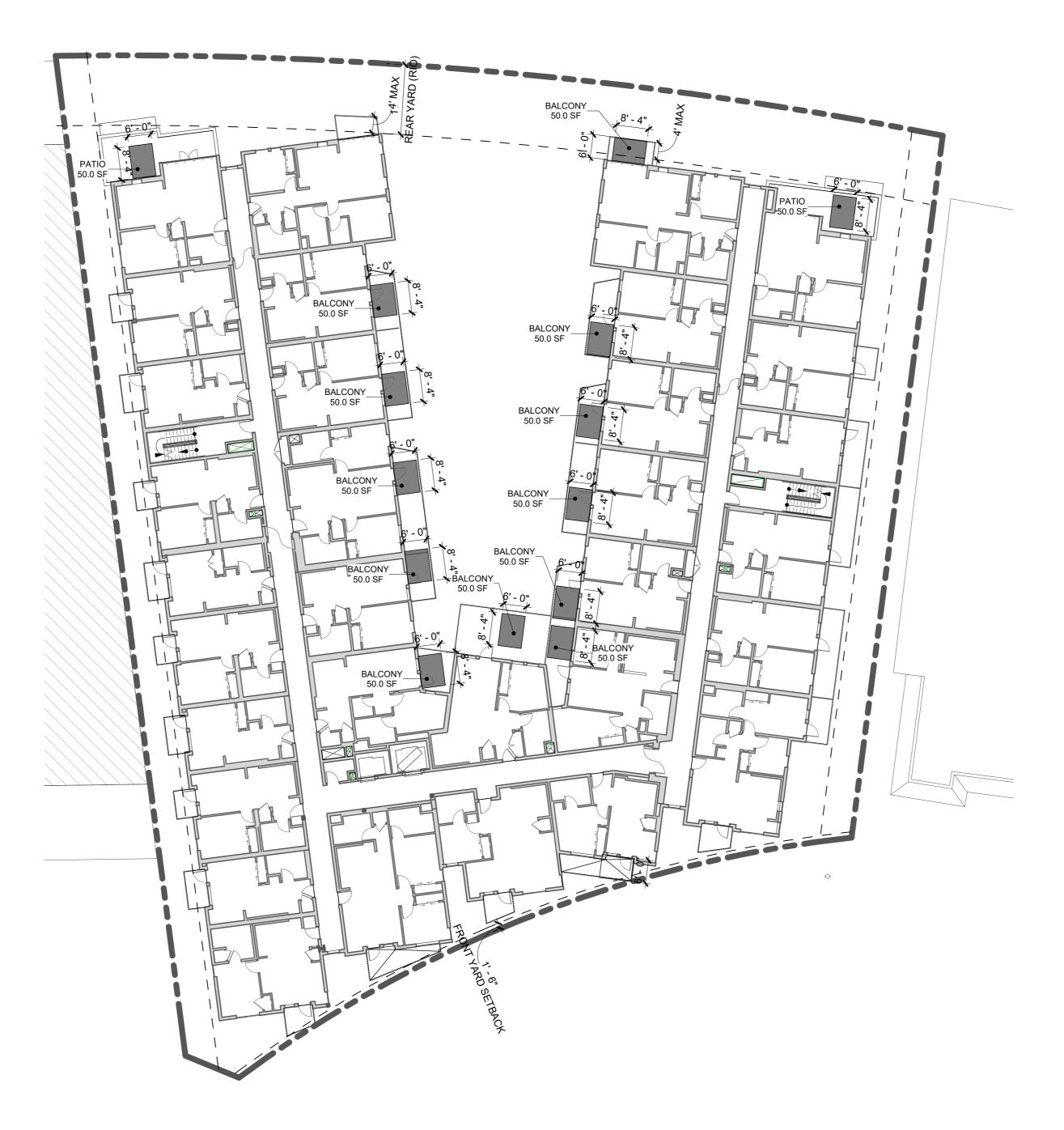












OPEN SPACE - THIRD FLOOR
1" = 20'-0"
3



THE CRESCENT APARTMENTS

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PHASE:

UNIVERSAL CITY GUEST HOME, L.P.

PZA SUBMITTAL 2.21.23

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

REVISION LIST:

REV# DESCRIPTION DATE

OPEN SPACE SUMMARY

OPEN SPACE - FIRST FLOOR
1" = 20'-0"
1

ZONING: OPEN SPACE - LAMC SEC 12.21

OPEN SPACE REQUIRED

**LEGEND** 

OPEN SPACE REQUIRE	:D				OPEN SPACE	
	NAME		TYPE	COUNT	REQ	OPEN SPACE
1 BD			1 BED, 1 BATH	73	100.0 SF	
2 BD			2 BED, 2 BATH	36	125.0 SF	4,500.0
STUDIO			0 BED, 1 BATH	20	100.0 SF	2,000.
				129		13,800.
MAX INTERIOR OPEN S	SPACE: 13,800 S	SF * 0.25 =	3,450.00 SF			
OPEN SPACE PROVIDE	D					
TYPE	NAME	COUNT	AREA	AREA (	OF INTERIOR CO	OMMON SPAC
1ST FLR SBFL						
COMMON OPEN SPACE	<b>OPEN SPACE</b>	2	8,947.	1 SF		0.
PRIVATE OPEN SPACE	PATIO	9	450.	0 SF		0.
REC ROOM	FITNESS	1	851.	0 SF		851.
REC ROOM	REC ROOM	1	586.	6 SF		586.
2ND FLR SBFL						
PRIVATE OPEN SPACE	BALCONY	8	400.	0 SF		0.
REC ROOM	FITNESS	1	615.	2 SF		615.
3RD FLR SBFL						
PRIVATE OPEN SPACE	BALCONY	12	600.	0 SF		0.
PRIVATE OPEN SPACE	PATIO	2	100.	0 SF		0.
4TH FLR SBFL						
PRIVATE OPEN SPACE	BALCONY	8	400.	0 SF		0.
PRIVATE OPEN SPACE	PATIO	4	200.	0 SF		0.
5TH FLR SBFL						
PRIVATE OPEN SPACE	BALCONY	12	600.	0 SF		0.
PRIVATE OPEN SPACE	PATIO	1	50.	0 SF		0.
			13,800.	0 SE		2,052.

 TYPE
 AREA
 PERCENTAGE

 COMMON OPEN SPACE
 8,947.1 SF
 64.83%

 PRIVATE OPEN SPACE
 2,800.0 SF
 20.29%

 REC ROOM
 2,052.8 SF
 14.88%

 13,800.0 SF

OPEN SPACE - FOURTH FLOOR

1" = 20'-0"

4

OPEN SPACE - SECOND FLOOR

1" = 20'-0"

2

BACONY
BOSS
BACONY

MACONY
SOCIETY

PACONY
SOCIETY

SHEET TITI

KEY PLAN:

OPEN SPACE
DIAGRAMS

SHEET NO.

GO.13

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015 (E) MANHOLE. REFER TO CIVIL DWGS 021 (E) POWER POLE TO BE RELOCATED. REFER TO CIVIL DWGS.

PLUMB DWGS.

032 (E) STREET LIGHT BOX TO REMAIN. REFER TO CIVIL DWGS 035 (E) TREE TO REMAIN. REFER TO CIVIL DWGS 036 TREE. REFER TO LANDSCAPE DWGS 039 (E) FIRE HYDRANT. REFER TO CIVIL DWGS. 053 NATURAL GAS RISER. REFER TO PLUMB DWGS. PROVIDE

055 BICYCLE RACK. STANDARD S-671-0. RESIDENTIAL SHORT TERM BIKE PARKING. 6 SPACES TOTAL. REFER TO CIVIL DWGS

056 BICYCLE RACK. FLR MNTD. REFER TO CIVIL DWGS & R-PERMI 059 BACKFLOW PREVENTER - IRRIGATION WATER. REFER TO LANDSCAPE DWGS. 060 BACKFLOW PREVENTER - DOMESTIC WATER. REFER TO CIVIL AND/OR PLUMB DWGS. 061 BACKFLOW PREVENTER - FIRE WATER. REFER TO CIVIL AND/OR

062 FIRE DEPT CONNECTION (FDC) PER LAFD RQMTS. REFER TO CIVIL DWGS. 065 CONC WALKWAY ON GRADE. REFER TO CIVIL DWGS. 074 PLANTER WALL, CMU WALL ON STRUCT CONC DECK. REFER TO STRUCT & CIVIL DWGS.

097 CUSTOM STEEL ENTRY GATE - REFER GATE SCHEDULE A7.01 119 CUSTOMER STATION ACCESS HATCH 188 KNOX BOX (KNOX COMPANY, MODEL #4400R) PER LAFD RQMTS. PROVIDE KEYS FOR BLDG ENTRY, COMMON UTILITY & STORAGE 227 EXHAUST VENT FOR DRYER. REFER TO MECH DWGS. 320 GUARDRAIL - GLAZED WITH ALUMINUM FRAME. REF DET. XXX.

ARCHITECT: 3834 WILLAT AVENUE, CULVER CITY, CA 90232

(T) 424.299.4666

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CONSULTANT:

UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230

(310) 280-5766 PROJECT: A. REFER TO CIVIL DWGS FOR ALL UTILITIES AND SITE WORK.

C. CONSTRUCTION WASTE TO BE HANDLED BY A CITY OF LOS ANGELES CERTIFIED HAULER.

D. GENERAL CONTRATOR, FRAMING CONTRACTO, AND SCAFFOLDING CONTRACTOR REQUIRED TO OBTAIN CALOSHAA PERMIT PRIOR TO COMMENCEMENT OF WORK.

F. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM, & SLIP RESISTANT. G. BICYCLE RACKS SHALL ALLOW FOR THE BICYCLE FRAME AND

AT LEAST ONE WHEEL TO BE LOCKED TO THE RACKS. THE BICYCLE RACKS SHALL ALSO ALLOW FOR THE USE OF A CABLE AS WELL AS A U-SHAPED LOCK. H. TRASH & RECYCLING AREA LOCATED BELOW GRADE. REFER TO PARKING 1 FLOOR PLAN, A1.21.

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PZA SUBMITTAL 2.21.23

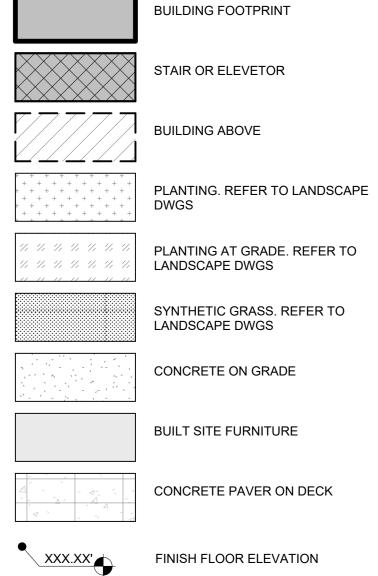
REVISION LIST:

KEY PLAN:

THE CRESCENT

**APARTMENTS** 

#### SITE PLAN LEGEND



-- - ACCESSIBLE PATH OF TRAVEL

▼ X.XX% SLOPE DOWN

LIGHT FIXTURE. REFER TO LIGHTING FIXTURE SHEDULE ON A7.12 & ELEC DWGS LIGHT FIXTURE. REFER TO LIGHTING FIXTURE SHEDULE ON A7.12 & ELEC DWGS

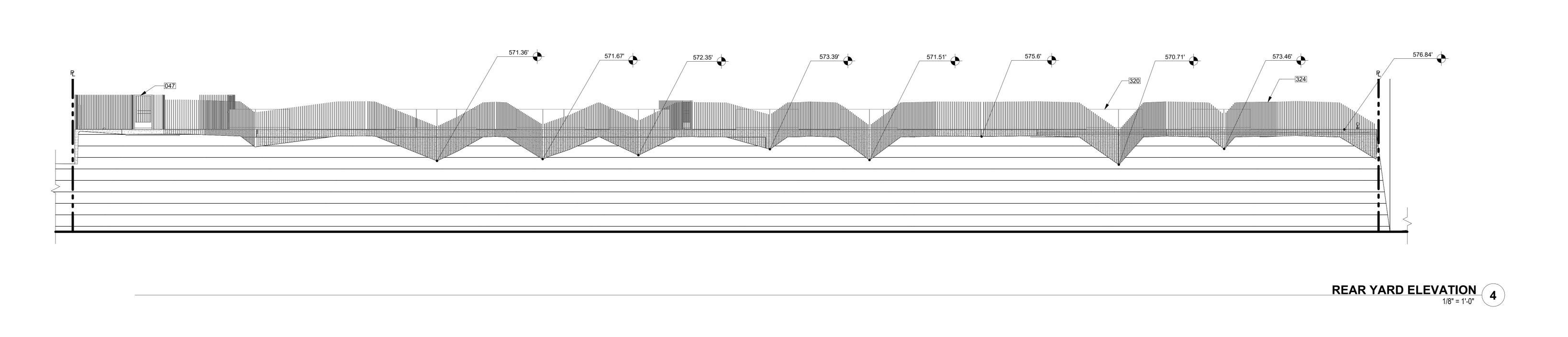
PLANTER DRAIN. REFER TO PLUMB DWGS

FLOOR DRAIN. REFER TO PLUMB DWGS

SHEET TITLE: ARCHITECTURAL SITE PLAN

AS SHOWN

SHEET NO. CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:23:32 PM Crescent 2- Arch.rvt



DESCRIPTION 010 SIDEWALK. REFER TO CIVIL DWGS. 041 (E) SITE WALL TO REMAIN. REFER TO CIVIL DWGS. TO BE EVALUATED FOR CONTINUED USE, REPLACEMENT OR REPAIR, REFER TO DET XXXX

047 FENCE. 048 TRANSFORMER & PAD PER LADWP RQMTS. REFER TO ELEC DWGS. 065 CONC WALKWAY ON GRADE. REFER TO CIVIL DWGS. 068 HANDRAIL. 36 MIN HT. REFER TO DET 16/G0.33 102 CONC SLAB ON GRADE. REFER TO STRUCT DWGS. 113 CONC. WALL. REFER TO STRUCT DWGS. 119 CUSTOMER STATION ACCESS HATCH

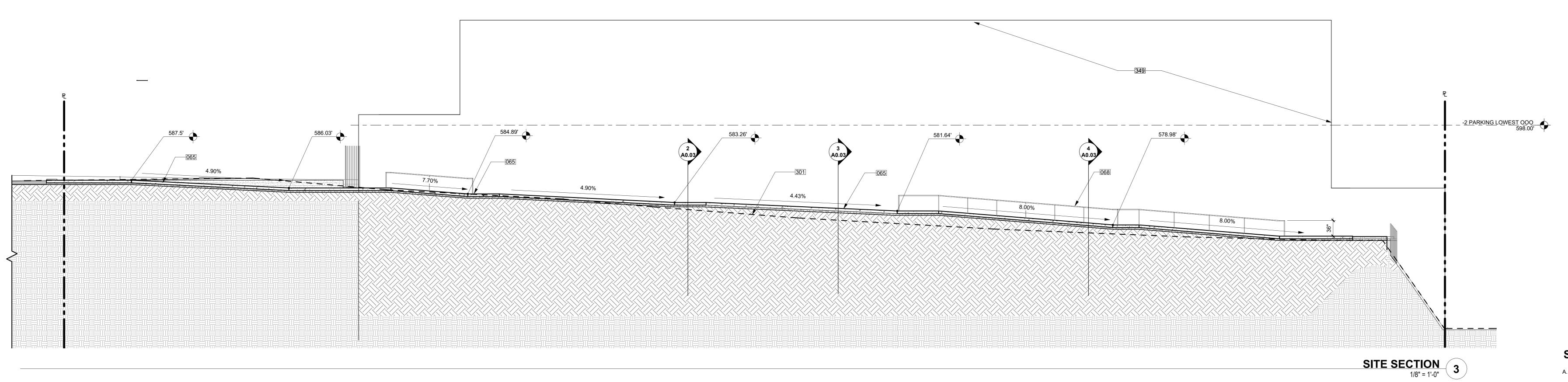
227 EXHAUST VENT FOR DRYER. REFER TO MECH DWGS. 301 LINE OF EXISTING GRADE SHOWN DASHED. 320 GUARDRAIL - GLAZED WITH ALUMINUM FRAME. REF DET. XXX. REF STRUCT. 324 VERTICAL PICKET FENCE, TOP OR SIDE MNTD. REFER TO DET

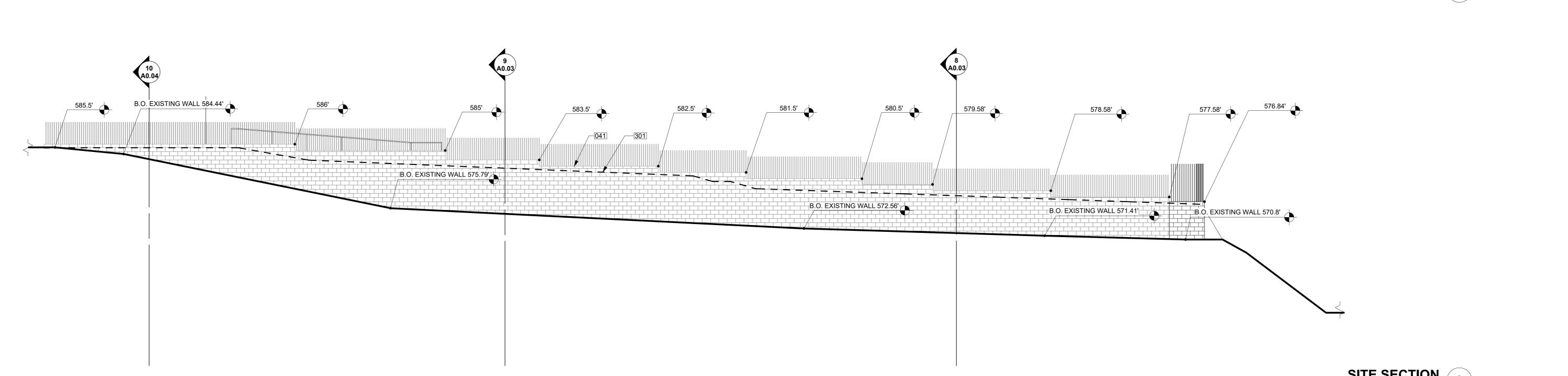
349 ADJACENT BUILDING BEYOND 383 SHORING. REFER TO SHORING DWGS. 384 REFER TO SOILS REPORT FOR GRAVEL BED.

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ARCHITECT:

CONSULTANT:





#### **SECTION GENERAL NOTES**

A. REFER TO CIVIL DWGS FOR ALL UTILITIES AND SITE WORK. B. DETAIL CALLOUTS FOR TYPICAL CONDITIONS ARE SHOWN OCCASIONALLY BUT APPLY TO ALL TYPICAL OCCURRENCES OF TYPICAL CONDITIONS.

#### PROJECT:

THE CRESCENT **APARTMENTS** 

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

UNIVERSAL CITY

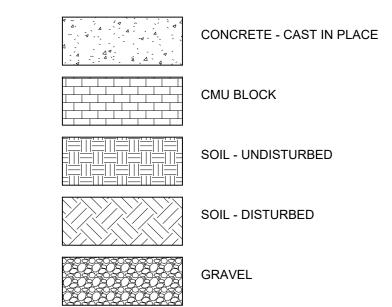
5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

GUEST HOME, L.P.

PZA SUBMITTAL 2.21.23

REVISION LIST:

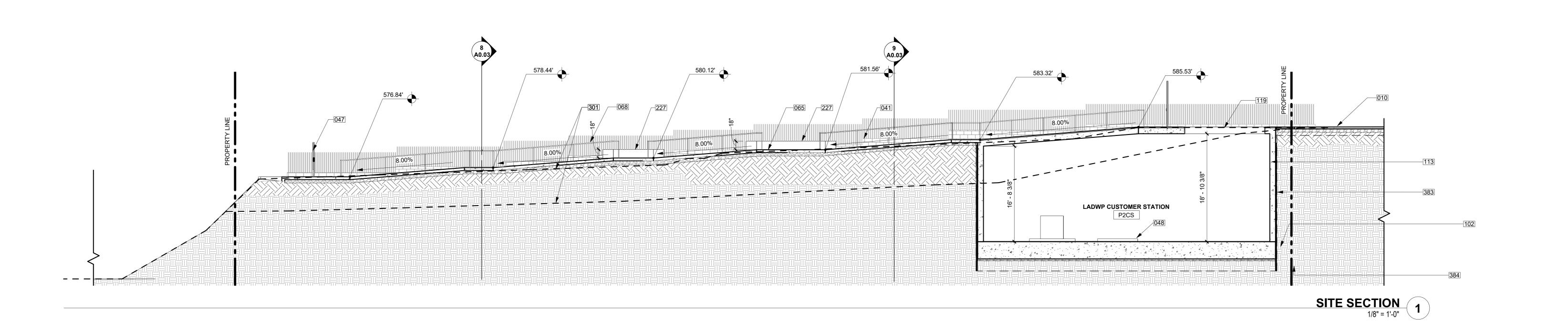
#### **LEGEND**

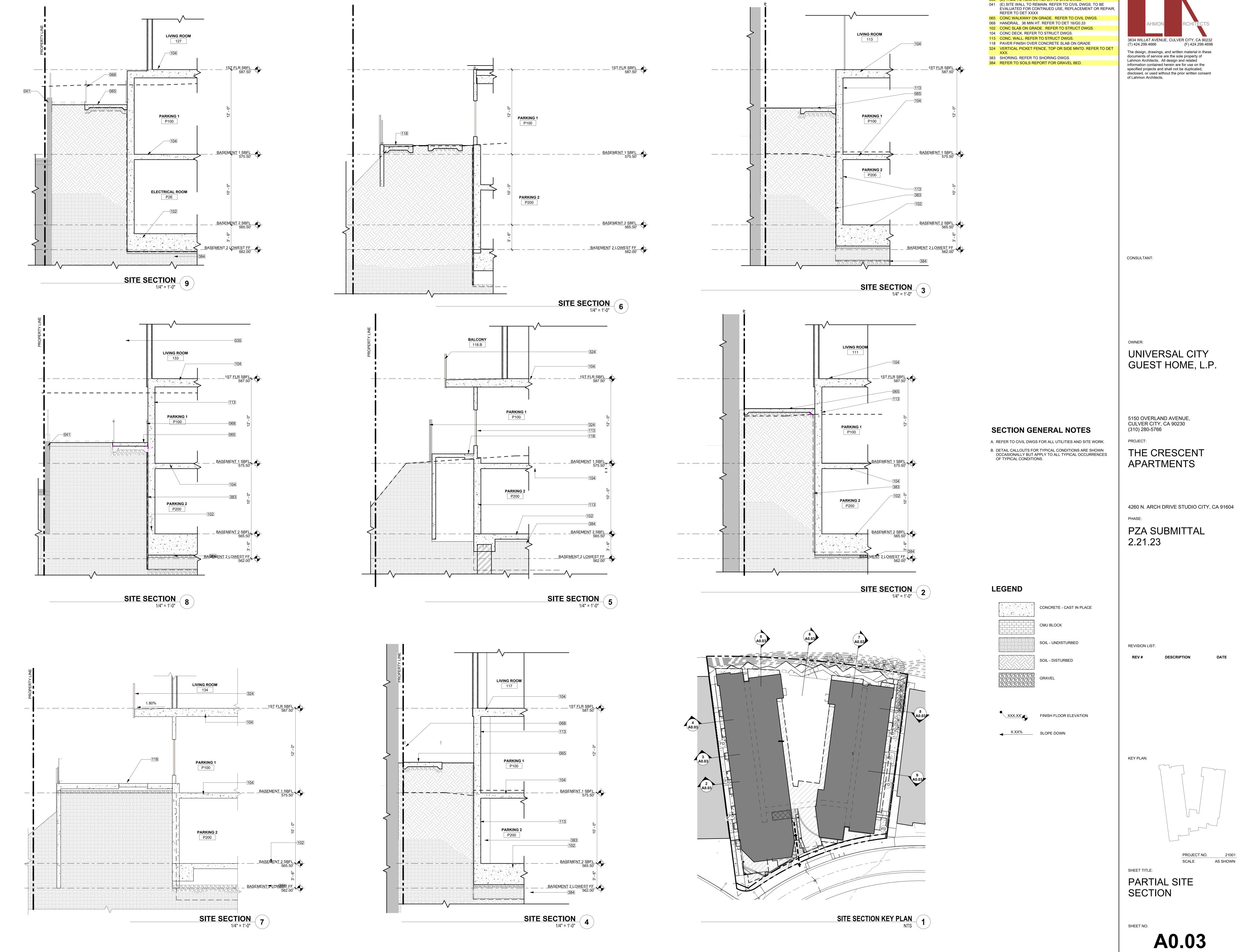


XXX.XX' FINISH FLOOR ELEVATION ▼ X.XX% SLOPE DOWN

KEY PLAN:

SHEET TITLE: PARTIAL SITE SECTION



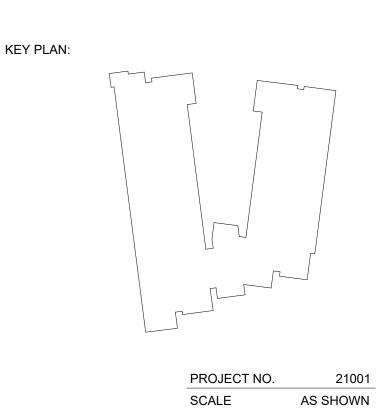


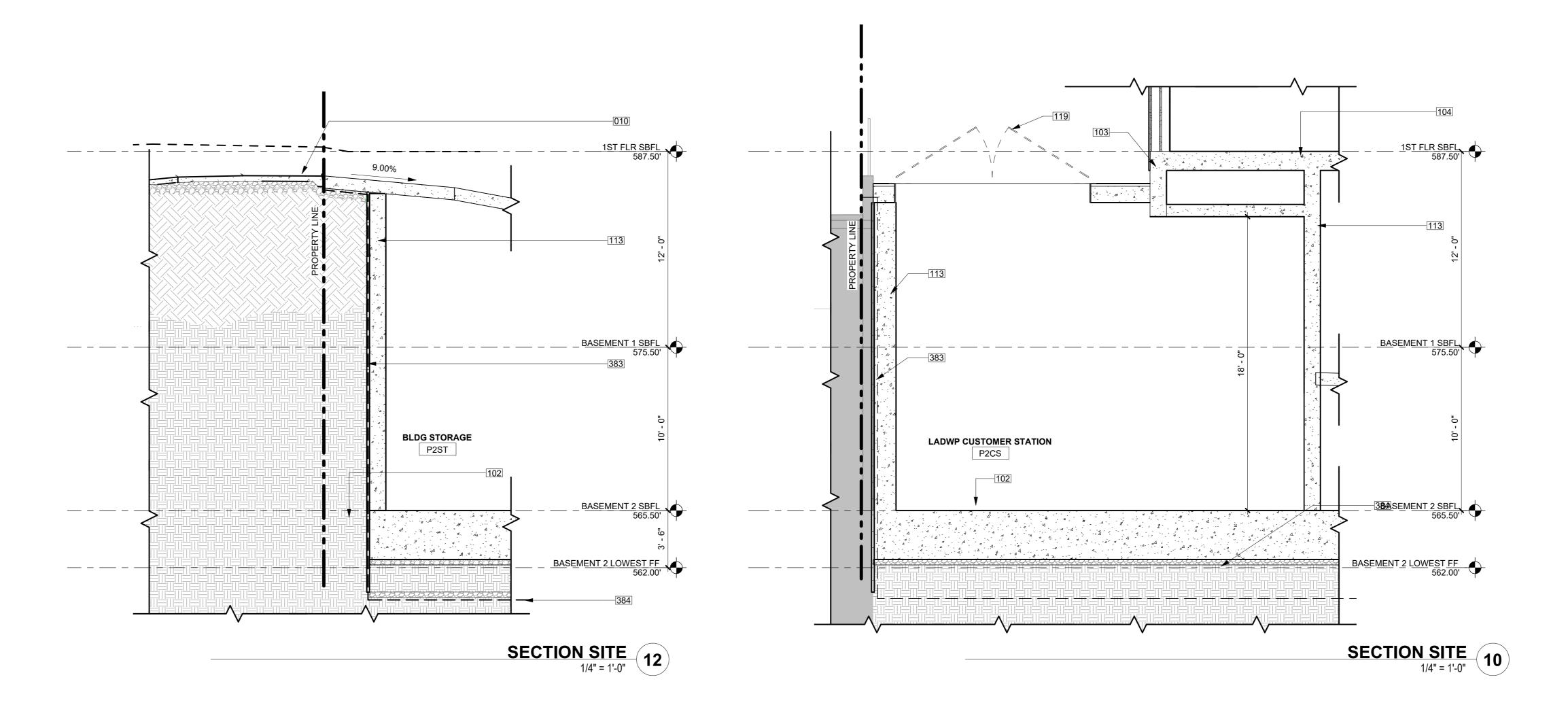
035 (E) TREE TO REMAIN. REFER TO CIVIL DWGS

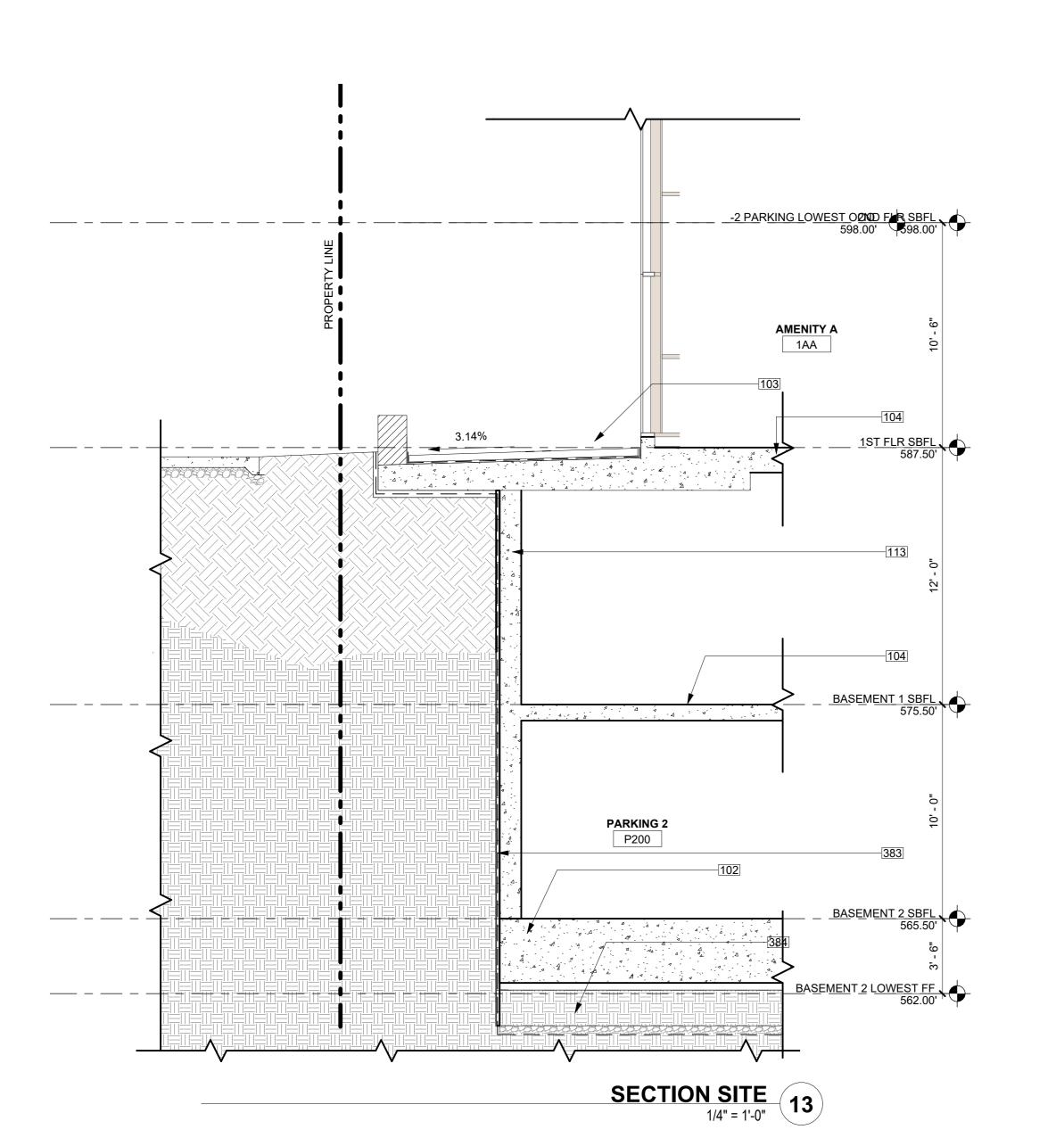


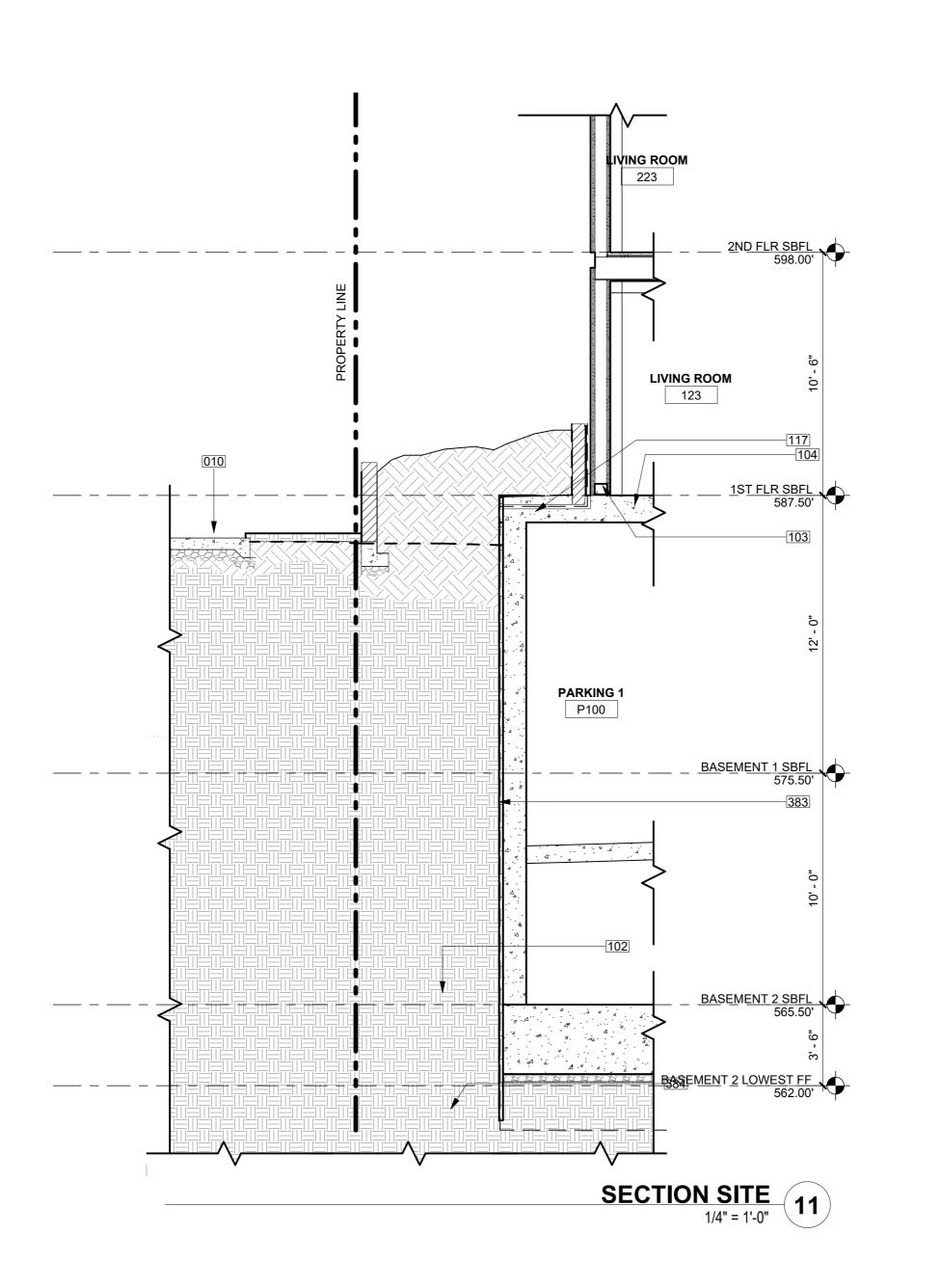
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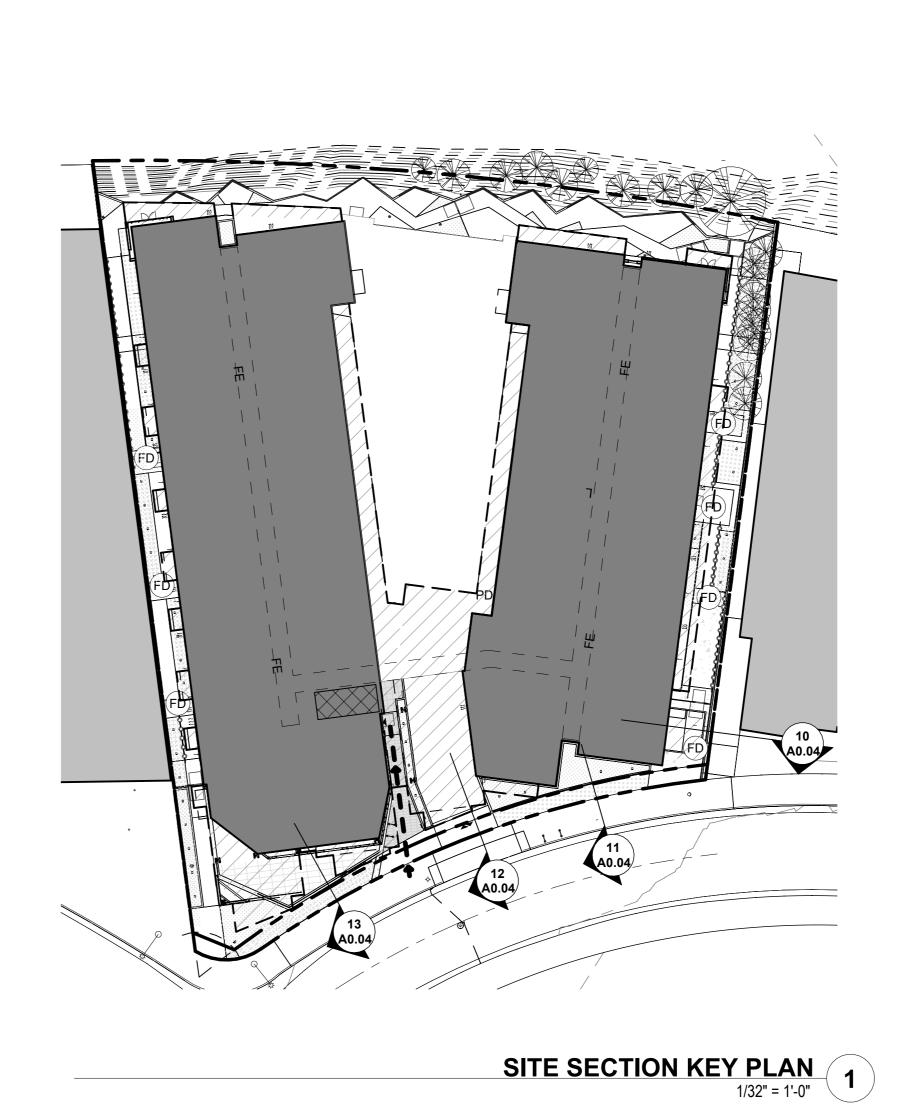
UNIVERSAL CITY GUEST HOME, L.P.





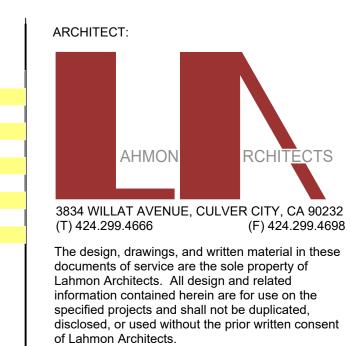






DESCRIPTION

010 SIDEWALK. REFER TO CIVIL DWGS. 102 CONC SLAB ON GRADE. REFER TO STRUCT DWGS. 103 CONC CURB. REFER TO STRUCT DWGS. 104 CONC DECK. REFER TO STRUCT DWGS. 113 CONC. WALL. REFER TO STRUCT DWGS. 117 CONC TOPPING SLAB. REFER TO STRUCTURAL DWGS. 119 CUSTOMER STATION ACCESS HATCH 383 SHORING. REFER TO SHORING DWGS. 384 REFER TO SOILS REPORT FOR GRAVEL BED.



CONSULTANT:

PROJECT:

UNIVERSAL CITY GUEST HOME, L.P.

THE CRESCENT

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

**APARTMENTS** 

#### 5150 OVERLAND AVENUE, CULVER CITY, CA 90230 **GENERAL NOTES** (310) 280-5766

- A. REFER TO CIVIL DWGS FOR ALL UTILITIES AND SITE WORK. B. REFER TO CIVIL DWGS FOR PLACEMENT OF BLDG ON SITE.
- C. CONSTRUCTION WASTE TO BE HANDLED BY A CITY OF LOS ANGELES CERTIFIED HAULER. D. GENERAL CONTRATOR, FRAMING CONTRACTO, AND
- SCAFFOLDING CONTRACTOR REQUIRED TO OBTAIN CALOSHAA PERMIT PRIOR TO COMMENCEMENT OF WORK.
- E. TEMPORARY PEDESTRIAN PROTECTION SHALL BE PROVIDED AS REQUIRED.
- F. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM, & SLIP RESISTANT. G. BICYCLE RACKS SHALL ALLOW FOR THE BICYCLE FRAME AND AT LEAST ONE WHEEL TO BE LOCKED TO THE RACKS. THE
- H. TRASH & RECYCLING AREA LOCATED BELOW GRADE. REFER TO PARKING 1 FLOOR PLAN, A1.21. ALL ROOF DRAINAGE TO DRAIN TO STORAGE TANK. REFER TO

#### BICYCLE RACKS SHALL ALSO ALLOW FOR THE USE OF A CABLE AS WELL AS A U-SHAPED LOCK. PZA SUBMITTAL

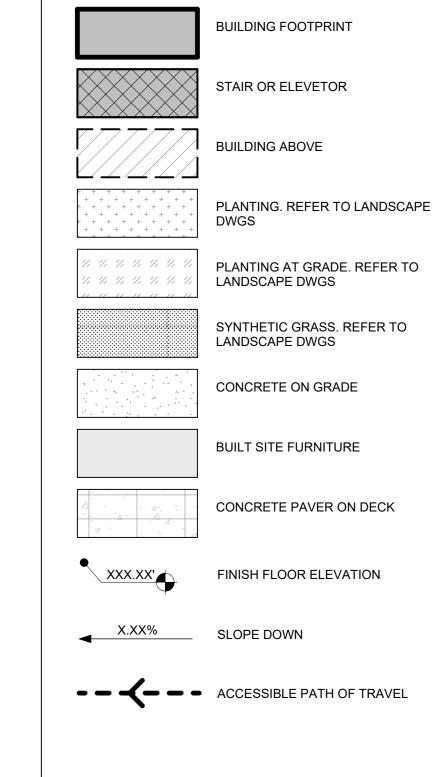
REVISION LIST:

KEY PLAN:

SHEET TITLE:

#### SITE PLAN LEGEND

CIVIL DWGS.

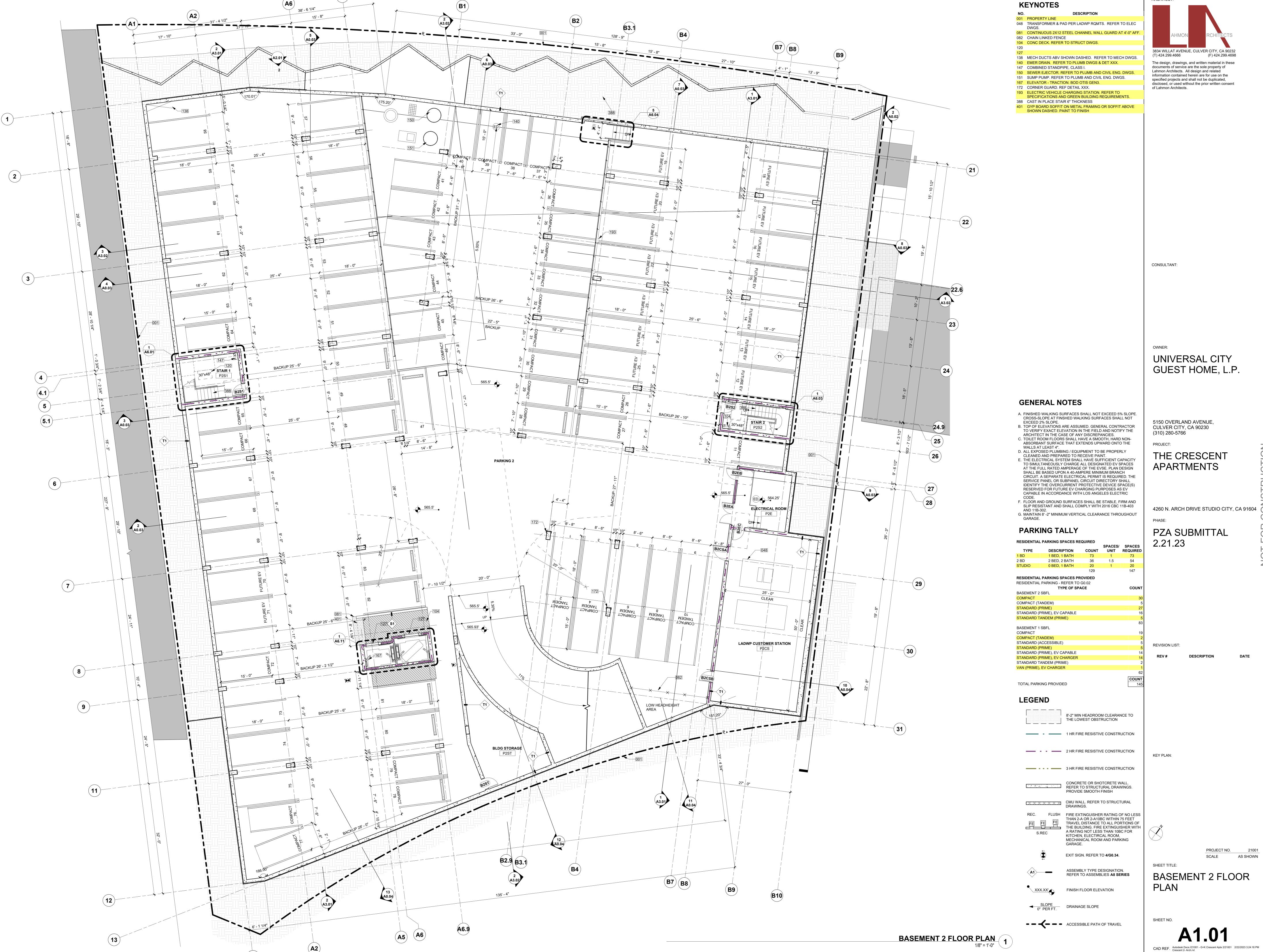


BL1	LIGHT FIXTURE. REFER TO LIGHTING FIXTURE SHEDUL ON A7.12 & ELEC DWGS
GH1°	LIGHT FIXTURE. REFER TO LIGHTING FIXTURE SHEDUL ON A7.12 & ELEC DWGS
PD	PLANTER DRAIN. REFER TO PLUMB DWGS

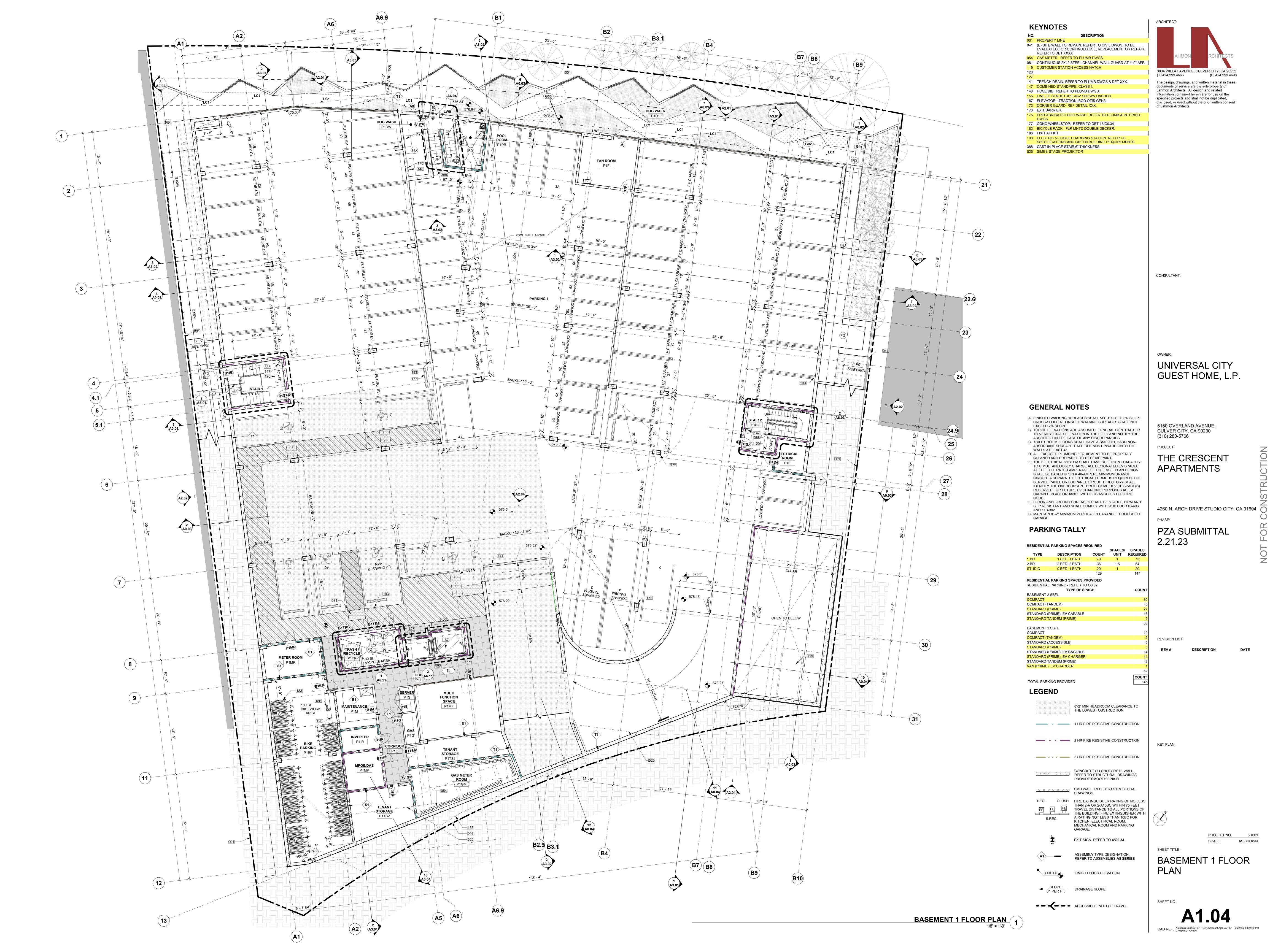
PARTIAL SITE FLOOR DRAIN. REFER TO PLUMB DWGS SECTION

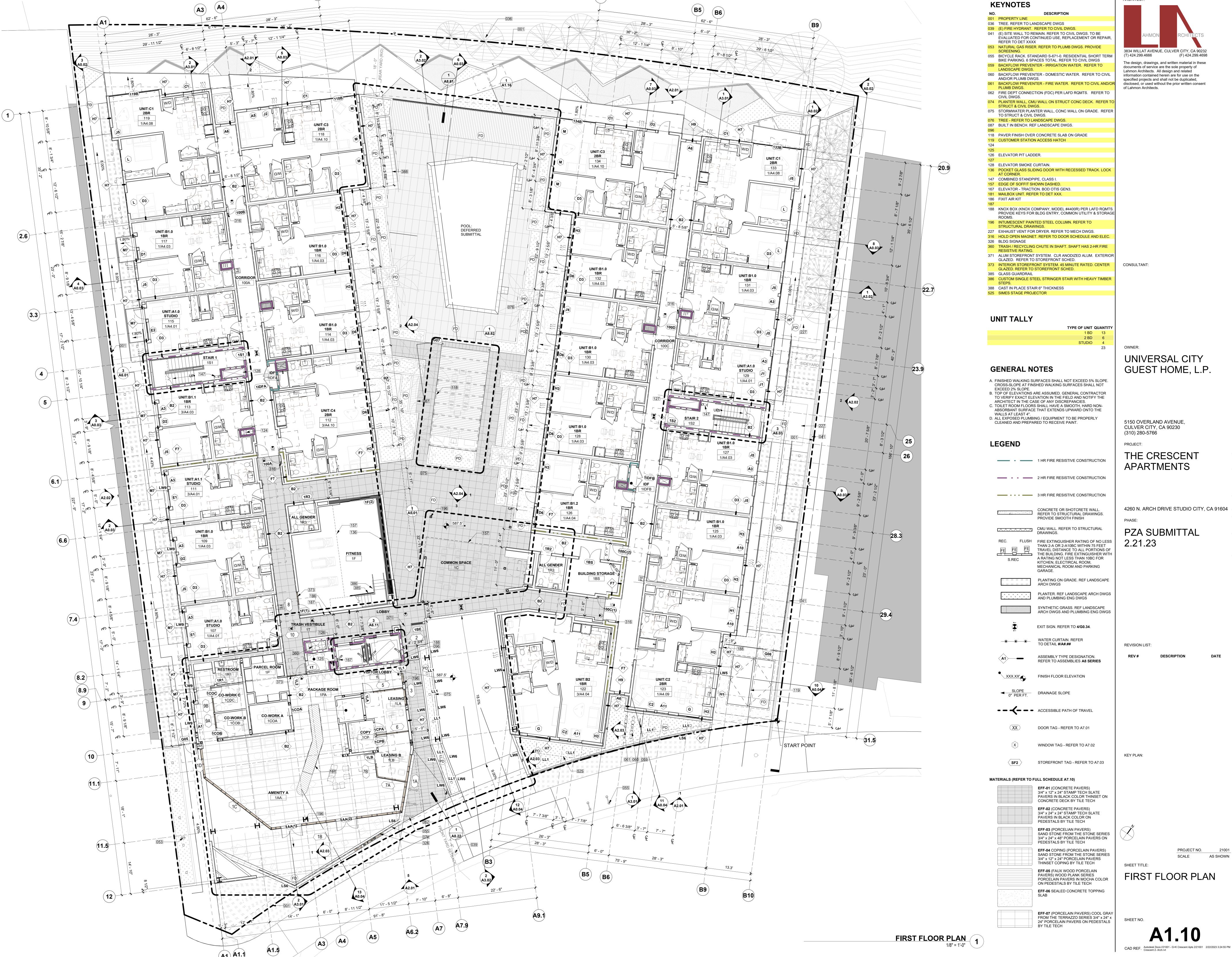
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21001 AS SHOWN



ARCHITECT:

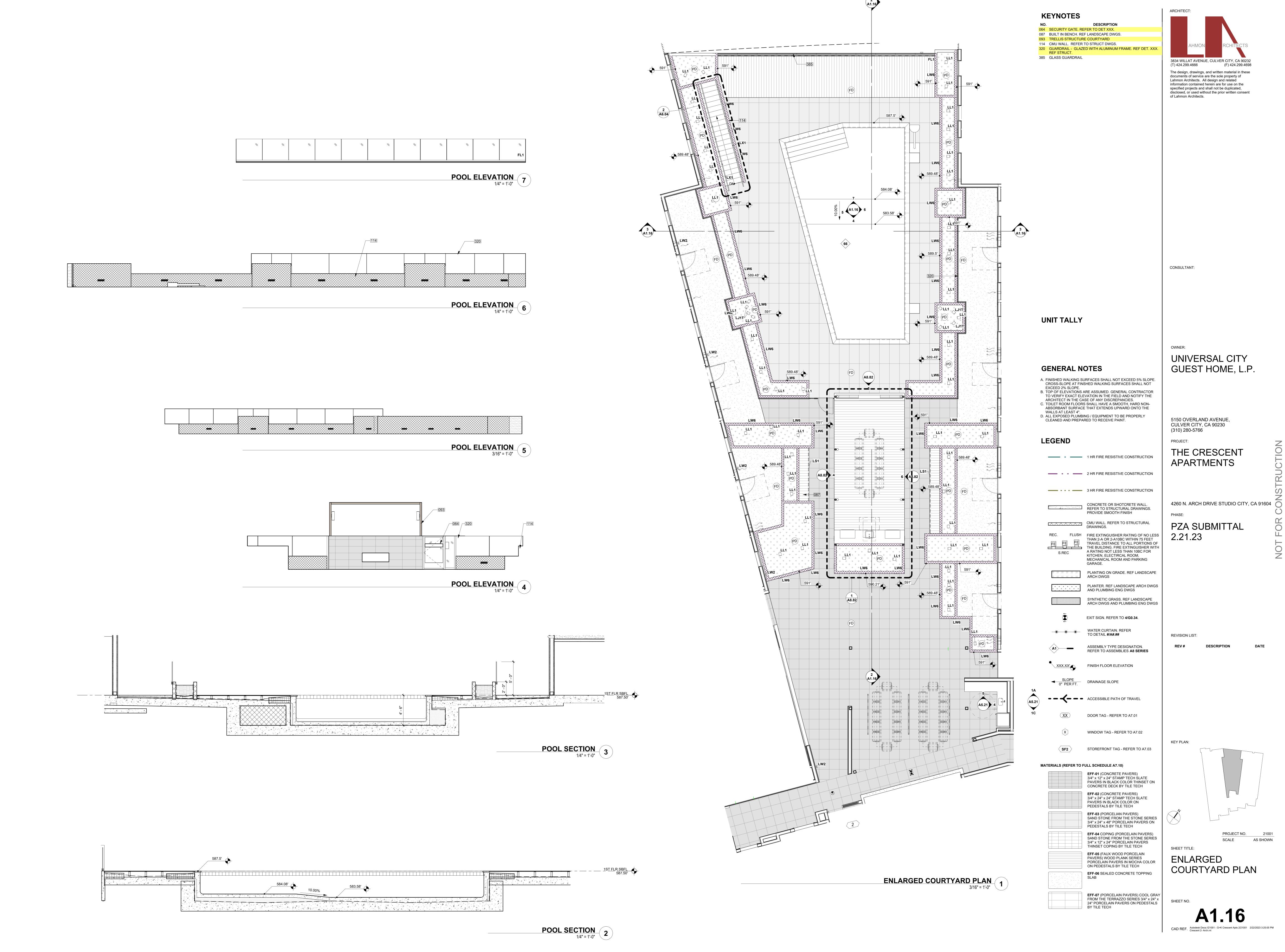




A1 A1.1

ARCHITECT:

CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:24:55 PM Crescent 2- Arch.rvt

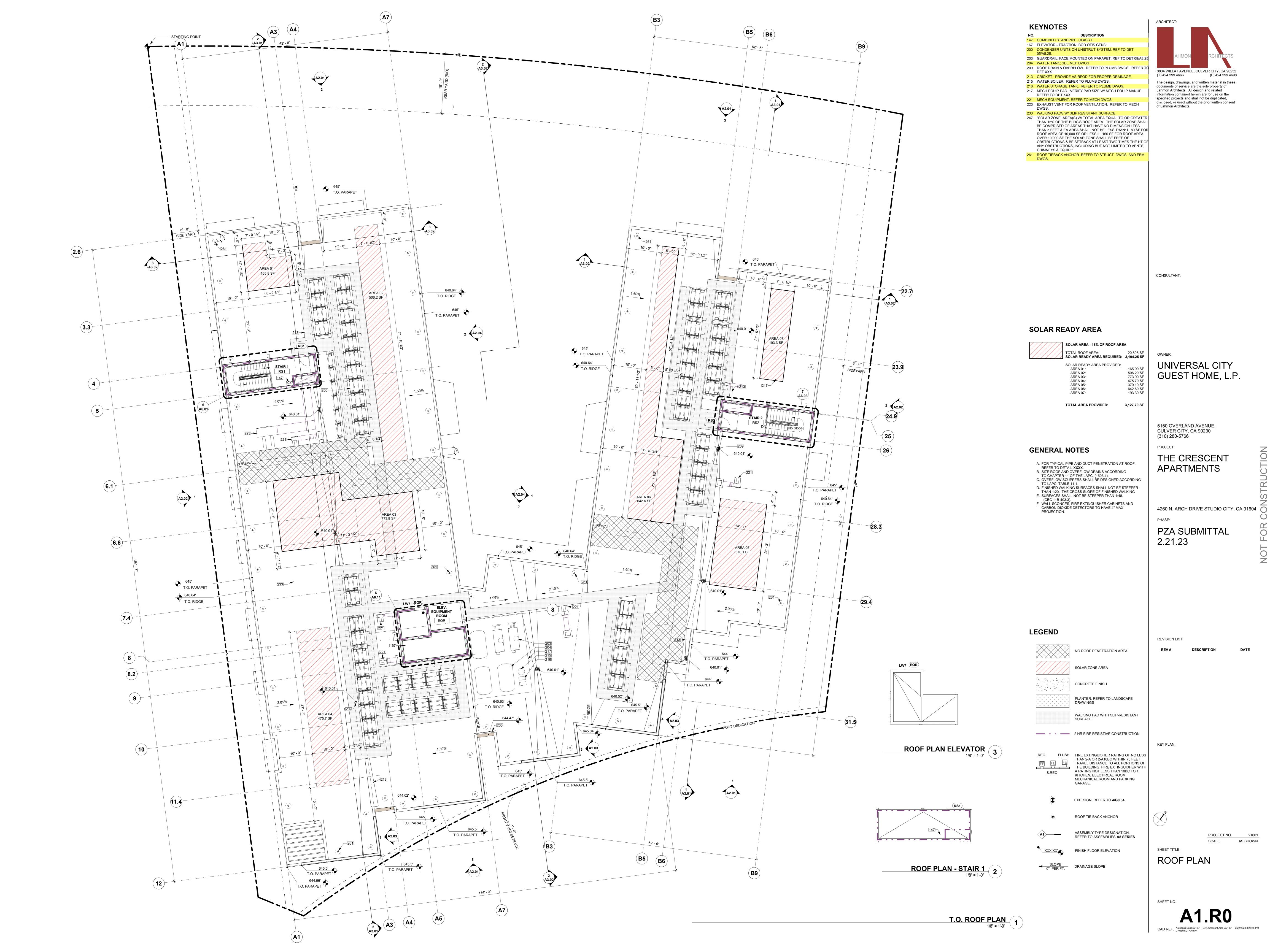


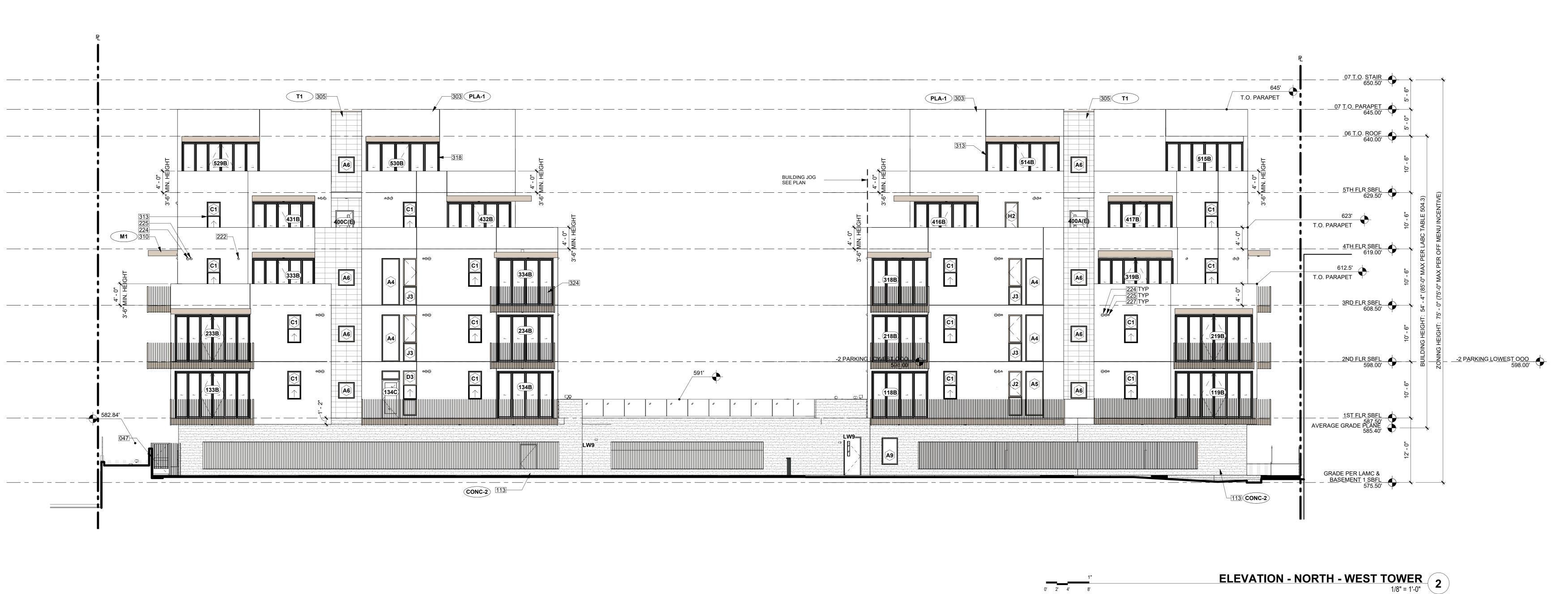


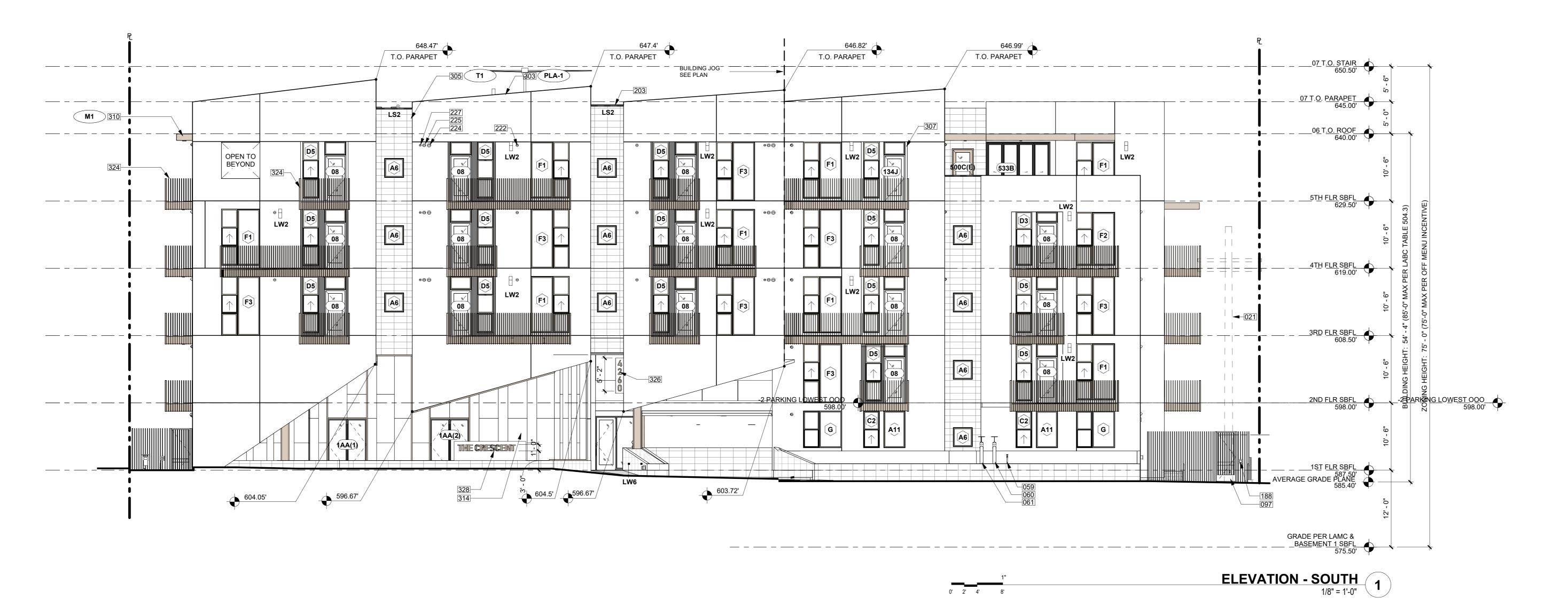












- 021 (E) POWER POLE TO BE RELOCATED. REFER TO CIVIL DWGS. 047 FENCE.
  - 059 BACKFLOW PREVENTER IRRIGATION WATER. REFER TO LANDSCAPE DWGS. 060 BACKFLOW PREVENTER - DOMESTIC WATER. REFER TO CIVIL
  - AND/OR PLUMB DWGS. 061 BACKFLOW PREVENTER - FIRE WATER. REFER TO CIVIL AND/OF PLUMB DWGS.
  - 097 CUSTOM STEEL ENTRY GATE REFER GATE SCHEDULE A7.01 113 CONC. WALL. REFER TO STRUCT DWGS. 188 KNOX BOX (KNOX COMPANY, MODEL #4400R) PER LAFD RQMTS
  - PROVIDE KEYS FOR BLDG ENTRY, COMMON UTILITY & STORAGE 203 GUARDRAIL. FACE MOUNTED ON PARAPET. REF TO DET 09/A 222 INTAKE VENT FOR ROOF VENTILATION. REFER TO DET XXX.
  - 224 EXHAUST VENT AT KITCHEN. REFER TO MECH DWGS. 225 EXHAUST VENT AT BATHROOM. REFER TO MECH DWGS. 227 EXHAUST VENT FOR DRYER. REFER TO MECH DWGS.
  - 305 BENCH 307 CEMENT BOARD SIDING. 310 DRAINAGE SYSTEM

303 EXT CEM PLASTER. PAINT TO FIN.

- 313 VINYL NAIL-ON WINDOW. REFER TO WINDOW SCHED. 314 CURTAIN WALL - REFER TO SHEET A 7.02
- 318 BI PARTING GLASS FOLDING DOOR. REFER TO DOOR SCHEDULE
- 324 VERTICAL PICKET FENCE, TOP OR SIDE MNTD. REFER TO DET
- 326 BLDG SIGNAGE 328 ADDRESS SIGNAGE

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ARCHITECT:

CONSULTANT:

UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

THE CRESCENT **APARTMENTS** 

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PZA SUBMITTAL 2.21.23

KEY PLAN:

# **GENERAL NOTES**

- A. BUILDING ADDRESS NUMBERS SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THEY SHALL BE ILLUMINATED AT NIGHT. FIRE CODE 505.1.
- B. PROVIDE GRAFFITI-RESISTANT FINISH (MONOCHEM SHIELD BY MONOPOLE, INC. LARR #25080-T) UP TO SECOND

# **ELEVATION LEGEND**

KEYNOTE - REFER TO SHEET KEYNOTES

MATERIAL TAG - REFER TO MATERIAL SCHEDULE WINDOW TAG - REFER TO WINDOW SCHEDULE

LIGHTING FIXTURE TAG. REFER TO LIGHTING FIXTURE SCHEDULE A7.11, ELEC ENG DWGS, AND LIGHTING DESIGNER DWGS.

MATERIALS (REFER TO FULL SCHEDULE A7.10) PLASTER - WHITE (PLA-1) PLASTER - CHARCOAL (PLA-2)

PORCELAIN TILE - (T1)

WOOD SLATS - (W1)

BOARD FORMED CONCRETE (CONC2) DECORATIVE METAL - (M1)

SHEET NO.

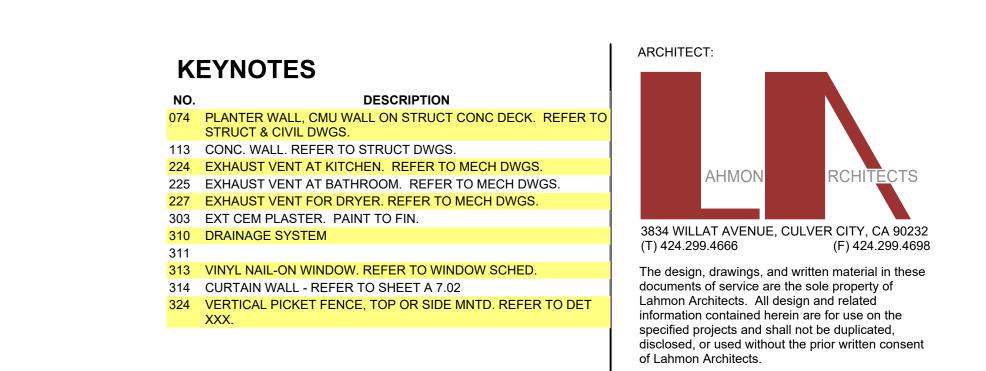
BUILDING **ELEVATIONS** 

SHEET TITLE:

CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:27:17 PM Crescent 2- Arch.rvt

PROJECT NO.

AS SHOWN



CONSULTANT:

UNIVERSAL CITY

5150 OVERLAND AVENUE, CULVER CITY, CA 90230

**APARTMENTS** 

PZA SUBMITTAL

2.21.23

KEY PLAN:

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

(310) 280-5766

PROJECT:

GUEST HOME, L.P.





# **GENERAL NOTES**

A. BUILDING ADDRESS NUMBERS SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THEY SHALL BE ILLUMINATED AT NIGHT. FIRE CODE 505.1. B. PROVIDE GRAFFITI-RESISTANT FINISH (MONOCHEM SHIELD BY MONOPOLE, INC. LARR #25080-T) UP TO SECOND

**ELEVATION LEGEND** KEYNOTE - REFER TO SHEET KEYNOTES MATERIAL TAG - REFER TO MATERIAL SCHEDULE WINDOW TAG - REFER TO WINDOW SCHEDULE LIGHTING FIXTURE TAG. REFER TO LIGHTING FIXTURE SCHEDULE A7.11, ELEC ENG DWGS, AND LIGHTING DESIGNER DWGS. MATERIALS (REFER TO FULL SCHEDULE A7.10) SHEET TITLE: PLASTER - WHITE (PLA-1) BUILDING **ELEVATIONS** PLASTER - CHARCOAL (PLA-2) BOARD FORMED CONCRETE (CONC2)

DECORATIVE METAL - (M1)

PORCELAIN TILE - (T1)

WOOD SLATS - (W1)

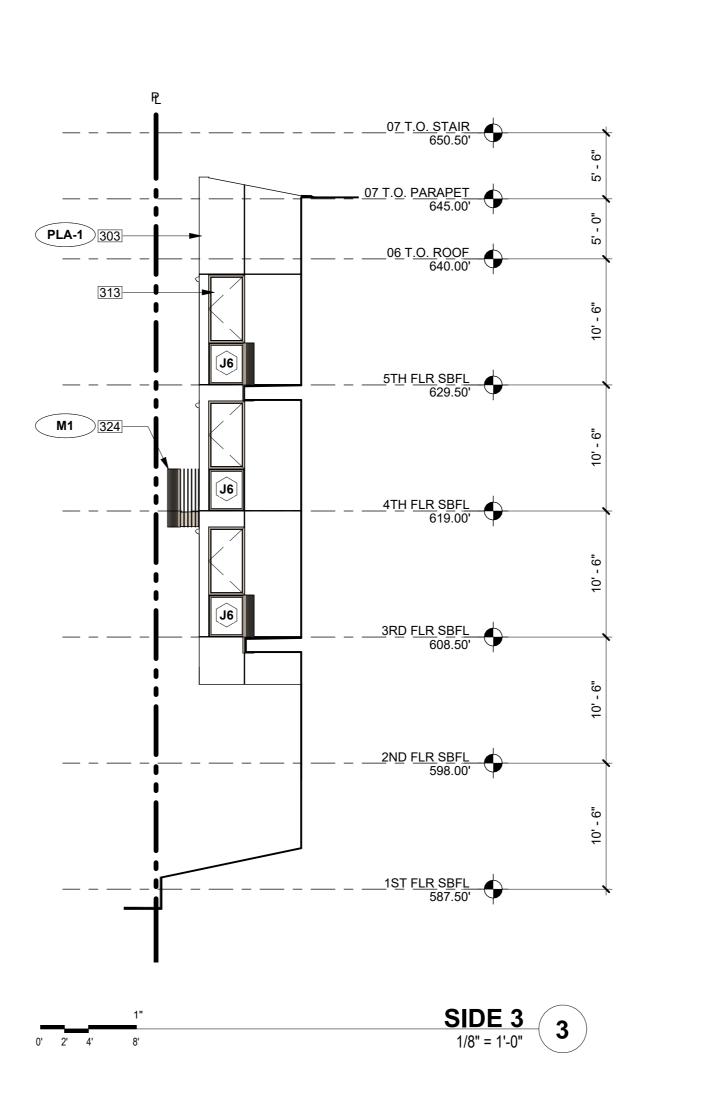
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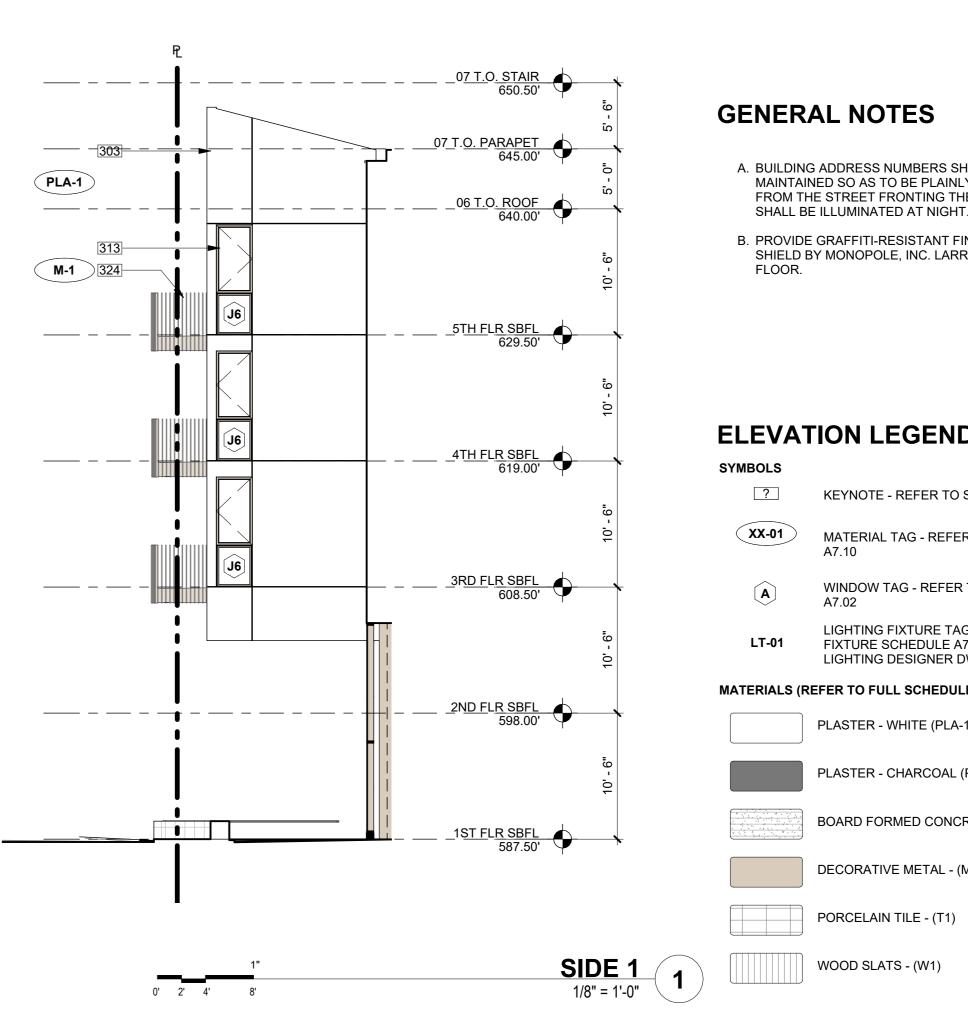
CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:27:35 PM Crescent 2- Arch.rvt

AS SHOWN

0' 2' 4' 8'

SIDE 4 1/8" = 1'-0"





**GENERAL NOTES** A. BUILDING ADDRESS NUMBERS SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THEY SHALL BE ILLUMINATED AT NIGHT. FIRE CODE 505.1. B. PROVIDE GRAFFITI-RESISTANT FINISH (MONOCHEM SHIELD BY MONOPOLE, INC. LARR #25080-T) UP TO SECOND FLOOR. **ELEVATION LEGEND** KEYNOTE - REFER TO SHEET KEYNOTES MATERIAL TAG - REFER TO MATERIAL SCHEDULE WINDOW TAG - REFER TO WINDOW SCHEDULE A7.02 LIGHTING FIXTURE TAG. REFER TO LIGHTING FIXTURE SCHEDULE A7.11, ELEC ENG DWGS, AND LIGHTING DESIGNER DWGS. MATERIALS (REFER TO FULL SCHEDULE A7.10) PLASTER - WHITE (PLA-1) PLASTER - CHARCOAL (PLA-2)

BOARD FORMED CONCRETE (CONC2)

DECORATIVE METAL - (M1)

WOOD SLATS - (W1)

KEY PLAN:

21001 AS SHOWN

PROJECT NO.

SCALE SHEET TITLE: BUILDING **ELEVATIONS** 

SHEET NO. CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:27:40 PM Crescent 2- Arch.rvt

313 VINYL NAIL-ON WINDOW. REFER TO WINDOW SCHED. 324 VERTICAL PICKET FENCE, TOP OR SIDE MNTD. REFER TO DET 3834 WILLAT AVENUE, CULVER CITY, CA 90232 (T) 424.299.4666 The design, drawings, and written material in these documents of service are the sole property of Lahmon Architects. All design and related information contained herein are for use on the specified projects and shall not be duplicated, disclosed, or used without the prior written consent of Lahmon Architects.

**KEYNOTES** 

303 EXT CEM PLASTER. PAINT TO FIN.

DESCRIPTION

224 EXHAUST VENT AT KITCHEN. REFER TO MECH DWGS. 225 EXHAUST VENT AT BATHROOM. REFER TO MECH DWGS. 227 EXHAUST VENT FOR DRYER. REFER TO MECH DWGS.

ARCHITECT:

CONSULTANT:

**UNIVERSAL CITY** 

GUEST HOME, L.P.

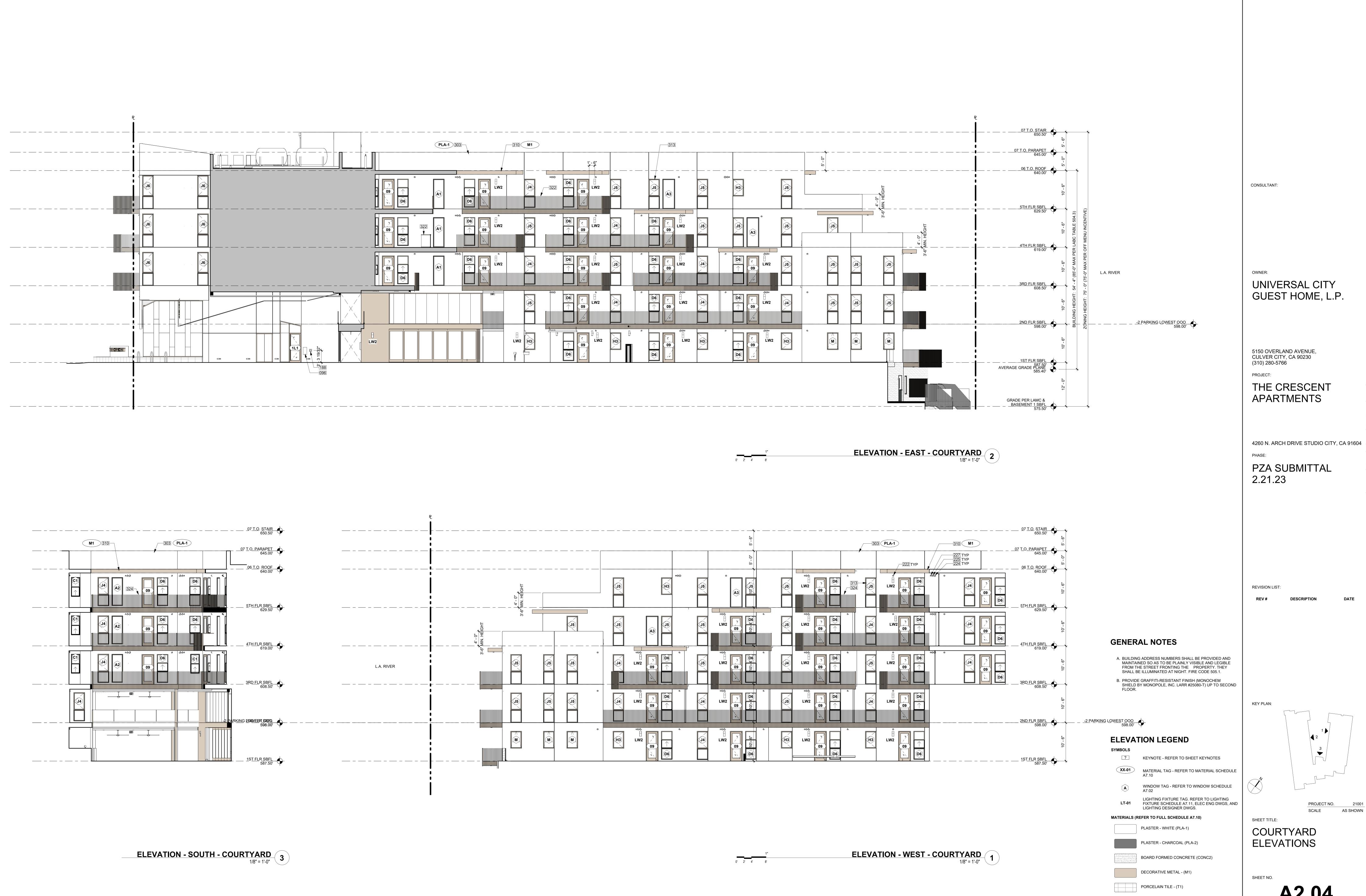
5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

PROJECT: THE CRESCENT **APARTMENTS** 

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PZA SUBMITTAL 2.21.23

REVISION LIST:



ARCHITECT:

188 KNOX BOX (KNOX COMPANY, MODEL #4400R) PER LAFD RQMTS. PROVIDE KEYS FOR BLDG ENTRY, COMMON UTILITY & STORAGE 222 INTAKE VENT FOR ROOF VENTILATION. REFER TO DET XXX. 224 EXHAUST VENT AT KITCHEN. REFER TO MECH DWGS. 225 EXHAUST VENT AT BATHROOM. REFER TO MECH DWGS. 227 EXHAUST VENT FOR DRYER. REFER TO MECH DWGS. (T) 424.299.4666 303 EXT CEM PLASTER. PAINT TO FIN.

**KEYNOTES** 

310 DRAINAGE SYSTEM

313 VINYL NAIL-ON WINDOW. REFER TO WINDOW SCHED.

CONNECTED TOP AND BOTTOM.

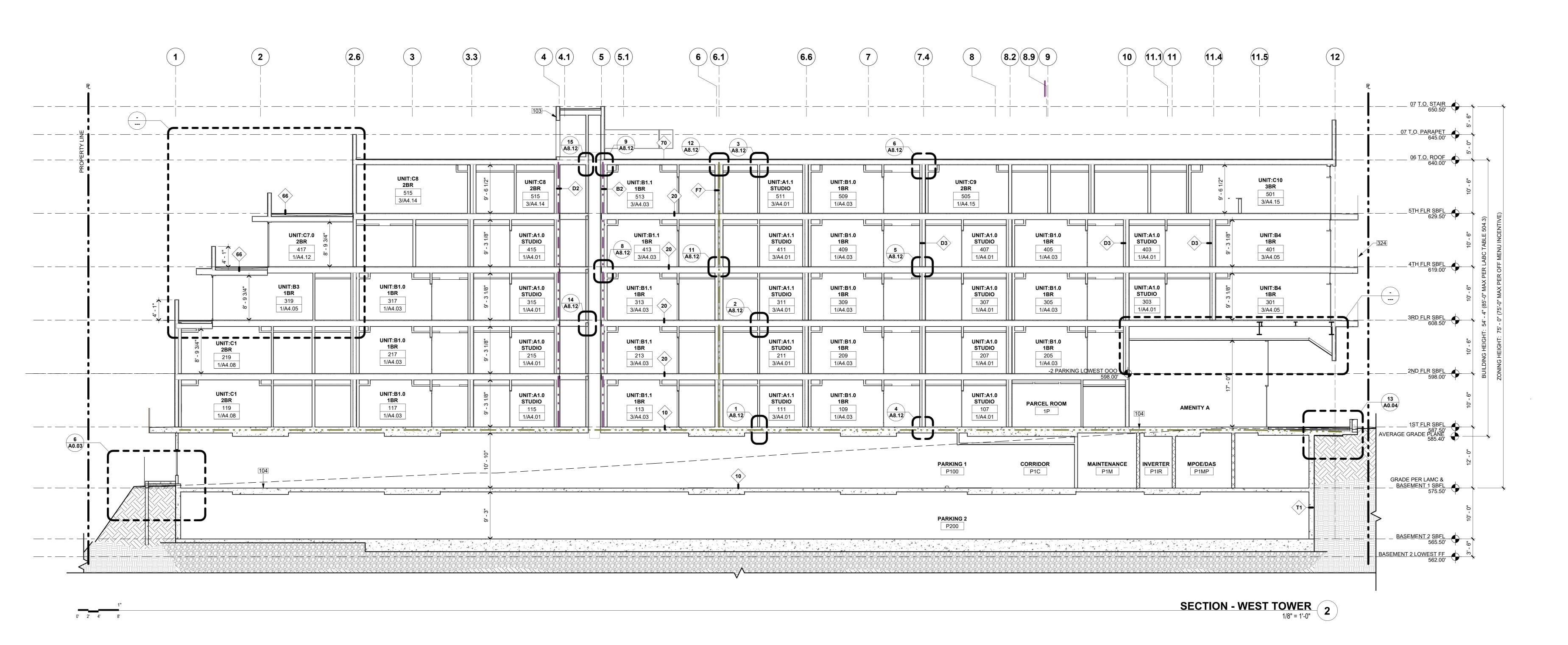
322 FROSTED GLASS DIVIDER, FULL HEIGHT. ALUMINUM BRACKET

324 VERTICAL PICKET FENCE, TOP OR SIDE MNTD. REFER TO DET

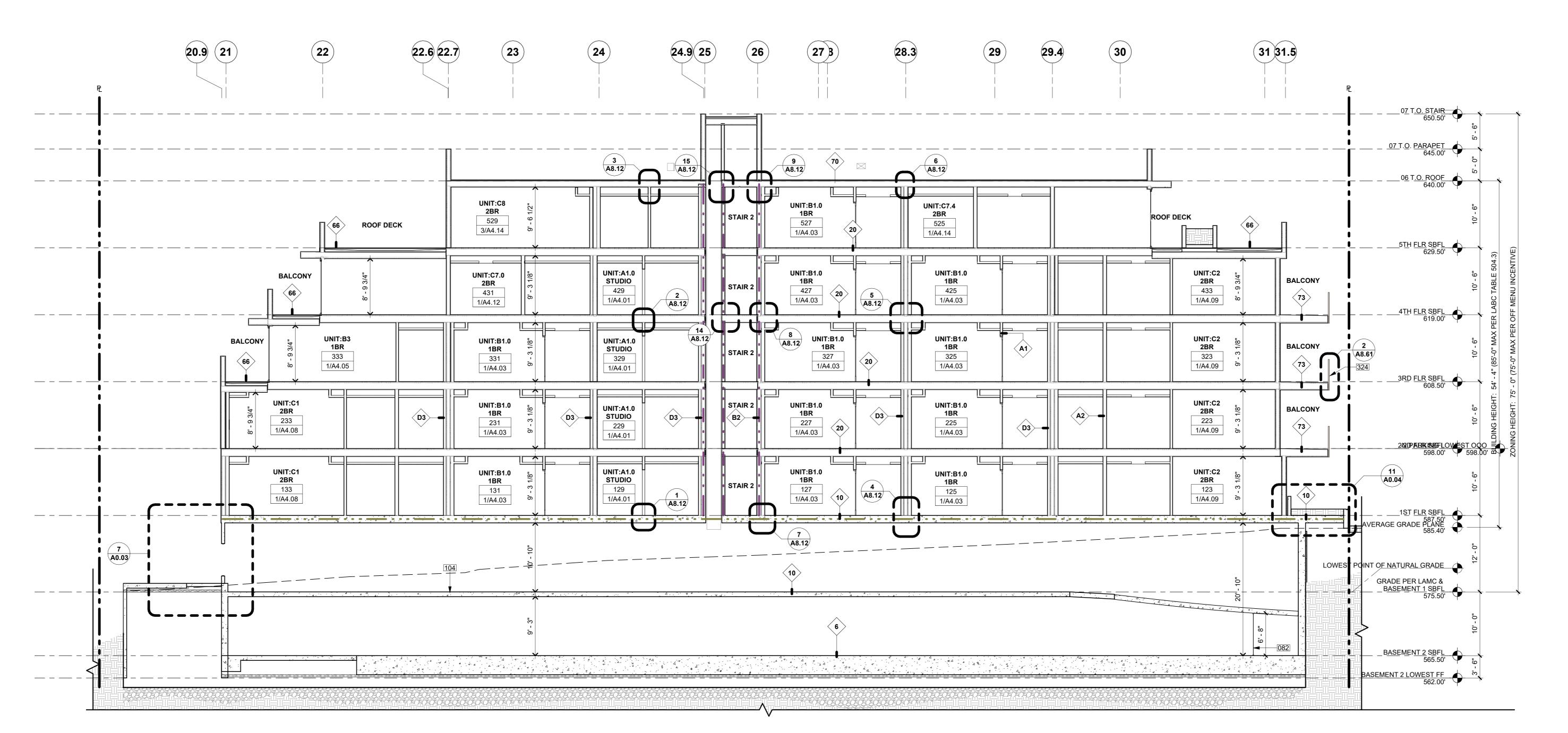
3834 WILLAT AVENUE, CULVER CITY, CA 90232 The design, drawings, and written material in these documents of service are the sole property of Lahmon Architects. All design and related information contained herein are for use on the specified projects and shall not be duplicated, disclosed, or used without the prior written consent of Lahmon Architects.

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WOOD SLATS - (W1)



0' 2' 4' 8'



SECTION - EAST TOWER
1/8" = 1'-0"

082 CHAIN LINKED FENCE

**KEYNOTES** 103 CONC CURB. REFER TO STRUCT DWGS. 104 CONC DECK. REFER TO STRUCT DWGS. 324 VERTICAL PICKET FENCE, TOP OR SIDE MNTD. REFER TO DET



ARCHITECT:

CONSULTANT:

UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

#### **SECTION GENERAL NOTES**

A. DETAIL CALLOUTS FOR TYPICAL CONDITIONS ARE SHOWN OCCASIONALLY BUT APPLY TO ALL OCCURRENCES OF TYPICAL CONDITIONS.

PROJECT: THE CRESCENT **APARTMENTS** 

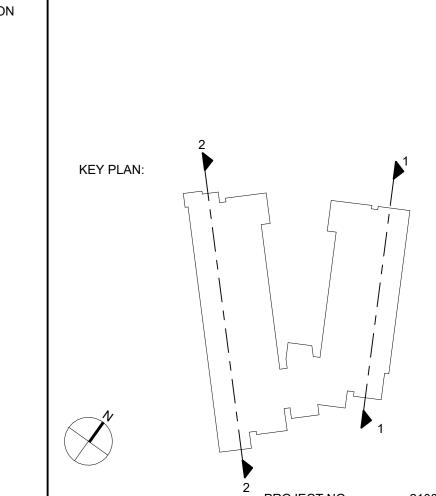
4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PZA SUBMITTAL 2.21.23

REVISION LIST:

# **SECTION LEGEND**

REFER TO STRUCTURAL DRAWINGS. PROVIDE SMOOTH FINISH CMU WALL. REFER TO STRUCTURAL DRAWINGS. 2 HR FIRE RESISTIVE CONSTRUCTION 3 HR FIRE RESISTIVE CONSTRUCTION ASSEMBLY TYPE DESIGNATION. REFER TO ASSEMBLIES A8 SERIES XXX.XX' FINISH FLOOR ELEVATION

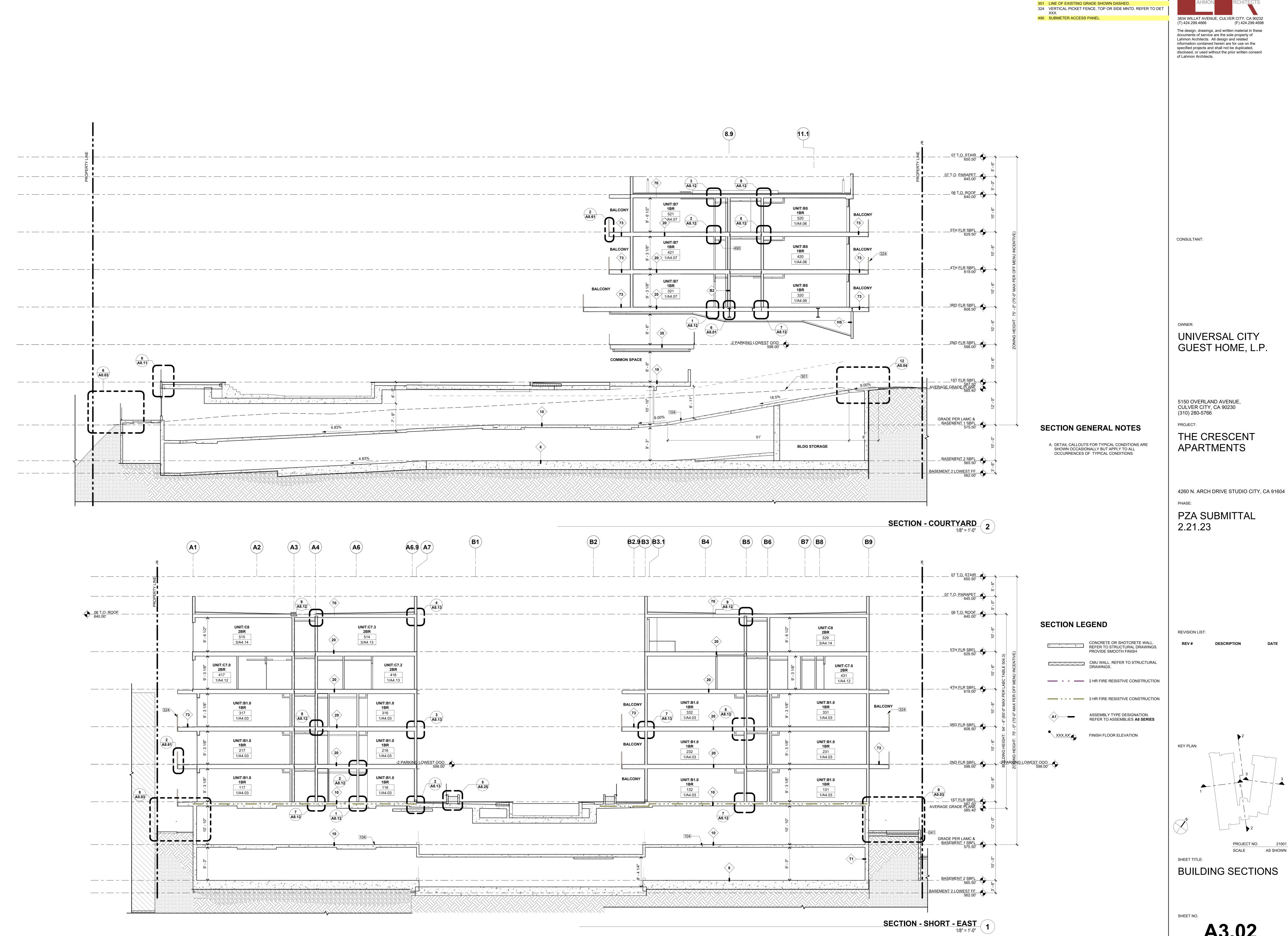


**BUILDING SECTIONS** 

SHEET TITLE:

AS SHOWN

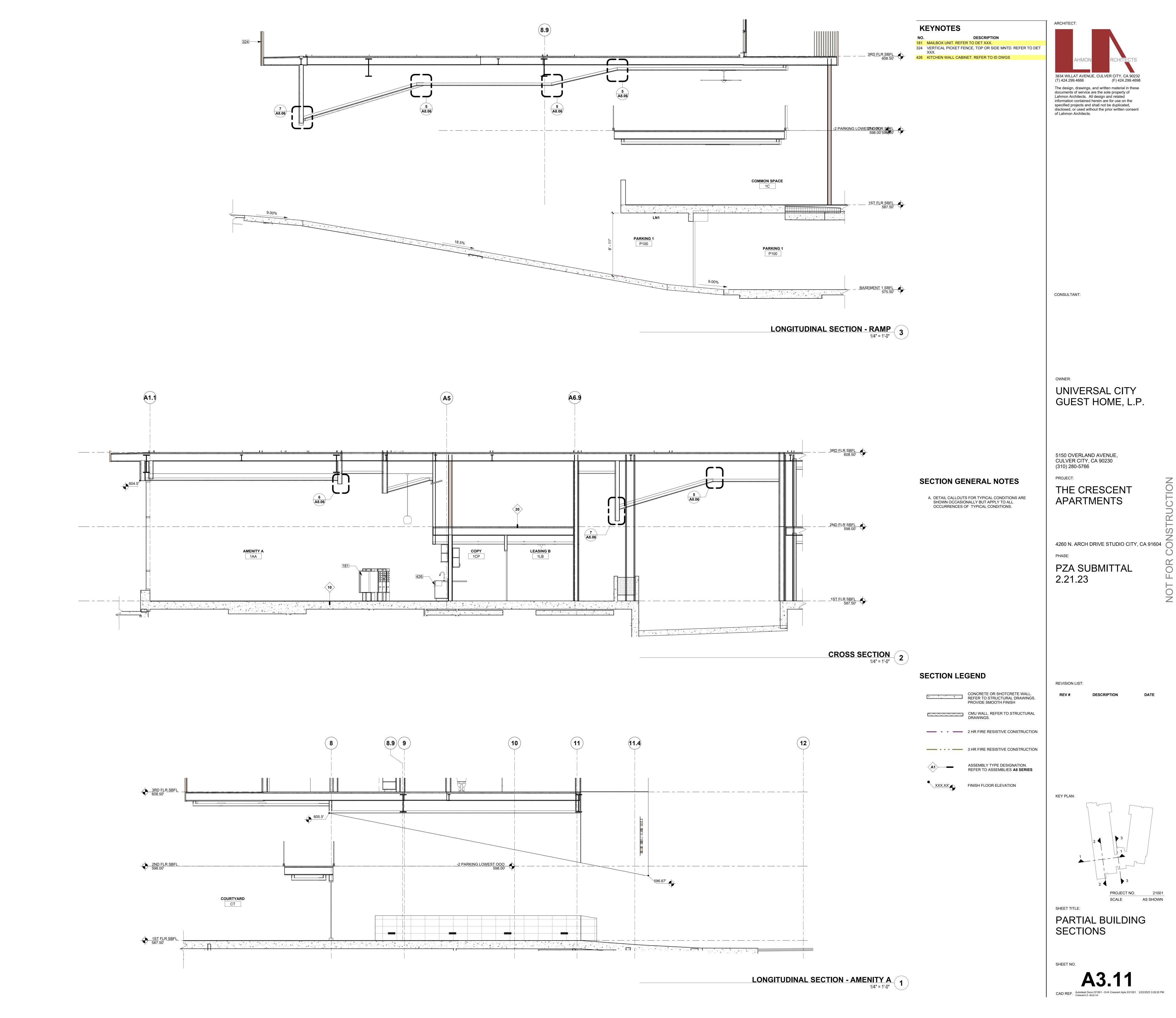
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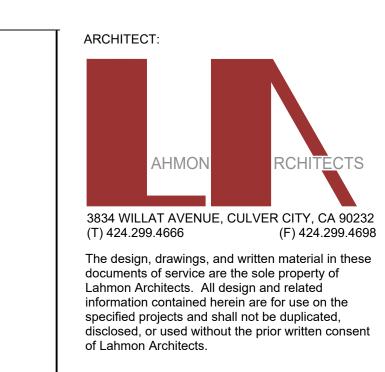


ARCHITECT: **KEYNOTES** 

041 (E) SITE WALL TO REMAIN. REFER TO CIVIL DWGS. TO BE EVALUATED FOR CONTINUED USE, REPLACEMENT OR REPAIR, REFER TO DET XXXX 104 CONC DECK. REFER TO STRUCT DWGS.

CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:28:15 PM





CONSULTANT:

OWNER: UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

PROJECT: THE CRESCENT **APARTMENTS** 

4260 N. ARCH DRIVE STUDIO CITY, CA 91604 PHASE:

PZA SUBMITTAL 2.21.23

REVISION LIST:

CMU WALL. REFER TO STRUCTURAL DRAWINGS. - 2 HR FIRE RESISTIVE CONSTRUCTION

ASSEMBLY TYPE DESIGNATION. REFER TO ASSEMBLIES **A8 SERIES** 

**SECTION LEGEND** 

**SECTION GENERAL NOTES** 

A. DETAIL CALLOUTS FOR TYPICAL CONDITIONS ARE SHOWN OCCASIONALLY BUT APPLY TO ALL OCCURRENCES OF TYPICAL CONDITIONS.

XXX.XX' FINISH FLOOR ELEVATION

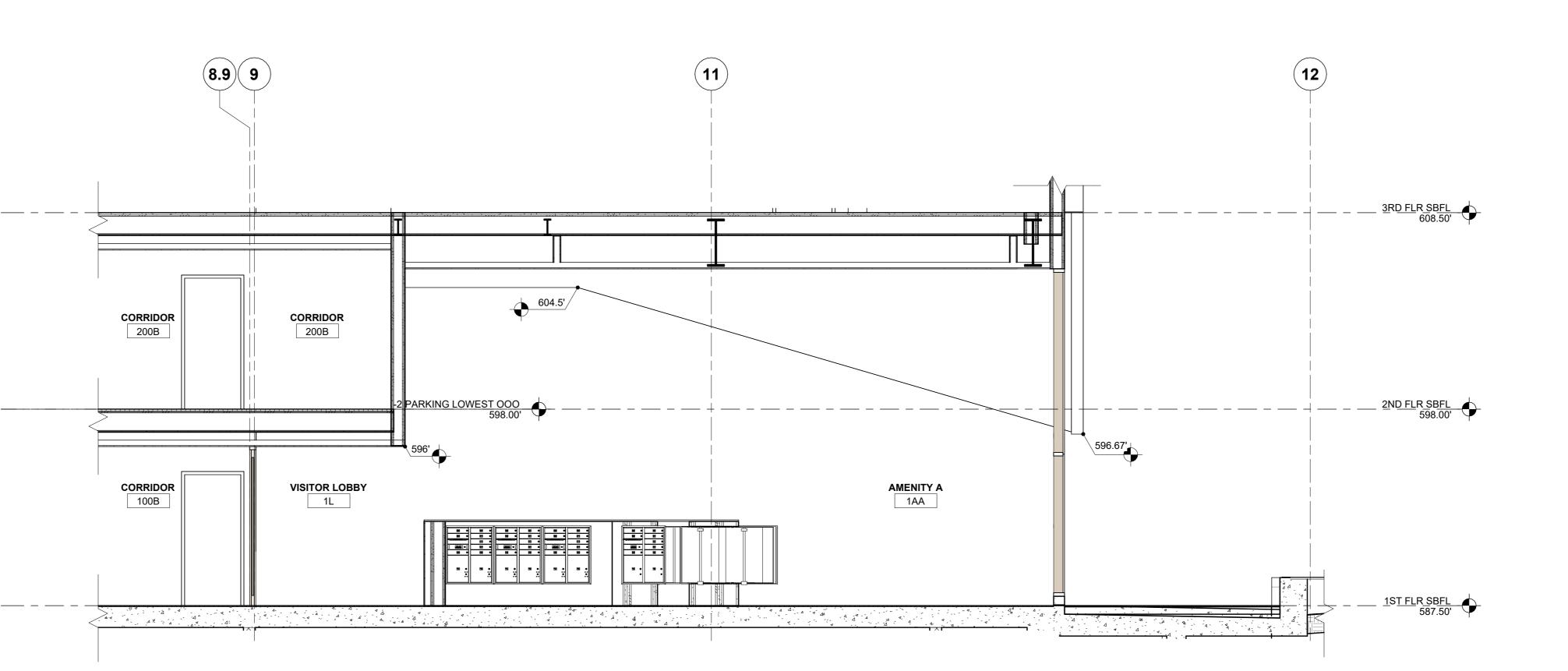
3 HR FIRE RESISTIVE CONSTRUCTION

CONCRETE OR SHOTCRETE WALL.
REFER TO STRUCTURAL DRAWINGS.
PROVIDE SMOOTH FINISH

KEY PLAN: PROJECT NO. 21001 AS SHOWN

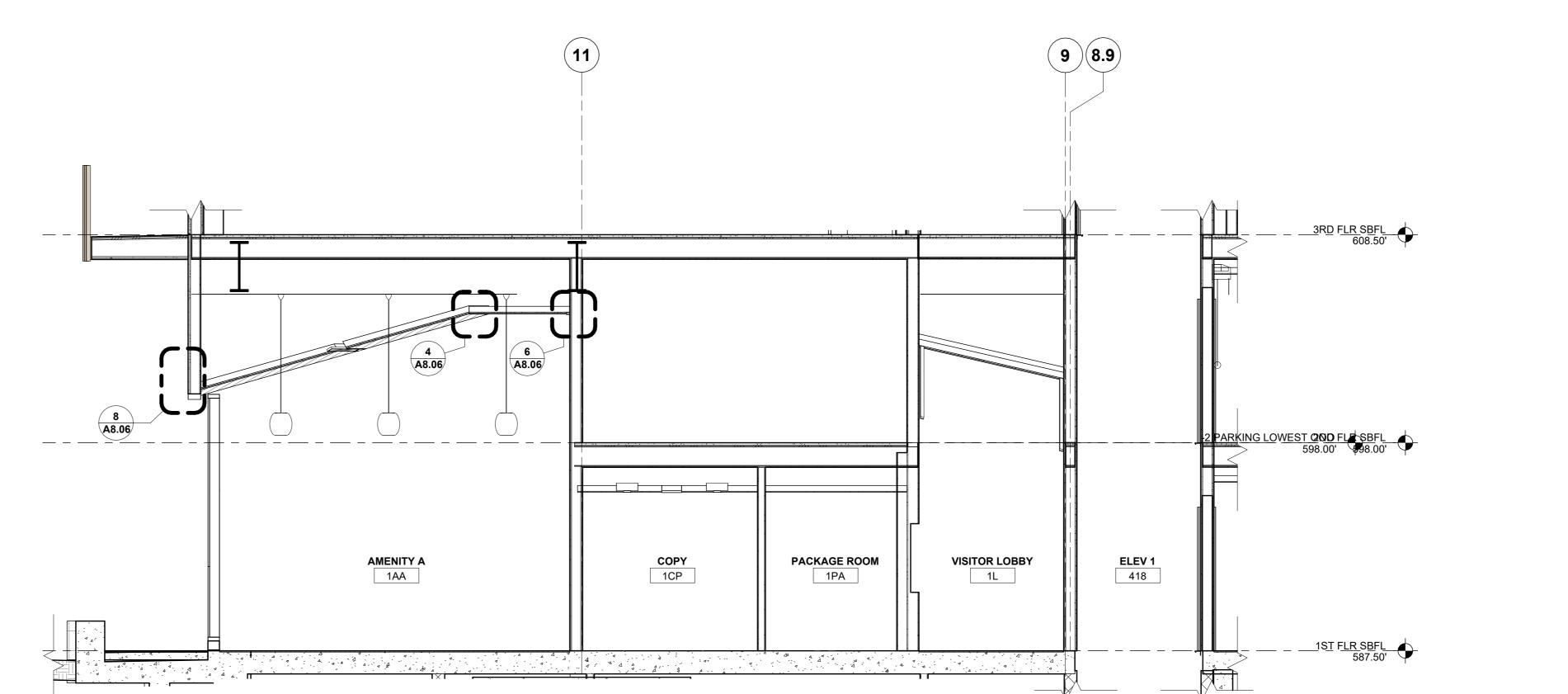
SHEET TITLE: PARTIAL BUILDING SECTIONS

SHEET NO. CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 2/22/2023 3:28:25 PM Crescent 2- Arch.rvt



LONGITUDINAL SECTION - ANGLED WALL
1/4" = 1'-0"
2

LONGITUDINAL SECTION
1/4" = 1'-0"
1





1 SHEET INDEX

2 ABBREVIATIONS

3 SYMBOLS

# CRESCENT APARTMENTS LAND CHIEF

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4260 NORTH ARCH DRIVE, STUDIO CITY, CALIFORNIA 91604 PLAN CHECK SUBMITTAL LANDSCAPE DOCUMENTS

SHEET#	SHEET NAME					
L0.0	COVER SHEET, SYMBOLS, ABBREVIATIONS	<u>SYMBOL</u> <u>DESCRIPTION</u>				
L0.1	GENERAL NOTES	AGG. AGGREGATE ALT. ALTERNATE A.B. ANCHOR BOLT	$\frac{1}{X.X}$	ELEVATION CALLOUT		
		& AND ∠ ANGLE				
LP1.0	1ST FLOOR PLANTING PLAN	A.D. AREA DRAIN				
LP1.1	4TH FLOOR PLANTING PLAN	ASPH. ASHALT	X.X	SECTION CALLOUT		
LP1.2	5TH FLOOR PLANTING PLAN	BM. BEAM BLK. BLOCK BOT. BOTTOM B.O.W. BOTTOM OF WALL				CONSULTANT:
LP2.0	PLANTING DETAILS	B.O.W. BOTTOM OF WALL BLDG. BUILDING C.B. CATCH BASIN CENT. CENTER	1	ENLARGED PLAN CALLOUT		KSA Inc.
LP3.0	PLANTING IMAGES	CENT. CENTER  © CENTERLINE  CER. TILE CERAMIC TILE	X.X			NOA Inc.
		CLR. CLEAR COL. COLUMN				Landscape S t u d i o
LI1.0	1ST FLOOR IRRIGATION PLAN	CLR. CLEAR COL. COLUMN CONC. CONCRETE CONST. CONSTRUCTION CONT. CONTINUOUS		BREAK LINE		Ph. 310 574 4460 Fx. 310 574 4462
LI1.1	4TH FLOOR IRRIGATION PLAN	CONTR. CONTRACTOR C.J. CONTROL JOINT DET. DETAIL				6150 Washington Boulevard Culver City, CA 90232
LI1.2	5TH FLOOR IRRIGATION PLAN	DIA. DIAMETER DIM. DIMENSION		REVISION CLOUD		OWNER:
LI2.0	IRRIGATION LEGEND AND NOTES	DN. DOWN DWG. DRAWING D.F. DRINKING FOUNTAIN		NEVISION GEODE		UNIVERSAL CITY GUEST HOME, L.P.
LI3.0	IRRIGATION DETAILS	EA. EACH F. FAST				
LI3.1	IRRIGATION DETAILS	(E) EXISTING EL. ELEVATION ELEC. ELECTRICAL ENCL. ENCLOSURE		LIMIT OF WORK		
		ENG. ENGINEER				
		EQ. EQUAL EQUIP. EQUIPMENT EXPAN. EXPANSION E.J. EXPANSION JOINT				5150 OVERLAND AVENUE, CULVER CITY, CA 90230
		EXT. EXTERIOR FT. FEET		— TREE SPECIES		(310) 280-5766
		F.F. FINISH FLOOR F.S. FAR SIDE FTG. FOOTING	Ex	EXISTING TREE TO REMAIN		PROJECT: THE CRESCENT
		GAL V. GAL VINIZED  GA. GAUGE  GR. GRADE				APARTMENTS
		GA. GAUGE  GR. GRADE  GRND. GROUND  HRDWRE. HARDWARE  HT. HEIGHT				
		H.P. HIGH POINT HORIZ. HORIZONTAL		— NEW TREE BOX SIZE		
		H.B. HOSE BIBB IN. INCH I.D. INSIDE DIAMETER	T5			4260 N. ARCH DRIVE STUDIO CITY, CA 9
		INT. INTERIOR INV. INVERT JNT. JOINT		TREE CANOPY		PHASE:
		L.P. LOW POINT LT. LIGHT				PLAN CHECK
		MH. MANHOLE  MANUF. MANUFACTURER  M.O. MASONRY OPENING	( Ex )	— EXISTING TREE TO BE REMOVED		SUBMITTAL
		MAT. MATERIAL MAX. MAXIMUM MECH. MECHANICAL				12.15.22
		MEMB. MEMBRANE MTL. METAL				
		MIN. MINIMUM  MISC. MISCELLANEOUS  MTD. MOUNTED	EQ	EXISTING PALM TO BE TRANSPLANTED		
		N/A NOT APPLICABLE (N) NEW NOM. NOMINAL				
		N.I.C. NOT IN CONTRACT N.S. NEAR SIDE				
		N.T.S. NOT TO SCALE  NO. NUMBER  O.C. ON CENTER  O.D. OUTSIDE DIAMETER	EQ	EXISTING PALM TO BE REMOVED		
		OV.DR. OVERFLOW DRAIN				REVISION LIST:  REV # DESCRIPTION DA
		P.A. PLANTING AREA	Fw	—— EXISTING PALM TO REMAIN	START POINT	
		PL. PLATE PLYWD. PLYWOOD			COOPE OF WORK NOTES	
		PT. POINT P.I.P. POURED IN PLACE P.O.B. POINT OF BEGINNING			SCOPE OF WORK NOTES:	
		P.O.C. POINT OF CONNECTION QNTY. QUANTITY R RADIUS			1 NEW POOL UNDER A SEPARATE PERMIT	
		R. RADIUS REF. REFERENCE REINF. REINFORCED REQ. REQUIRED	EC	—— EXISTING PALM TO REMAIN	585.84	
		RM. ROOM R.O. ROUGH OPFNING			2 NEW OUTDOOR OVERHEAD STRUCTURE PER ARCHITECTS DRAWINGS	
		SHT. SHEET SIM. SIMILAR SPEC. SPECIFICATION SQ. SQUARE S.F. SQUARE FEET			3 NEW BUILT-IN PLANTERS  4 NEW OUTDOOR BBQ AND COOK CENTER	KEY PLAN:
		SQ. SQUARE S.F. SQUARE FEET S.S. STAINLESS STEEL	FO	EXISTING PALM TO REMAIN		
		STAND. STANDARD  STA. STATION  ST. STEEL			NEW OUTDOOR BBQ AND COOK CENTER	\ \ 7
		ST. STEEL STRUCT. STRUCTURAL SYM. SYMMETRICAL THK. THICK				
		THK. THICK T.O.C. TOP OF CURB T.O.P. TOP OF PAVEMENT			5 NEW TWO-SIDED FIREPLACE AND POOL ENCLOSURE	
		TOW TOP OF WALL	EP	EXISTING PALM TO REMAIN	6 PROPOSED IN-GROUND PLANTING AND IRRIGATION	N (PROJECT)
		T.S. TUBE STEEL  TYP. TYPICAL  UNFIN. UNFINISHED  U.O.N. UNLESS OTHERWISE NOTED  V.I.F. VERIFY IN FIELD				
		V.I.F. VERIFY IN FIELD VERT. VERTICAL W.I. WROUGHT IRON		— SHRUB SPREAD	7 PROPOSED DOG RUN ENCLOSED AREA	PROJECT NO. SCALE AS S
		W/ WITH WD. WOOD	CM	SHRUB TYPE REFERENCE SEE PLANTING SCHEDULE		SHEET TITLE:
		WT. WEIGHT YD. YARD	Λ	JLL I LANTIING JUMEDULE	N 0' 20' 40' 80'	COVER SHEET,
		V.O.S. VERIFY ON SITE			GRAPHIC SCALE	SYMBOLS, ABBREVIATIONS
					SITE PLAN GC: 1" = 40'-0"	
						SHEET NO.
						L0.0

4 SITE PLAN

260 N. ARCH DRIVE STUDIO CITY, CA 9160

RESPONSIBLE FOR REVIEW OF IRRIGATION CONTRACT DOCUMENTS.

2. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH APPLICABLE CODES AND REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.

3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.

4. WRITTEN SPECIFICATIONS AND NOTES SUPERSEDE DRAWINGS. IF CONDITIONS IN FIELD ARE IN CONFLICT WITH DRAWINGS, NOTIFY OWNER OR L.A. PRIOR TO PROCEEDING. 5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING 100% HEAD-TO-HEAD IRRIGATION COVERAGE OF ALL PLANTING AREAS.

6. VALVE SUN AND SHADE AREAS SEPARATELY. REPORT DISCREPANCIES IN WRITING TO OWNER'S AUTHORIZED AGENT PRIOR TO INSTALLATION.

7. FLUSH ALL LINES AND ADJUST ALL HEADS FOR MAXIMUM PERFORMANCE, ACCORDING TO CONTRACT DOCUMENTS & EQUIPMENT MANUFACTURER'S INSTRUCTION, AND PREVENT OVER SPRAY ONTO WALKS AND

8. ALL VALVES SHALL BE LOCATED IN SHRUB PLANTING AREAS. VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING WALLS, AND PATHWAYS. VERIFY LOCATION OF ALL REMOTE VALVE BOXES WITH OWNER OR L.A. BEFORE INSTALLATION.

9. IN EVENT THAT TREE ROOT BALL LOCATION CONFLICTS WITH IRRIGATION EQUIPMENT, EQUIPMENT SHALL BE REMOVED AND REINSTALLED AT NO COST TO OWNER.

10. IRRIGATION LINES INSTALLED IN PLANTER LESS THAN 24" IN WIDTH SHALL BE RUN DOWN ONE SIDE OF THE PLANTER OR THE OTHER, NOT THE MIDDLE. 11. CONTRACTOR TO ENSURE THAT EVERY REMOTE CONTROL VALVE AND HOSE BIBB INDICATED SHALL BE

SERVED BY PRESSURE SUPPLY MAINLINE. THE INDICATED MAINLINE IN THE PLAN SHALL SERVE AS A GUIDE AS TO HOW THE LINE SHOULD RUN DIRECTIONALLY. 12. PIPES SHALL BE LOCATED IN PLANTING AREAS, EXCEPT WHEN AUTHORIZED BY OWNER'S AGENT PRIOR

TO INSTALLATION. 13. CONTRACTOR IS RESPONSIBLE FOR CONNECTION OF NEW SYSTEM TO EXISTING WATER SYSTEM AND UNINTERRUPTED IRRIGATION TO EXISTING PLANTING DURING CONSTRUCTION.

14. CONTRACTOR IS TO VERIFY AVAILABLE MAINLINE PRESSURE. IN THE EVENT THAT PRESSURE IS INADEQUATE, REPORT TO OWNER OR L.A PRIOR TO COMMENCING ANY CONSTRUCTION.

15. CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL HOOKUP OF CONTROLLERS.

16. ALL MAINLINE UNDER PAYING TO BE INSTALLED IN PVC SCHEDULE 40 SLEEVES, TWO (2) TIMES LARGER THAN PIPE SIZE. SLEEVES TO BE RUN PRIOR TO PLACEMENT OF PAVING. NO HYDRAULIC JACKING UNDER PAVED AREAS. WHERE SLEEVING IS NOT POSSIBLE, PVC SCHEDULE 80 PIPING MAY BE INSTALLED, UPON AUTHORIZATION BY OWNER'S AGENT AND PRIOR TO COMMENCING ANY CONSTRUCTION. 17. ALL CONTROL WIRE UNDER PAVING TO BE INSTALLED IN PVC SCHEDULE 40 SLEEVES. SIZE AS REQUIRED. MAINLINE — 2" AND LARGER SHALL BE PVC CLASS 315, LESS THAN 2" SHALL BE PVC SCHEDULE 40. ALL FITTINGS SHALL BE SCHEDULE 80. PRIME AND SOLVENT WELD ALL TURNS WITH

18. ALL IRRIGATION HEADS TO BE POP—UP TYPE UNLESS OTHERWISE APPROVED BY THE OWNER OR L.A. ALL RISERS TO BE ON SWING JOINTS.

19. IF SPECIFIED VALVE SIZE IS UNAVAILABLE, PROVIDE NEXT LARGER AVAILABLE SIZE. 20. CONTRACTOR SHALL CONFIRM FULL HEAD TO HEAD COVERAGE UPON COMPLETION OF IRRIGATION SYSTEM, AND PRIOR TO PLANTING, AND SHALL REPORT IN WRITING THAT SUCH A TEST HAS BEEN MADE, USING SPECIFIED EQUIPMENT. WRITTEN CONFIRMATION SHALL INCLUDE REMEDIES OR RECOMMENDATIONS SHOULD HEAD TO HEAD TEST SHOW DRY AREAS. SUBMIT REPORT TO OWNER'S AUTHORIZED AGENT.

21. NO POPUP HEADS OVER 4" SHALL BE USED IN CAR OVERHANG PLANTING AREAS. **WOOD NOTES:** 

1. ALL WOOD TO BE CONSTRUCTION HEART S4S REDWOOD UNLESS NOTED OTHERWISE.

2. ALL WOOD TO BE FULLY KILN-DRIED, FREE OF CHECKING, SPLITTING, AND KNOTS. 3. ALL CRACKS, BOLT—HOLES, ETC. SHALL BE FILLED, SANDED AND SEALED PRIOR TO PAINTING. ALL KNOTS SHALL BE SEALED PRIOR TO PAINTING.

4. IF APPROPRIATE, MILDEWCIDE SHALL BE APPLIED ACCORDING TO MANUFACTURER'S PUBLISHED INSTRUCTIONS.

5. PRODUCE JOINTS WHICH ARE TRUE, TIGHT, AND WELL NAILED WITH ALL MEMBERS. 6. MAKE JOINTS TO CONCEAL SHRINKAGE; MITER EXTERIOR JOINTS; COPE INTERIOR JOINTS. MITER OR SCARF END TO END JOINTS.

7. INSTALL TRIM IN PIECES AS LONG AS POSSIBLE, JOINING ONLY WHERE SOLID SUPPORT IS OBTAINED. FILL, SEAL AND SAND ALL JOINTS.

8. INSTALL ITEMS STRAIGHT, TRUE, LEVEL, PLUMB, AND FIRMLY ANCHORED IN PLACE. 9. WHERE BLOCKING OR BACKING IS REQUIRED, COORDINATE AS NECESSARY WITH OTHER TRADES TO

ENSURE PLACEMENT OF REQUIRED BACKING AND BLOCKING IN A TIMELY MANNER. 10. NAIL TRIM WITH FINISH NAILS OF PROPER DIMENSION TO HOLD MEMBER FIRMLY IN PLACE WITHOUT SPLITTING WOOD.

11. NAIL EXTERIOR TRIM WITH STAINLESS STEEL NAILS, MAKING JOINTS TO EXCLUDE WATER AND SETTING IN WATERPROOF GLUE OR SEALANT.

12. ON EXPOSED WORK, SET NAILS FOR PUTTY. 13. SCREW, DO NOT DRIVE, WOOD SCREWS; EXCEPT THAT SCREWS MAY BE STARTED BY DRIVING AND

THEN SCREWED HOME. 14. INSTALL ITEMS IN STRICT ACCORDANCE WITH DRAWINGS, AND THE RECOMMENDED METHODS OF THE MANUFACTURER. ANCHOR FIRMLY INTO POSITION AT PRESCRIBED LOCATION, STRAIGHT, PLUMB, AND

15. SANDPAPER FINISHED WOOD SURFACES THOROUGHLY AS REQUIRED TO PRODUCE UNIFORMLY SMOOTH

SURFACE, ALWAYS SAND IN DIRECTION OF GRAIN; EXCEPT DO NOT SAND WOOD WHICH IS DESIGNED TO B LEFT ROUGH. 16. NO COARSE GRAINED SANDPAPER MARK, HAMMER MARK, OR OTHER IMPERFECTION WILL BE ACCEPTED.

17. KEEP PREMISES IN A NEAT, SAFE, AND ORDERLY CONDITION AT ALL TIMES DURING EXECUTION OF THIS PORTION OF WORK, FREE FROM ACCUMULATION OF SAWDUST, CUT-ENDS, AND DEBRIS. 18. CONTRACTOR TO CONCEAL ALL METAL FRAMING CONNECTIONS FOR L.A. ELEMENTS, INCLUDING BUT

NOT LIMITED TO GAZEBOS, FENCES, AND TRELLISES. 19. SEE STRUCTURAL DRAWINGS FOR ALL FRAMING, CONNECTIONS, AND FOOTINGS.

#### LIGHTING NOTES:

1. CONTRACTOR TO INSTALL ELECTRICAL SYSTEM TO CODE AND SHALL SECURE ALL NECESSARY PERMITS. 2. SWITCHING REQUIREMENTS TO BE COORDINATED WITH LANDSCAPE ARCHITECT (L.A.), ARCHITECT AND OWNER DURING BUILDING CONSTRUCTION.

3. DRAWING IS DIAGRAMMATIC FOR LEGIBILITY. VERIFY EXACT LOCATIONS OF LIGHTS AND TRANSFORMERS WITH L.A. SWITCHING SHOWN ON PLAN FOR DESIGN INTENT ONLY.

4. LOAD TRANSFORMERS PER MANUFACTURER'S INSTRUCTIONS. LOAD NOT TO EXCEED 80% OF MANUFACTURER'S RECOMMENDED MAXIMUM LOAD.

5. LENGTH OF WIRE RUN NOT TO EXCEED 100 FEET FROM THE TRANSFORMER TO THE LAST FIXTURE ON THE WIRE RUN CONTRACTOR SHOULD TAKE MEASURES TO AVOID LARGE VOLTAGE DROPS AND ADVISE L.A. OF SUCH BEFORE COMMENCING WORK.

6. FIXTURES MOUNTED ON EXISTING TREES TO BE MOUNTED 12'-0" MINIMUM ABOVE GRADE.

8. CONTRACTOR AND L.A. SHALL ADJUST LIGHTING DURING EVENING HOURS AS REQUIRED.

9. ALL FIXTURES SHALL CONFORM TO UL STANDARD 1838.

7. EXTERIOR OUTLETS TO BE MOUNTED 12" MINIMUM ABOVE GRADE, PER CODE.

10. CONTRACTOR SHALL SUPPLY LAMP WATTAGE AS SHOWN ON LEGEND AS WELL AS ONE ADDITIONAL LAMP IN A HIGHER WATTAGE WHERE AVAILABLE FOR EACH FIXTURE.

11. FIREPLACE TO MEET ALL APPLICABLE CODES.

12. CONTRACTOR TO CONFIRM ALL WATERPROOFING WITH WATER PROOF CONSULTANT.

<u>PLANTING NOTES:</u>

1. CONTRACTOR SHALL INSTALL PLANT MATERIAL IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS INCLUDING BUT, NOT LIMITED TO PLANS, DETAILS, DRAWINGS, NOTES AND SPECIFICATIONS.

2. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH APPLICABLE CODES AND REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.

3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK. 4. WRITTEN SPECIFICATIONS AND NOTES SUPERSEDE DRAWNGS. IF CONDITIONS IN FIELD ARE IN CONFLICT

5. CONTRACTOR SHALL PROVIDE ONE PHOTOGRAPH OF EACH TREE VARIETY AND SIZE, CALLED OUT ON DRAWNGS. AND SEND TO OWNER'S AUTHORIZED REPRESENTATIVE OR L.A. FOR APPROVAL PRIOR TO PURCHASE, DELIVERY TO SITE OR INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR TIMELY DELIVERY OF SUCH PHOTOS, ALLOWING ADEQUATE TIME FOR OWNER'S REJECTION OF MATERIAL AND RESUBMITTAL

6. AT LANDSCAPE ARCHITECT'S DISCRETION, LANDSCAPE ARCHITECT MAY TAG ALL SITE TREES.

WITH DRAWINGS, NOTIFY OWNER OR L.A. PRIOR TO PROCEEDING.

WITHOUT COMPROMISE TO OVERALL LANDSCAPE INSTALLATION SCHEDULE.

7. TREES SHALL BE PRELIMINARILY TAGGED BY CONTRACTOR. CONTRACTOR SHALL OBSERVE EACH TREE IN ORDER TO ASCERTAIN THAT TREES ARE HEALTHY, FREE OF PESTS, DISEASES, ROOT GIRDLING, SCARS, AND THAT TREES HAVE GOOD BRANCH ATTACHMENT. LANDSCAPE ARCHITECT MAY REJECT ANY TREES BROUGHT TO THE SITE WHICH ARE NOT IN GOOD FORM AND HEALTH.

8. TREES AND SHRUBS SHALL COME FROM REPUTABLE TREE FARMS AND NURSERIES. NURSERIES SHALL BE MEMBERS OF THE CALIFORNIA ASSOCIATION OF NURSERIES AND GARDEN CENTERS (CANGC), AND SHALL HAVE CONDUCTED BUSINESS AS A TREE FARM IN CURRENT LOCATION AND UNDER CURRENT OWNERSHIP FOR MINIMUM OF TEN YEARS. CONTRACTOR REQUIRED TO SUBMIT PROOF THAT NURSERY MEETS THE ABOVE QUALIFICATIONS.

9. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ALL PLANT MATERIAL DEFMED TO BE UNSUITABLE FOR PROJECT FOR ANY REASON ONCE IT IS ONSITE.

10. ROOT BALL CONDITION OF PLANTS FURNISHED BY THE CONTRACTOR WILL BE DETERMINED BY REMOVAL OF EARTH FROM THE ROOTS OF NOT LESS THAN 2 PLANTS NOR MORE THAN 2 PERCENT OF THE TOTAL NUMBER OF PLANTS OF EACH SPECIES, EXCEPT WHEN CONTAINER-GROWN PLANTS ARE FROM SEVERAL SOURCES, THE ROOTS OF NOT LESS THAN 2 PLANTS OF EACH SPECIES OR VARIETY FROM EACH SOURCE WILL BE INSPECTED BY THE LANDSCAPE ARCHITECT. IN CASE THE SAMPLE PLANTS INSPECTED ARE FOUND TO BE DEFECTIVE, INCLUDING BUT NOT LIMITED TO , ROOT BOUND OR UNDERDEVELOPED ROOT BALL, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT THE ENTIRE LOT OR LOTS OF PLANTS REPRESENTED BY THE DEFECTIVE SAMPLES. PLANTS RENDERED UNSUITABLE FOR PLANTING BECAUSE OF THIS INSPECTION WILL BE CONSIDERED AS SAMPLES AND WILL NOT BE PAID FOR.

10. ALL PLANTS SHALL ARRIVE ON SITE WITH NURSERY TAGS. THOSE WITHOUT NURSERY TAGS ARE SUBJECT TO REJECTION.

11. FINAL LOCATIONS OF TREES AND SHRUBS SHALL BE APPROVED BY THE OWNER OR L.A. PRIOR TO PLANTING. COMPLETED PLANTING AND IRRIGATION SHALL BE INSPECTED BY THE OWNER'S AUTHORIZED AGENT OR OBSERVED BY LANDSCAPE ARCHITECT PRIOR TO FINAL ACCEPTANCE. 12. CONTRACTOR SHALL GUARANTEE ALL NEW PLANTS AS FOLLOWS:

TREES (24" BOX AND LARGER) — 1 YEAR SHRUBS VINES, AND VINES (1 GAL. AND LARGER) — 1 YEAR SUCCULENTS AND GROUND COVER — 6 MONTHS ANNUAL COLOR — 2 MONTH

13. PLANT MATERIAL WHICH IN THE JUDGMENT OF THE OWNER OR L.A. IS NOT HEALTHY AND VIGOROUS AT THE END OF THE MAINTENANCE PERIOD AND/OR GUARANTEE PERIOD SHALL BE REPLACED BY CONTRACTOR AT NO COST TO OWNER.

14. CONTRACTOR SHALL PROVIDE A MAINTENANCE PERIOD OF NOT LESS THAN 90 DAYS COMMENCING AT THE DATE OF FINAL ACCEPTANCE. SUCH MAINTENANCE SHALL INCLUDE ALL CARE PERTAINING TO ALL WORK INSTALLED AS PART OF THESE CONTRACT DOCUMENTS. CONTRACTOR SHALL SUBMIT A WRITTEN LOG OF DATES. STAFF. AND ACTIONS PERFORMED DURING SUCH MAINTENANCE PERIOD.

15. QUALITY AND SIZE OF ALL PLANTS SHALL CONFORM TO THE CALIFORNIA STANDARD GRADING CODE OF NURSERY STOCK AND SHALL BE NUMBER ONE GRADE. THERE SHALL BE NO INSECTS, EGGS, OR

16. CONTRACTOR SHALL SUBMIT SUPPLIER RECEIPTS TO OWNER'S AUTHORIZED AGENT FOR ALL MATERIALS USED ONSITE WITH BILLING.

17. CONTRACTOR SHALL CONFIRM WITH GROWERS THAT PLANTS PURCHASED FOR THIS PROJECT ARE PROPERLY ACCLIMATIZED TO PROJECTS CONDITIONS AND SEASONS OF PLANTING. 18. CONTRACTOR SHALL STORE PLANT MATERIAL IN SHADE AND PROTECT FROM SUN. MAINTAIN PLANTS

IN MOIST CONDITION PRIOR TO PLANTING. 19. CONTRACTOR SHALL PLANT ALL PLANTS SO THAT AFTER FULL SETTLING, THE CROWN OF THE PLANT IS EVEN WITH OR  $rac{1}{2}$ " ABOVE THE FINISH GRADE. AFTER PLANTING, SMOOTH SOIL AROUND PLANT, COMPACT BY FOOT AND WATER WITH A FINE SPRAY.

20. CONTRACTOR SHALL WATER THOROUGHLY, IMMEDIATELY AFTER PLANTING. WATER SETTLE AND HAND TAMP ALL BACKFILLED AREAS THOROUGHLY.

21. CONTRACTOR SHALL WATER SETTLE AND HAND COMPACT ALL SOIL IN BUILT-UP PLANTERS. SUCH COMPACTION SHALL OCCUR OVER A 3-DAY PERIOD, ONE WEEK MINIMUM PRIOR TO PLANTING, IN ORDER TO MAXIMIZE SETTLEMENT. CONTRACTOR SHALL INSTALL ADDITIONAL SOIL AS REQUIRED TO BRING TOP OF FINISH GRADE TO 2" BELOW TOP OF WALL, OR TO TOP OF WATERPROOFING MEMBRANE WHERE WATERPROOFING MEMBRANE IS HIGHER THAN 3" BELOW TOP OF WALL.

22. ALL DRAINAGE AND TREE SUPPORT GRAVEL TO BE  $\frac{3}{4}$ " DIAMETER WASHED GRAVEL.

23. CONTRACTOR SHALL TOP DRESS ALL PLANTING AREAS WITH 2" NITROWOOD MULCH UNLESS OTHERWISE NOTED.

24. CONTRACTOR SHALL REMOVE ALL NURSERY STAKES AND TAGS FROM ALL PLANT MATERIALS AFTER 25. CONTRACTOR SHALL DOUBLE STAKE OR GUY ALL TREES 15 GALLONS AND LARGER IMMEDIATELY

AFTER PLANTING PER DRAWINGS. DO NOT PENETRATE WATER PROOFING MEMBRANE. DO NOT PENETRATE ROOT BALL. 26. CONTRACTOR SHALL TAKE SUFFICIENT MEASURES TO KEEP LAWN AREAS FROM UNHEALTHY YELLOWNG. OR OTHERWISE DAMAGE BY PEDESTRIANS AND WORKMEN. CONTRACTOR SHALL REPLACE TURF DAMAGED,

REGARDLESS OF CAUSE. 27. CONTRACTOR SHALL ATTACH VINES TO HARD SURFACES WITH 1"x3/16" BRASS SCREW—EYES AND GREEN WIRE TIES. PROVIDE SAMPLE OF WIRE TIE TO OWNER OR L.A. PRIOR TO TYING.

28. MULCH SHALL NOT BE PLACED CLOSER THAN 2" AWAY FROM CROWN OF ANY GROUND COVER, SHRUB OR TREE. 29. TURF SHALL BE INSTALLED LEVEL, FREE OR DIVOTS, HOLES, DIPS, OR RISES. TURF SHALL BE

INSTALLED TO DRAIN AS SPECIFIED ON CONTRACT DOCUMENTS. TURF WHICH DOES NOT MEET THESE STANDARDS SHALL BE REGRADED AND REPLANTED IN TOTALITY.

#### <u> MOCK-UPS/SUBMITTALS:</u>

ALL MOCK-UPS OR SUBMITTALS ARE TO BE SUBMITTED TO AND REVIEWED BY OWNER'S AUTHORIZED REPRESENTATIVE FOR APPROVAL. IF MOCK-UP IS REJECTED, CONTRACTOR SHALL PROVIDE A NEW MOCK-UP BASED ON CONSTRUCTIVE COMMENTS OF PREVIOUS MOCK-UP AND RESUBMIT FOR APPROVAL BY OWNER'S AUTHORIZED REPRESENTATIVE. ALL MOCK-UPS MUST BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL SUBMIT MOCK-UPS FOR THE FOLLOWING, AS WELL AS ANY OTHERS CALLED FOR

IN CONTRACT DOCUMENTS: 1. ALL VARIETY OF CONCRETE COLORS AND FINISHES INDICATED PER KEYNOTE LEGEND (SIZE: 48"x48")

2. WOOD DECK WITH FINISH AND FASTENERS (SIZE: 24"x24")

3. ALL COLOR VARIETY OF DECOMPOSED GRANITE INDICATED PER KEYNOTE LEGEND (SIZE: 48"x48") 5. MULCH

#### TREE PRESERVATION NOTES:

1. THE PRESERVATION OF STREET TREES AND EXISTING TREES WITHIN THE LIMIT OF WORK IS CRITICAL TO THE SUCCESS OF THE PROJECT.

THE CONTRACTOR SHALL: A. NOT STORE EQUIPMENT, FUEL, MATERIALS, PARK CARS, LOCATE TEMPORARY FACILITIES OR TRASH CONTAINERS, STOCKPILE EXCAVATION, WASH-OUT CONCRETE TRUCKS, ALLOW SPILLAGE OR

DUMPING OF DELETERIOUS SUBSTANCES OR ALLOW LABORERS TO CONGREGATE WITHIN DRIP LINES OF EXISTING TREES. B. LIMIT EQUIPMENT OR VEHICULAR ACCESS WITHIN DRIP LINES OF TREES TO FOOT TRAFFIC. CARTS OR

BOBCATS TO AVOID SOIL COMPACTION. C. EXCAVATE WITHIN TREE DRIP LINES BY HAND. ROOTS 1" AND LARGER SHALL NOT BE CUT OR

SEVERED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE. SHOULD PRESERVED ROOTS INTERFERE WITH WORK PROGRESS THE CONTRACTOR SHALL SEEK DIRECTION PRIOR TO

NO EXCAVATION FOR ANY TRENCHES FOR ANY UTILITY ALLOWED UNDER DRIPLINES OF EXISTING

2. WHERE POSSIBLE, TRENCHES FOR ALL PIPES, CONDUIT AND WRING SHALL BE PLACED OUTSIDE TREE DRIP-LINES. WHERE NOT POSSIBLE, OR SHOWN OTHERWISE ON PLANS, CONTRACTOR SHALL HAND EXCAVATE AND BACKFILL TRENCHES. 3. WHEN HAND EXCAVATING TRENCHES WITHIN TREE DRIP LINES THE CONTRACTOR SHALL MAINTAIN.

IN—PLACE, ALL TREE ROOTS AND TUNNEL UNDERNEATH THEM TO THE REQUIRED DEPTH OF THE TRENCH. EXPOSED TREE ROOTS BRIDGING TRENCHES SHALL BE WRAPPED IN BURLAP IF EXPOSED FOR MORE THAN 24HRS. BURLAP SHALL BE KEPT MOIST PIPES, CONDUIT AND OR WIRING SHALL BE RUN BENEATH OR BETWEEN ROOTS. SHOULD ROOT ELEVATION INTERFERE WITH REQUIRED LOCATIONS OR ELEVATIONS CONTRACTOR SHALL SUBMIT A WRITTEN RFI FOR DIRECTION. BACKFILL AND COMPACT TRENCHES WITH SPECIFIED BEDDING MATERIAL HAND TAMPING TO ACHIEVE REQUIRED COMPACTION WITHOUT DISTURBING

4. EXCESS SOILS FROM TRENCHING SHALL NOT BE STOCKPILED WITHIN TREE DRIP LINES AND SHALL BE LEGALLY DISPOSED OF OFF—SITE. IF UNAVOIDABLE, AND AS APPROVED, EXCESS PLYWOOD BOARD-ROADING MAY NOT STAY IN PLACE FOR MORE THAN SEVEN (7) DAYS.

5. THE CONTRACTOR SHALL INSTALL AND MAINTAIN TREE PROTECTION FENCING AND TRUNK PROTECTION PLANKING THROUGHOUT THE COURSE OF CONSTRUCTION. PLANKING AND TREE PROTECTION FENCING SHALL BE REMOVED AFTER SUBSTANTIAL COMPLETION.

6. TO FACILITATE THE PROGRESS OF WORK THE CONTRACTOR MAY TEMPORARILY RELOCATE TREE PROTECTION FENCING AS APPROVED BY THE OWNER'S REP.

7. ANY ROOT INADVERTENTLY SEVERED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH SOIL. BACKFILL EXPOSED ROOTS WITH SPECIFIED TOPSOIL AS SOON AS POSSIBLE. IF ROOT NEEDS TO BE UNCOVERED FOR MORE THAN TWENTY FOUR (24) HOURS, COVER WITH HARDWOOD MULCH. 8. LIMIT CUT AND/OR FILLS WITHIN TREE DRIP—LINES TO NO MORE THAN 1" ABOVE OR BELOW EXISTING

GRADE. IF PLANS INDICATE OTHERWISE SUBMIT WRITTEN RFI FOR DIRECTION. NO SOIL OR MULCH IS

9. EXISTING TREES TO BE PRESERVED SHALL BE WATERED ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER OR AS DIRECTED. TREE CANOPIES SHALL BE SPRAYED WITH WATER MONTHLY TO AVOID DUST

#### <u>SOIL PREPARATION AND IMPORTED PLANTING SOIL REQUIREMENTS</u> (ON-GRADE APPLICATIONS):

PERMITTED ON THE ROOT FLARE OF ANY TREE.

ACCUMULATION ON LEAVES.

1. ALL SOIL AMENDMENTS, FERTILIZER, BACKFILL, AND MULCH TO BE CERTIFIED ORGANIC. 2. CONTRACTOR TO REMOVE ALL DEBRIS, CLEAR, GRUB & RAKE ALL PLANTING AREAS PRIOR TO

3. CONTRACTOR TO ARRANGE FOR A SOIL TEST IN A MIN. OF 2 LOCATIONS BY AN AUTHORIZED SOILS LAB PRIOR TO ANY NEW LANDSCAPE PLANTING TO IDENTIFY SOIL CHARACTERISTICS AND RECOMMEND FERTILIZERS, AMENDMENTS AND INSTALLATION PROCEDURES. SOIL SAMPLES RESULTS WILL BE SUBMITTED TO THE L.A. FOR REVIEW. CONTRACTOR SHALL HAND CULTIVATE AREAS WITH EXISTING PLANT MATERIAL.

4. ALL SOIL SHOULD BE IMPORTED B.D. WHITE OR EQUAL.

5. ACID—LOVING PLANTS (PLANTING PITS): 50% SITE SOIL/50% "AZALEA—CAMELLIA MIX" — TO BE APPROVED BY L.A. / 1 LB. SEQUESTRINE FE 330 IRON CHELATE / "GRO-POWER" PLANTING TABLETS (SEE BELOW FOR QUANTITY)

6. IMPORTED PLANTING SOIL FOR ALL PITS FOR ALL TREES AND SHRUBS: SOIL TEST RESULTS TO BE APPLIED IF DIFFERENT FROM GENERAL IMPORTED PLANTING SOIL SPECIFICATIONS.

7. THOROUGHLY PRE-MIX IMPORTED PLANTING SOIL PER CUBIC YARD AS FOLLOWS:

6 PARTS BY VOLUME OF CLEAN IMPORTED TOPSOIL 4 PARTS BY VOLUME OF NITROGEN—STABILIZED ORGANIC AMENDMENT. ORGANIC FERTILIZER. FERTILIZER TABLETS TO BE 7-GRAM 12-8-8 AT THE FOLLOWING RATES:

– *3 TABLETS* 1 GAL. CAN 5 GAL. CAN – 8 TABLETS – 13 TABLETS 15 GAL. CAN 24" BOX – 15 TABLETS 36" BOX – 20 TABLETS 48" BOX – 23 TABLETS

8. CREATE TEMPORARY WATERING BASIN AROUND EACH PLANTING PIT. APPLY FERTILIZER TABLETS, AGRIFORM OR EQUAL PER MANUFACTURER'S WRITTEN SPECIFICATIONS.

9. CONTRACTOR SHALL APPLY TOPSOIL FROM TO ALL AREAS THAT WILL RECEIVE PLANTING.

#### SOIL PREPARATION AND IMPORTED PLANTING SOIL REQUIREMENTS (ON-STRUCTURE APPLICATION):

<u>(ON-GRADE APPLICATIONS):</u>

1. ALL SOIL AMENDMENTS, FERTILIZER, BACKFILL, AND MULCH TO BE CERTIFIED "ORGANIC". 2. LEACHING AND COMPACTION CONTRACTOR SHALL INSTALL PLANTER MIX IN 12" LIFTS. WATER SETTLE AND HAND COMPACT BETWEEN EACH LIFT. SUCH COMPACTIONS SHALL OCCUR OVER A 3 DAY PERIOD, ONE WEEK MINIMUM PRIOR TO INSTALLATION OF PLANTING, IN ORDER TO MAXIMIZE SETTLEMENT.

3. CONTRACTOR SHALL INSTALL ADDITIONAL SOIL AS REQUIRED TO BRING TOP OF FINISH GRADE TO 2" BELOW TOP OF WALL OR HARDSCAPE UNLESS NOTED OTHERWISE.

4. PLANTING MIX FOR PLANTERS ON STRUCTURE (SHRUBS & TREES)

40% SAND (#16 SAND SIZE) 40% PEAT MOSS

20% PERLITE 1# SINGLE SUPERPHOSPHATE (0: 20: 0) 1/2# UREA FORMALDEHYDE (38:0:0) 1/2# POTASSIUM SULFATE (0:05:50)

1/3# GYPSUM 5. FERTILIZER (COMMERCIAL): 10—10—10 SHALL BE APPLIED AT THE RATE OF 40 POUNDS PER 1,000 SQFT. AND SCARIFIED INTO TOP TWO INCHES OF FINISH GRADE. FERTILIZER SHALL BE APPLIED AFTER LEACHING OPERATION. FOR ON GRADE AND FOR ON STRUCTURE PLANTING.

6. ALL ON STRUCTURE LANDSCAPING SOIL TO BE A MIXTURE OF LIGHTWEIGHT AND STANDARD WEIGHT SOIL WITH A RESULTANT DRY WEIGHT NOT EXCEED 80 POUNDS PER CUBIC FOOT.

7. ALL DRAINAGE AND TREE SUPPORT GRAVEL TO BE  $\frac{3}{4}$ " DIAMETER WASHED GRAVEL.

8. ALL PLANTER WALLS AND CONCRETE SURFACES TO BE WATERPROOFED. WATERPROOFING IS NOT PART OF LANDSCAPE ARCHITECTURAL SCOPE OR DOCUMENTS, CONTRACTOR TO CONFIRM WITH ARCHITECT. 9. PROVIDE DRAINAGE MEMBRANE OR GRAVEL WITH GEOTEXTILE SOIL SEPARATOR ABOVE OR BELOW GRAVEL

AT BASE OF ALL BUILT UP PLANTERS, MINIMUM 2" DEEP, TYPICAL. REFER TO ARCHITECTURAL DRAWNGS

10. INSTALL TREE SUPPORT GRAVEL UNDER TREE ROOT BALLS, AT BASE OF PLANTERS WITH TREES 24" BOX AND OVER, TO RAISE TREE TO PROPER FINAL GRADE. CALCULATIONS FOR GRAVEL DEPTH SHALL BE MADE ON SITE AFTER TREES ARE ON SITE. SOIL DEPTH SHALL BE INDIVIDUALLY MEASURED FOR EACH TREE IN TREE BOX AFTER EXCESS SOIL IS REMOVED FROM ROOT FLARE.

11. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING FINAL FINISH GRADES AND FOR INSTALLING PLANT MATERIAL AT CORRECT FINISH GRADE, REGARDLESS OF SEQUENCE OR INSTALLATION.

#### CONCRETE NOTES

ALL MATERIALS SHALL COMPLY WITH THE CURRENT RULES AND REGULATIONS OF THE LOCAL AIR QUALITY MANAGEMENT DISTRICT, WITH THE RULES REGARDING VOLATILE ORGANIC COMPOUNDS, AND WITH FDA RULES AND REGULATIONS FOR DANGEROUS SUBSTANCES IN CONSTRUCTION PRODUCTS.

FURNISH CONCRETE FROM LICENSED COMMERCIAL READY—MIX CONCRETE PLANTS CONFORMING TO ASTM C94 AND APPROVED BY BUILDING OFFICIAL. REQUIREMENTS HEREIN GOVERN WHEN EXCEEDING ASTM

CONSTRUCT CONCRETE CONFORMING TO THE TOLERANCES SPECIFIED IN ACI 117 "RECOMMENDED TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AS APPLICABLE, UNLESS EXCEEDED BY REQUIREMENTS OF REGULATORY AGENCIES OR OTHERWISE INDICATED OR SPECIFIED.

COARSE AGGREGATE, CONSISTING OF GRAVEL OR CRUSHED STONE SHOULD BE, CLEAN, HARD AND FREE OF DELETERIOUS MATTER.

4. FINE AGGREGATE SHOULD BE CLEAN, HARD AND FREE OF DELETERIOUS MATTER.

ALL STEEL, WOOD, OR OTHER SUITABLE MATERIAL FRAMEWORK SHALL BE OF SIZE AND STRENGTH TO RESIST MOVEMENT DURING CONCRETE PLACEMENT. USE FLEXIBLE SPRING STEEL FORMS OR LAMINATED BOARDS TO FORM RADIUS BANDS. FRAMEWORK SHALL BE UNIFORM.

MIX EACH BATCH OF 2 CU. YD. OR LESS FOR AT LEAST 90 SECONDS AFTER INGREDIENTS ARE IN MIXER. INCREASE MIXING TIME 15 SECONDS FOR EACH ADDITIONAL CUBIC YARD OR FRACTION THEREOF. PROPORTION CONCRETE TO PROVIDE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI FOR SITE WORK CONCRETE.

SLUMP: BETWEEN 3 AND 4 INCHES MAXIMUM.

AGGREGATE SIZE: MAXIMUM  $\frac{5}{8}$  INCH FOR CONCRETE PAVING. AIR CONTENT: 5 TO 8 PERCENT.

ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.

OR DESTROY BOND WITH CONCRETE.

CONCRETE PROTECTION.

IMPROPER CURING.

SCARIFY EARTH SUBGRADE TO A DEPTH OF NOT LESS THAN 6 INCHES AND COMPACT IT TO 95 PERCENT OF MAXIMUM DENSITY. REMOVE SOIL AS REQUIRED FOR PROPER INSTALLATION OF ALL PAYING. 10. SET FORMS TO REQUIRED GRADES AND LINES, BRACED AND SECURED. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO THAT FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT. COAT FORMS WITH A NON-STAINING FORM RELEASE AGENT.

11. TOLERANCES: TOP OF FORM NOT MORE THAN  $\frac{1}{16}$ " IN 10'. VERTICAL FACE ON LONGITUDINAL AXIS NOT MORE THAN 1/4" IN 10'. 12. CLEAN FORMS AFTER EACH USE AND COAT WITH RELEASE AGENT AS OFTEN AS REQUIRED TO

13. REINFORCEMENT SHOULD COMPLY WITH CONCRETE REINFORCING STEEL INSTITUTES RECOMMENDED PRACTICE FOR "PLACING REINFORCING BARS."

14. CLEAN REINFORCEMENT OF LOOSE RUST AND SCALE, EARTH AND OTHER MATERIALS THAT REDUCE

15. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. 16. PLACE REINFORCEMENT TO MAINTAIN MINIMUM COVERAGE AS INDICATED ON DRAWINGS FOR

17. INSTALL WELDED WIRE FABRIC IN LENGTHS AS LONG AS PRACTICABLE. LAP ADJOINING PIECES AT LEAST ONE FULL MESH AND LACE SPLICES WITH WIRE. OFFSET LAPS OF ADJOINING WIDTHS TO PREVENT CONTINUOUS LAPS IN EITHER DIRECTION.

18. ALL WELDING BOTH IN SHOP AND IN FIELD SHALL BE PERFORMED BY CERTIFIED WELDING 19. COMPLY WITH ACI 304 "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE." 20. DEPOSIT CONCRETE CONTINUOUSLY OR IN LAYERS OF THICKNESS SUCH THAT NO NEW CONCRETE

21. HOT WEATHER PLACEMENT: WHEN HOT WEATHER CONDITIONS EXIST THAT WOULD IMPAIR QUALITY AND STRENGTH OF CONCRETE, PLACE CONCRETE COMPLYING WITH ACI 305 AND AS SPECIFIED:

WILL BE PLACED ON CONCRETE THAT HAS HARDENED SUFFICIENTLY TO CAUSE SEAMS OR LINES OF

WEAKNESS. DEPOSIT CONCRETE TO AVOID SEGREGATION AT ITS FINAL LOCATION.

A. COOL INGREDIENTS BEFORE MIXING TO MAINTAIN CONCRETE TEMPERATURE AT TIME OF PLACEMENT TO BELOW 90°F (32°C). MIXING WATER MAY BE CHILLED OR CHOPPED ICE MAY BE USED TO CONTROL TEMPERATURE PROVIDED WATER EQUIVALENT OF ICE IS CALCULATED TO TOTAL AMOUNT OF MIXING WATER.

22. STEEL TEMPERATURE MAY NOT EXCEED AMBIENT AIR TEMPERATURE IMMEDIATELY BEFORE EMBEDDING IN CONCRETE.

23. USE APPROVED WATER REDUCING RETARDING AD-MIXTURE WHEN REQUIRED BY HIGH TEMPERATURES, LOW HUMIDITY, OR OTHER ADVERSE PLACING CONDITIONS. 24. DO NOT PLACE CONCRETE UNTIL SUB BASE AND FORMS HAVE BEEN CHECKED FOR LINE AND GRADE. MOISTEN SUBGRADE IF REQUIRED TO PROVIDE DAMPENED CONDITION AT TIME CONCRETE IS

25. PLACE CONCRETE USING METHODS WHICH PREVENT SEGREGATION OF MIX. CONSOLIDATE CONCRETE ALONG FACE OF FORMS AND ADJACENT TO TRANSVERSE JOINTS WITH INTERNAL VIBRATOR. 26. EXPANSION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT—FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND

WHERE INDICATED. 27. EXTEND JOINT FILLERS FULL WIDTH AND DEPTH OF JOINT, AND NOT LESS THAN 1/2" OR MORE THAN 1" BELOW FINISHED SURFACE WHERE JOINT FILLER IS LOCATED. IF NO JOINT SEALER, PLACE TOP OF JOINT FILL FLUSH WITH FINISHED CONCRETE OR AS OTHERWISE SHOWN ON DRAWINGS.

POSSIBLE. WHERE MORE THAN ONE LENGTH IS REQUIRED, LACE OR CLIP JOINT FILLER TOGETHER. 29. PROTECT TOP EDGE OF JOINT FILLER DURING CONCRETE PLACEMENT WITH METAL. PLASTIC. OR OTHER TEMPORARY PREFORMED CAP. REMOVE PROTECTIVE CAP AFTER CONCRETE HAS BEEN PLACED ON BOTH SIDES OF JOINT.

28. FURNISH JOINT FILLERS IN ONE PIECE LENGTHS FOR FULL WIDTH BEING PLACED, WHEREVER

30. TOOL EDGES OF PAVEMENT, GUTTERS, CURBS, AND JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/8" RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE TOOL MARKS ON CONCRETE SURFACES. 31. AFTER STRIKING OFF AND CONSOLIDATING CONCRETE, CONTRACTOR SHALL SMOOTH SURFACE BY SCREEDING AND BULL FLOATING. ADJUST FLOATING TO COMPACT SURFACE AND PRODUCE UNIFORM TEXTURE. AFTER FLOATING, TEST SURFACE FOR TRUENESS WITH 10' STRAIGHT EDGE. DISTRIBUTE

CONCRETE AS REQUIRED TO REMOVE SURFACE IRREGULARITIES, AND REFLOAT REPAIRED AREAS TO

AND ROUND TO  $\frac{3}{8}$ " RADIUS UNLESS OTHERWISE INDICATED ON DRAWINGS. 32. CONTRACTOR SHALL PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, WINDY WEATHER PROTECT CONCRETE FROM RAPID MOISTURE LOSS BEFORE AND DURING FINISHING OPERATIONS WITH AN EVAPORATION CONTROL MATERIAL. APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING. BUT BEFORE POWER FLOATING AND TROWELING.

PROVIDE A SMOOTH CONTINUOUS FINISH. WORK EDGES OF SLAB AND FORMED JOINTS WITH EDGING TOOL

33. CONTRACTOR SHALL START INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM CONCRETE AFTER PLACING AND FINISHING. WEATHER PERMITTING, KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS.

35. CONTRACTOR SHALL GIVE ALL CONCRETE GUTTERS AND CONCRETE PAVEMENT A FLOOD TEST. ALL CONCRETE WORK WHERE WATER PONDS AND DOES NOT RUN OFF IN A REASONABLE AMOUNT OF TIME, SHALL BE REMOVED TO THE NEAREST SCORE OR JOINT LINE AND REPLACED TO PROVIDE PROPER DRAINAGE.

39. ALL JOINTS TO BE STRAIGHT AND EVEN. NO OVER CUTS CAUSED BY SAW BLADE WILL BE ACCEPTED

36. WHEN BASE SLAB SURFACE IS UNACCEPTABLE FOR GOOD BONDING, ROUGHEN SURFACE BY CHIPPING OR SCARIFYING BEFORE CLEANING. REPORT ANY EXPOSED REBAR OR MESH TO OWNER PRIOR

34. CONTRACTOR SHALL NOT INSTALL CONCRETE IN WEATHER CONDITIONS THAT COULD CAUSE

37. PRIOR TO FINAL ACCEPTANCE REVIEW BY LANDSCAPE ARCHITECT. CLEANUP AND REMOVE DELETERIOUS MATERIALS AND DEBRIS FROM ENTIRE WORK AREA. 38. CONFIRM CMU SIZE, REINFORCING AND FOOTING SIZE WITH STRUCTURAL ENG.

IN SAW CUT JOINTS. SAW CUTS SHALL BEGIN AND TERMINATE AS SHOWN ON PLANS.

#### <u>GENERAL NOTES</u>

MEETS THE DESIGN INTENT.

WITH SOILS ENGINEER.

TO DEMOLITION AND/OR CONSTRUCTION.

PROVIDED, IF APPLICABLE.

TO THE OWNER.

PROPER NOTIFICATION IS NOT MADE.

CONTRACTOR'S EXPENSE.

WITH APPLICABLE CODES AND NORMAL SAFETY STANDARDS.

ALL ASPECTS OF SPECIFIED ITEM. CONTRACTOR TO PROVIDE:

1. THIS CONSTRUCTION CONTRACT IS FOR THE CONSTRUCTION OF A COMPLETE AND FULLY FUNCTIONING INSTALLATION. THESE DOCUMENTS DESCRIBE THE DESIGN INTENT AND SPECIFIC REQUIREMENTS OF THE INSTALLATION. THESE DOCUMENTS DO NOT INTEND TO SHOW EVERY ITEM REQUIRED TO CONSTRUCT THE WORK. ITEMS INCLUDING BUT NOT LIMITED TO FASTENERS, CONNECTORS, FILLERS, CLOSURE ELEMENTS, WIRING, AND POWER ARE NOT ALWAYS SHOWN BUT ARE CONSIDERED INCLUDED IN THE SCOPE OF WORK. IT IS THE RESPONSIBLITY OF THE CONTRACTOR TO PROVIDE A FULLY FUNCTIONING INSTALLATION THAT

2. WRITTEN SPECIFICATIONS AND NOTES SUPERSEDE DRAWINGS. IF CONDITIONS IN FIELD ARE IN CONFLICT WITH DRAWNGS, NOTIFY OWNER OR L.A. PRIOR TO PROCEEDING.

3. DO NOT SCALE FROM THESE DRAWINGS. ANY DIMENSIONAL DISCREPANCIES SHALL BE REPORTED TO LANDSCAPE ARCHITECT BEFORE WORK CONTINUES. BEFORE COMMENCING ACTIVITIES, THE CONTRACTOR SHALL; TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS; CAREFULLY COMPARE THIS AND OTHER INFORMATION KNOWN TO THE CONTRACTOR WITH THE CONTRACT DOCUMENTS; AND PROMPTLY REPORT ERRORS, INCONSISTENCIES OR OMISSIONS DISCOVERED TO THE L.A.

4. CONTRACTOR TO CONFIRM ALL STRUCTURAL SLABS, WALLS, REINFORCING, AND FOOTINGS WITH LICENSED STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. PROVIDE OWNER WITH A SET OF DRAWINGS SIGNED BY STRUCTURAL ENGINEER. REINFORCING SHOWN ON THESE DRAWINGS IS FOR PRICING ONLY.

5. WATERPROOFING CONSULTANT TO REVIEW ALL DETAILS AND DRAWINGS AND PROVIDE ALL NECESSARY WATERPROOFING DETAILING AND ELEMENTS TO PREVENT WATER INFILTRATION. WATERPROOFING IS NOT PART OF LANDSCAPE ARCHITECTURAL SCOPE OF DOCUMENTS.

RECOMMENDATIONS DETAILS, NOTES AND/OR SPECIFICATIONS. 7. CONTRACTOR SHALL REVIEW EXISTING SITE CONDITIONS PRIOR TO BID SUBMITTAL AND COMMENCEMENT OF WORK. ANY DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND SITE CONDITIONS SHOULD BE

SHALL ASSUME RESPONSIBILITY FOR ALL NECESSARY REVISIONS IF HE FAILS TO GIVE NOTICE.

6. CONTRACTOR SHALL INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN

8. CONTRACTOR SHALL CONFIRM ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION. DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND SITE CONDITIONS WILL BE BROUGHT TO THE ATTENTION OF THE OWNER OR L.A. FOR RESOLUTION.

BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER AND LANDSCAPE ARCHITECT (L.A.). CONTRACTOR

9. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND STAKING ALL SEWER, UTILITY AND WATER MAIN LINES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES.

11. WRITTEN NOTES SUPERSEDE DRAWINGS. IF CONDITIONS IN THE FIELD ARE IN CONFLICT WITH THE DRAWINGS, NOTIFY OWNER OR L.A. PRIOR TO PROCEEDING.

DISCREPANCIES TO THE OWNER OR L.A. PRIOR TO ANY GRADING AND/OR CONSTRUCTION.

12. ALL WORK SHALL BE IN CONFORMANCE WITH APPLICABLE CODES, REGULATIONS AND ORDINANCES OF GOVERNING AGENCIES.

10. SPOT ELEVATIONS AND GRADES SHOWN ON THE DRAWINGS ARE BASED ON SURVEY INFORMATION AND

ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT

WELFARE OF THE PUBLIC AT ALL TIMES DURING THE CONSTRUCTION PROCESS. 14. NO TRENCHES OR EXCAVATIONS 5 FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND ARE PERMITTED UNLESS THE NECESSARY PERMIT IS OBTAINED FROM THE STATE OF CALIFORNIA

DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE ISSUANCE OF A BUILDING OR GRADING PERMIT. CONFIRM

13. CONTRACTOR SHALL TAKE ALL APPROPRIATE ACTIONS TO ENSURE THE HEALTH, SAFETY, AND

15. CONTRACTOR SHALL CONFIRM STATUS OF ALL EXISTING PLANT MATERIAL WITH OWNER OR L.A. PRIOR TO DEMOLITION. ALL DEMOLITION DEBRIS ARE TO BE DISPOSED OF IN A TIMELY MANNER TO A LEGAL DUMPING FACILITY.

16. CONTRACTOR SHALL PROTECT ALL EXISTING STREET TREES DURING CONSTRUCTION.

18. NO SUBSTITUTIONS TO ANY SPECIFIED ITEM ON THE DRAWINGS WILL BE MADE BY THE CONTRACTOR WITHOUT WRITTEN APPROVAL FROM THE OWNER OR LANDSCAPE ARCHITECT. CONTRACTOR MUST DEMONSTRATE SUBSTITUTIONS ARE IN FULL COMPLIANCE WITH ALL ASPECTS OF SPECIFIED ITEM. CONTRACTOR MUST SUBMIT IN WRITING DEMONSTRATING THAT SUBSTITUTION IS IN FULL COMPLIANCE WITH

17. CONTRACTOR SHALL COORDINATE SECURE STORAGE AND STAGING FACILITIES WITH THE OWNER PRIOR

a. STATEMENT INDICATING WHY SPECIFIED PRODUCT OR FABRICATION OR INSTALLATION CANNOT BE

b. COORDINATION INFORMATION, INCLUDING A LIST OF CHANGES OR MODIFICATIONS NEEDED TO OTHER PARTS OF THE WORK AND TO CONSTRUCTION PERFORMED BY OWNER AND SEPARATE CONTRACTORS THAT WILL BE NECESSARY TO ACCOMMODATE PROPOSED SUBSTITUTION.

c. DETAILED COMPARISON OF SIGNIFICANT QUALITIES OF PROPOSED SUBSTITUTION WITH THOSE OF THE WORK SPECIFIED. INCLUDE ANNOTATED COPY OF APPLICABLE SPECIFICATION SECTION. SIGNIFICANT

SUSTAINABLE DESIGN CHARACTERISTICS, WARRANTIES, AND SPECIFIC d. NO SUBSTITUTIONS FOR CONVENIENCE OR A RESULT OF UNTIMELY PROCURMENT ARE ALLOWED.

19. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING GRADES AND ASSURING PROPER DRAINAGE

QUALITIES MAY INCLUDE ATTRIBUTES SUCH AS PERFORMANCE, WEIGHT, SIZE, DURABILITY, VISUAL EFFECT,

AWAY FROM BUILDINGS AND WALKWAYS. 20. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR PROTECTION OF ALL WORK PERFORMED UNTIL COMPLETION AND FINAL ACCEPTANCE BY THE OWNER. ALL WORK AND/OR MATERIALS WHICH ARE DETERMINED BY THE OWNER OR L.A. TO BE DEFECTIVE OR DEFICIENT IN QUALITY OR WORKMANSHIP SHALL BE REMEDIED OR REMOVED AND REPLACED BY THE CONTRACTOR IN A TIMELY MANNER WITHOUT EXPENSE

21. NOTIFICATION OF ANTICIPATED OBSERVATION OR REVIEW BY THE L.A. WILL BE MADE A MINIMUM OF 4 WORKING DAYS IN ADVANCE. THE L.A. IS NOT RESPONSIBLE FOR PROJECT DELAYS IN THE EVENT

22. OWNER IS RESPONSIBLE FOR OBTAINING FINAL CERTIFICATES OF COMPLETION, CERTIFICATES OF OCCUPANCIES. OR SIMILAR AGENCY REQUIREMENTS.

23. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. 24. IF ANY OF THE FOLLOWING CIRCUMSTANCES THAT WILL NECESSITATE REVISION IN INSTRUMENTS OF SERVICE AND SHALL AFFECT THE LANDSCAPE ARCHITECT'S SERVICES FOR THE PROJECT, THE LANDSCAPE

ACCEESSIBLITY NOTES: 1. CONTRACTOR TO BUILD TO COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT ACCESSIBILITY GUIDELINES(ADAAG) AND/OR THE CALIFORNIA ACCESS COMPLIANCE ACT WHICHEVER IS MORE STRINGENT.

ARCHITECT SHALL BE ENTITLED TO AN APPROPRIATE ADJUSTMENT IN SCHEDULE AND COMPENSATION:

WHEN CHANGES IN LEVEL NOT EXCEEDING 1/2" OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2 EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL.

3. WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE NOT INTERRUPTED BY STEPS

OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2". <u>DEMOLITION NOTES:</u> THE EXISTING BASE BUILDING. INCLUDING: PERIMETER EXTERIOR WALLS (SHELL). AND ALL CORE ELEMENTS SHALL NOT BE A PART OF ANY IMPROVEMENTS AND / OR ALTERATIONS AND / OR DEMOLITION WORK

EXCEPT WHERE NOTED. 1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS SHOWN ON THE DRAWNGS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY ERRORS AND / OR DISCREPANCIES PRIOR TO THE COMMENCEMENT OF ANY WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CORRECTION OF ANY ERRORS AND / OR DISCREPANCIES IN THE EVENT OF FAILURE TO NOTIFY THE ARCHITECT AS

2. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY ERRORS. DISCREPANCIES. AND / OR ANY WORK AFFECTING THE STRUCTURAL INTEGRITY OF THE BUILDING OR TENANT SPACE BEFORE PROCEEDING WITH ANY WORK.

3. IF ANY ALTERATION AND / OR DEMOLITION WORK IS PERFORMED IN EXCESS OF WHAT IS REQUIRED,

TO A STATE EQUAL TO THAT PRIOR TO SUCH WORK, AT NO COST TO THE OWNER. 4. PROTECT EXISTING THAT IS NOT IDENTIFIED FOR DEMOLITION. ANY DAMAGE TO EXTERIOR WALLS, STEPS, ETC. — CAUSED BY DEMOLITION SHALL BE REPAIRED AND / OR REPLACED AT THE

THE CONTRACTOR SHALL, AT THEIR OWN EXPENSE, RESTORE THE AFFECTED AREA AND / OR AREAS

5. CONTRACTOR TO PATCH AND FINISH ADJACENT WALLS AND OTHER SURFACES AS REQUIRED AFTER DEMOLITION. ALL STRIPPED SURFACES TO BE PROPERLY SUITED TO RECEIVE NEW FINISHES AS SCHEDULED. 6. ALL SERVICES AND UTILITIES SCHEDULED FOR REMOVAL ARE TO BE SAFELY CAPPED IN ACCORDANCE

7. PROTECT EXISTING PLANTS THAT ARE NOT IDENTIFIED FOR REMOVAL. DAMAGE TO TREES. BUSHES.

SHRUBS, GRASS, ETC., CAUSED BY DEMOLITION, SHALL BE REPLACED AND RESTORED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. 8. THE CONTRACTOR SHALL REMOVE ALL DEBRIS RESULTING FROM THE DEMOLITION AND CONSTRUCTION ON A DAILY BASIS. BROOM CLEAN AT THE END OF EACH DAY TO CONTROL DIRT AND DUST.

9. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION / WASTE DISPOSAL PERMITS REQUIRED FOR ALL MATERIALS AND EQUIPMENT BEING DEMOLISHED AND / OR REMOVED FROM THE JOB SITE. 10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND

REGULATIONS PERTAINING TO THE SAFETY OF PERSONS AND THE PROTECTION OF THE ENVIRONMENT. 11. THE ARCHITECT HAS NO KNOWLEDGE OF AND SHALL NOT BE HELD LIABLE FOR ANY HAZARDOUS MATERIALS AT THE JOBSITE. IF HAZARDOUS MATERIALS ARE DISCOVERED DURING ANY PHASE OF WORK AND / OR CONSTRUCTION, THE CONTRACTOR SHALL ISOLATE THE AFFECTED AREA AND

CONTACT THE OWNER FOR FURTHER INSTRUCTIONS BEFORE PROCEEDING.

12. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES (ELECTRICAL, WATER, SEWER, TELEPHONE, CABLE, ETC.) PRIOR TO CONSTRUCTION.

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PROJECT:

THE CRESCENT

4260 N. ARCH DRIVE STUDIO CITY, CA 91604 PLAN CHECK

SUBMITTAL

12.15.22

REVISION LIST: DESCRIPTION

KEY PLAN: N (PROJECT)

PROJECT NO.

AS SHOWN

SHEET TITLE:

CAD REF. Autodesk Docs://21001 - G+K Crescent Apts 2/21001 12/5/2022 11:22:13 PM Crescent 2- Arch.rvt

**GENERAL NOTES** 

SHEET NO.

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4212 1/2 Glencoe Avenue

Marina Del Rey, CA 90292

UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

THE CRESCENT APARTMENTS

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

ASE:

AHRF SUBMISSION 05.4.22

REVISION LIST:

REV# DESCRIPTION D

N (PROJECT)

1ST FLOOR
PLANTING PLAN

SHEET NO.

LP1.0



PLANTING KEY:
TREES

SYMBOL QTY. SIZE BOTANICAL NAME

STWDOL	3, ,,	JIZL	BOTTING TE TATIONE	Johnwort Tital	SFACING
	4	36" BOX	ARBUTUS 'MARINA'	STRAWBERRY TREE MULTI.TRUNK	PER PLAN
(:)	4	36" BOX	CERCIDIUM 'DESERT MUSEUM'	PALO VERDE	PER PLAN
*	8	36" BOX	WASHINGTONIA FILIFERA	DESERT FAN PALM	PER PLAN
Pn	0	30 GAL	PHYLLOSTACHYS NIGRA	BLACK BAMBOO	PER PLAN
0	_	_	_	(E) TREE	
SHRUB.	S				
SYMBOL	QTY.	SIZE	BOTANICAL NAME	COMMON NAME	SPACING
A	0	1 GAL	ACHILLEA TAYGETA 'MOONSHINE'	YARROW MOONSHINE	PER PLAN
G	0	1 GAL	_	ORNAMENTAL GRASS	PER PLAN
K	0	1 GAL	KOLENA MACRANTHA	PRAIRIE JUNEGRASS	PER PLAN
Ls	0	1 GAL	LUPINUS SUCCULENTUS	ARROYO LUPINE	PER PLAN
SV	0	1 GAL	SENECIO VITALIS CYLINDRICUS	MEXICAN BUSH SAGE	PER PLAN
Ap	0	5 GAL	ARCTOSTAPHYLOS 'PACIFIC MIST'	MANZANITA PACIFIC MIST	PER PLAN
Су	0	5 GAL	CEANOTHUS 'YANKEE POINT'	MOUNTAIN LILAC	PER PLAN
Ec	0	5 GAL	EPILOBIUM CANUM 'CATALINA'	CALIFORNIA FUCHIA	PER PLAN
Ld	0	5 GAL	LAVANDULA DENTATA	FRENCH LAVENDER	PER PLAN
Eg	0	5 GAL	LEYMUS (ELYMUS) ARENARIUS 'GLAUCUS'	BLUE LYME GRASS	PER PLAN
LI	193	5 GAL	LOMANDRA 'LIME TUFF'	MAT RUSH	PER PLAN
Mr	0	5 GAL	MUHLENBERGIA RIGENS	DEERGRASS	PER PLAN
SI	0	5 GAL	SALVIA LEUCANTHA 'MIDNIGHT'	MEXICAN BUSH SAGE	PER PLAN
B	0	5 GAL	WESTRINGIA FRUTICOSA 'BLUE GEM'	BLUE GEM COAST ROSEMARY	PER PLAN
W	2	5 GAL	WOODWARDIA FIMBRIATA	GIANT CHAIN FERN	PER PLAN
Ln	0	15 GAL	LAURUS NOBILIS	SWEET BAY LAUREL	PER PLAN
Sa Sa	0		SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	PER PLAN
Sr	0	15 GAL	STRELITIZIA REGINAE	BIRD OF PARADISE	PER PLAN
Ср	0	4"PLUG	CAREX PRAEGRACILIS	CLUSTERED FIELD SEDGE	PER PLAN

COMMON NAME

SPACING

SYMBOL QTY. SIZE BOTANICAL NAME

COMMON NAME

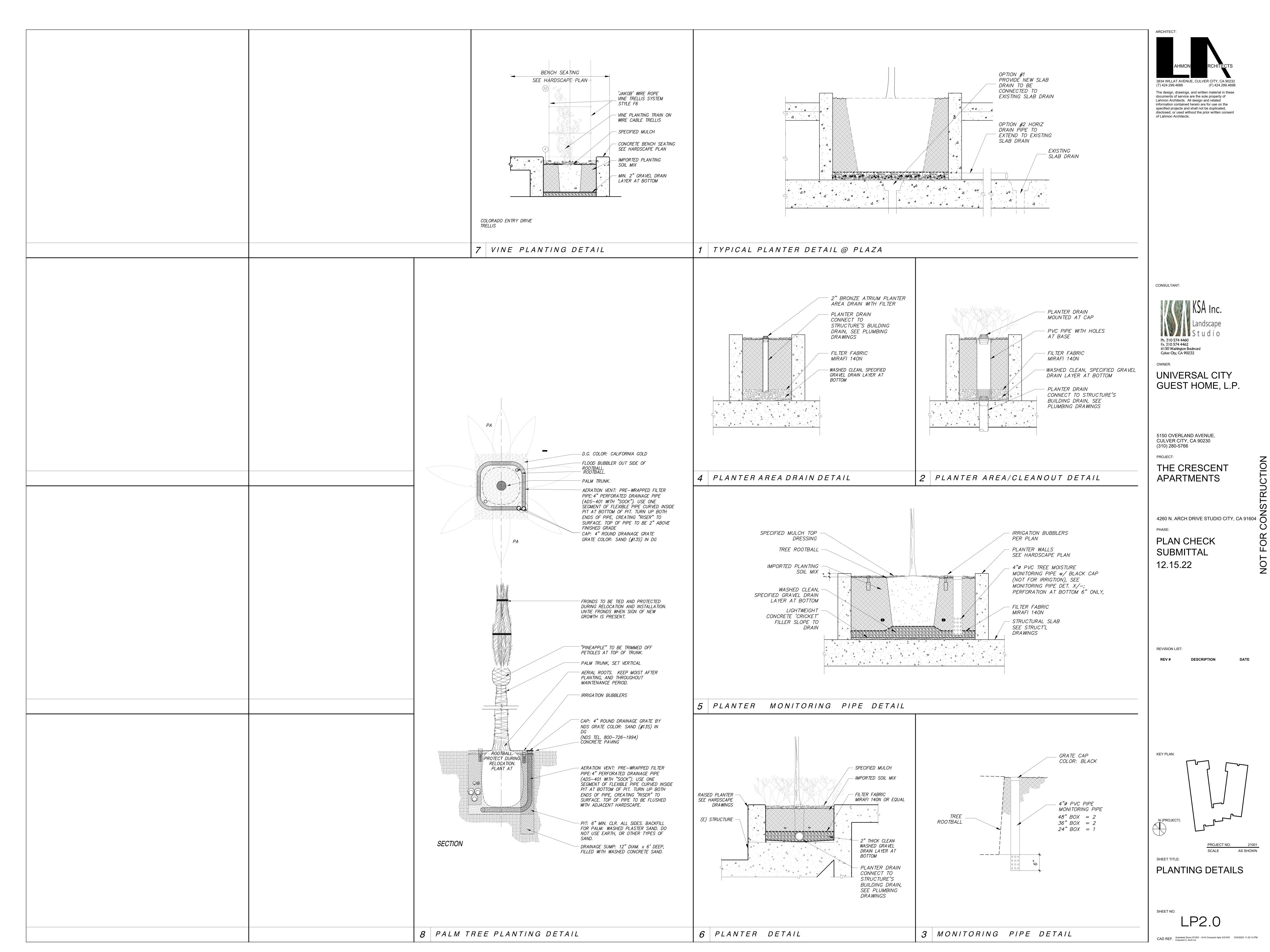
SPACING

ARTIFICIAL TURF

PER PLAN

FOREVER LAWN(KGTASS.COM)

PER PLAN



# TREES



MELALEUCA QUINQUENERVIA PAPER BARK TEA TREE



PRUNUS ILICIFOLIA SSP. ILICIFOLIA HOLLYLEAF CHERRY



UMBELLULARIA CALIFORNICA CALIFORNIA BAY



ARBUTUS MARINA STRAWBERRY TREE



WASHINGTONIA FILIFERA CALIFORNIA PALM

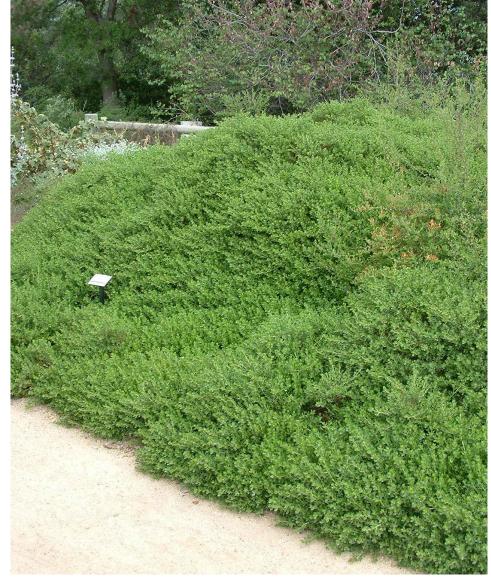


PHYLLOSTACHYS NIGRRA BLACK BAMBOO



AGONIS FLEXUOSA PEPPERMINT TREE

# GROUNDCOVER



BACCHARIS 'TWIN PEAKS' PROSTATE BACCHARIS



AGROSTIS PALLENS THINGRASS



CAREX PRAEGRACILIS CALIFORNIA FIELD SEDGE



STIPA LEPIDA NEEDLE GRASS



LOMANDRA LONGIFOLIA x CONFERTIFOLIA SPP LOMANDRA LIME TUFF



LANVANDULA DENTATA FRENCH LAVENDER

# SHRUBS



CHONDROPETALUM TECTORUM SMALL CAPE RUSH



ERIOGONUM FASCICULATUM CALIFORNIA BUCKWHEAT



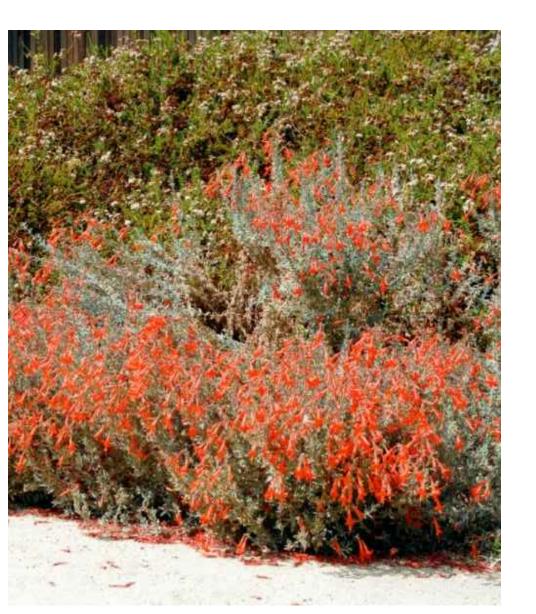
HETEROMELES ARBUTIFOLIA



LUPINUS SUCCULENTUS SUCCULENT LUPINE



MUHLENBERGIA RIGENS DEERGRASS



EPILOBIUM CANUM CALIFORNIA FUCHSIA



CEANOTHUS THYRSIFLORUS BLUEBLOSSOM



WOODWARDIA FIMBRIATA GIANT CHAIN FERN



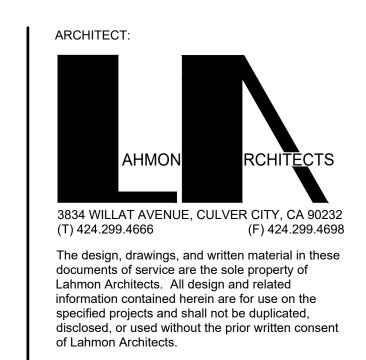
ACHILLEA MILLEFOLIUM COMMON YARROW



KOELERIA MACRANTHA JUNEGRASS



STRELITZIA REGINAE BIRD OF PARADISE FLOWER







UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

# PROJECT:

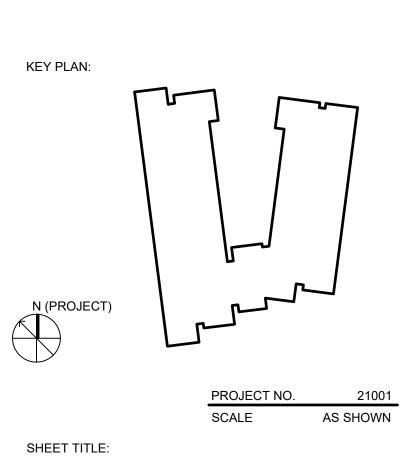
# THE CRESCENT APARTMENTS

# 4260 N. ARCH DRIVE STUDIO CITY, CA 91604

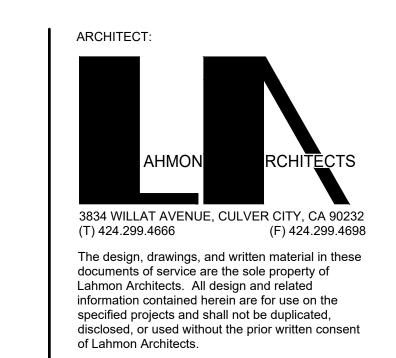
# PLAN CHECK SUBMITTAL

12.15.22

REVISION LIST:



PLANTING IMAGES



CCLIEDLILE

SYMBOL	MANUFACTURER	MODEL NO. / DESCRIPTION
MV	RAIN BIRD	MASTER VALVE RAIN BIRD 1 ½" BRASS VALVE
	RAIN BIRD	FLOW SENSOR RAIN BIRD FS150B 1½ " BRASS TEE FLOW SENSOR
×	NIBCO	T-113 CLASS 125, BRONZE GATE VALVE WITH HAND WHEEL (UP TO 2" SIZE) AND T-113-K CLASS 125, BRONZE GATE VALVE WITH BRONZE CROSS HANDLE (2 1/2" AND LARGER SIZES), FOR MAINLINE ISOLATION, LINE SIZE PER MAINLINE. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.
•	RAIN BIRD	44LRC 1" QUICK COUPLER VALVE WITH LOCKING VINYL COVER AND A LASCO G13S-218 SWING JOINT. INSTALL INSIDE A 10" ROUND VALVE BOX.
А	RAIN BIRD	ESP8LXME - x -STATION MODULAR IRRIGATION CONTROLLER CONNECTED TO RAINBIRD WR2RFC-48-WR2 ESP-SMTe SMART CONTROL SYSTEM W/ LXMMPED - NEW METAL PEDESTAL CABINET ESP-LX SERIES.
M	LOCAL AGENCY	NEW WATER METER DEDICATED TO THE NEW IRRIGATION SYSTEM AS SPECIFIED ON PLAN.
S	RAIN BIRD	WR2RFC-48-WR2 WIRELESS RAIN/FREEZE SENSOR, AS PART OF CONTROLLER ASSEMBLY. MOUNT WIRELESS RECEIVER IN ENCLOSURE ON THE SIDE OF THE CONTROLLER, WIRE TO THE CONTROLLER
•	RAIN BIRD	HIGH FLOW COMMERCIAL CONTROL ZONE KITS W/ 2 PRESSURE REGULATING, BASKET FILTERS
•	RAIN BIRD	RAINBIRD XCZ-100-PRB-COM / FLOW 0.3 -20 GPM  100-EFB-CP-PRS-D, PRESSURE REGULATED BRASS REMOTE CONTROL VALVE, SIZE AS SHOWN PRIOR TO STARTING WORK, CONTRACTOR TO CONFIRM VALVE LOCATION WITH OWNER'S REPRESENTATIVE
0	RAIN BIRD	THREE WAY BALL BALVE PER CIVIL ENGINEER
BFP	FEBCO	REDUCED PRESSURE BACKFLOW FEBCO 825-Y 2"
	- AS APPROVED	MAIN LINE - PVC PIPE 1" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, INSTALLED
	— AS APPROVED	12" BELOW FINISHED GRADE  LATERAL LINE - PVC PIPE 1" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, AS LATERAL LINES INSTALLED 8 MIN." BELOW FINISHED GRADE PVC SUPPLY AND DISCHARGE HEADERS SHALL  DE DVC LATERAL LINE DIDE: 4 4/4" MINIMUM SIZE WITH SCH. 40 DVC FITTINGS.
	AS APPROVED	BE PVC LATERAL LINE PIPE, 1 1/4" MINIMUM SIZE WITH SCH. 40 PVC FITTINGS.  PVC PIPE SCH. 40 AS SLEEVING, 2.5 TIMES THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED  (2" MINIMUM SIZE) INSTALL ALL PIPE AND WIRE UNDER PAVING, HARDSCAPE, ETC. (OR AS DIRECTED OWNER'S AUTHORIZED REPRESENTATIVE) INSIDE SLEEVES. SLEEVES UNDER PEDESTRIAN PAVING SHALL BE INSTALLED 24" BELOW FINISHED GRADE. SLEEVES UNDER VEHICULAR PAVING SHALL BE INSTALLED 36" BELOW FINISHED GRADE.
	RAIN BIRD	5CST-B RAIN BIRD BUBBLER NOZZLE 0-360 DEGREE AJUSTABLE PATTERN
•—•	RAIN BIRD	1404- 1.00 GPM PRESSURE COMPENSATING FULL-CIRCLE / LOW-FLOW BUBBLER. TWO BUBBLERS/ TR
•	RAIN BIRD	1404- 1.00 GPM PRESSURE COMPENSATING FULL-CIRCLE / LOW-FLOW BUBBLER. ONE BUBBLER/ VINI
	RAIN BIRD	LANDSCAPE DRIP XFS-06-12 SUBSURFACE TUBING WITH COPPER SHIELD. SPACING SHALL BE 12 INCHWITH DRIP HOLES ALTERNATING AT CENTER (6 INCHES) FROM ADJACENT TUBING.
SHRUB AREA	· <u> </u>	
NO SYMBOL	RAIN BIRD	XF SERIES 17mm BARBED FITTINGS FOR ALL CONNECTIONS BETWEEN DRIP TUBING (TUBING-TO-TUB ONLY). ALL BARBED DRIP TUBING FITTINGS. SHALL BE INSTALLED USING A FITINS-TOOL FOR PROPEINSERTION OF THE FITTING INTO THE TUBING. NO HEATING OF TUBING SHALL BE ALLOWED.
NO SYMBOL		THE CONTROLLER SHALL BE GROUNDED USING A #182000 $5/8$ " X 10 FOOT COPPER CLAD GROUND RC A #182005 CAST BRONZE ROD CLAMP AND THE REQUIRED LENGTH OF #6AWG BARE, SINGLE STRAND COPPER GROUND WIRE. INSTALL INSIDE A 10" ROUND VALVE BOX.
NO SYMBOL	RAIN MASTER	LSP-1-TURF LINE SURGE PROTECTION DEVICES SHALL BE INSTALLED ALONG THE TWO-WIRE PATH AT AN ON CENTER SPACING NOT TO EXCEED 500 FEET. INSTALL THE LSP DEVICE AND GROUND ROD IN STANDARD RECTANGULAR VALVE BOX. INSTALL ONE LSP DEVICE WITHIN 10 FEET OF THE IRRIGATION CONTROLLER ASSEMBLY.
E	N/A	120 VOLT ELECTRICAL POWER FOR CONTROLLER, PROVIDED BY ELECTRICIAN, VERIFY ACTUAL LOCATION IN FIELD
NO SYMBOL	LASCO	ALL FITTINGS USED WITH SOLVENT WELD MAINLINE PIPE SHALL BE SCH. 80 PVC FITTINGS, GRAY IN COLOR, AND SIZED TO MATCH THE THR MAINLINE PIPE. ALL FITTINGS USED WITH SOLVENT WELD LATERAL LINE PIPE SHALL BE SCH. 40 PVC, WHITE IN COLOR, AND SIZED TO MATCH THE LATERAL LINE PIPE. ALL THREADED PVC NIPPLES SHALL BE SCH. 80 PVC PIPE, DARK GRAY IN COLOR, WITH MOLDED THREADS.
NO SYMBOL	CHRISTY'S	ALL SOLVENT WELD CONNECTIONS FOR BOTH MAINLINE AND LATERAL LINE SHALL BE MADE USING THE TWO-STEP PROCESS OF PRIMER AND SOLVENT CEMENT. PRIMER SHALL BE LOW VOC "PURPLE PRIMER". MAINLINE SOLVENT CEMENT SHALL BE LOW VOC, "GRAY-HEAVY BODY" CEMENT. LATERAL LINE SOLVENT CEMENT SHALL BE LOW VOC, "RED HOT BLUE GLUE" CEMENT. USE DAUBERS SIZED A LEAST ONE-HALF THE SIZE OF THE LARGEST PIPE BEING JOINED. ALL SOLVENT CEMENTED JOINTS SHALL BE MADE PER THE PIPE AND FITTING MANUFACTURER'S RECOMMENDATIONS.
NO SYMBOL	AS APPROVED	1 1/4" SCH. 40 PVC, GRAY ELECTRICAL CONDUIT FOR FLOW SENSOR WIRES AND CONTROL WIRES, PROVIDE PULL BOX AT A MAXIMUM OF 200 FEET ON CENTER FOR A 3 FOOT WIRE LOOP OR ANY SPLICES. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.
NO SYMBOL	RAIN BIRD	P7072D DIRECT BURIAL IRRIGATION CONTROL CABLE (TWO-WIRE PATH) WITH TWO, PARALLEL, PVC INSULATED, SOLID COPPER CONDUCTOR IRRIGATION CONTROL WIRES, #14UF SIZE, WITH A IMPREGNATED POLYETHYLENE, COLOR CODED JACKET. JACKET COLOR SHALL BE RED AND THE CONDUCTORS INSULATION SHALL BE RED AND BLACK. WHERE MULTIPLE CONTROLLERS ARE USED ON THE PROJECT, EACH CONTROLLER SHALL HAVE A CONTROL CABLE OF A DIFFERENT COLOR. THE CONTRACTOR SHALL ROUTE THE CONTROL CABLE FROM THE CONTROLLER ALONG THE MAINLINE IN ALL DIRECTIONS AWAY FROM THE CONTROLLER. LOOP THE CONTROL CABLE UP AND INTO EACH VALVE BOX ALONG THE MAINLINE, PROVIDING A 3 FOOT MINIMUM LOOP IN EACH VALVE BOX.
NO SYMBOL	3M	DBR/Y-6 DIRECT BURIAL (I.L. APPROVED) WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE SPLICES AND CONNECTIONS
NO SYMBOL	NDS (K.B.I.)	KSC-XXX-S SWING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE CEACH RCV WHEN THE RCV IS LOWER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTAL WITHIN SPRINKLER / BUBBLER / DRIP ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
NO SYMBOL	NDS (K.B.I.)	KC-XXX-S SPRING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS HIGHER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER / DRIP ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.

ALL VALVE BOXES SHALL BE VB SERIES, PLASTIC TYPE WITH OVERLAPPING LIDS. COVERS FOR BOXES IN TURF AREAS SHALL BE GREEN AND COVERS FOR VALVE BOXES IN SHRUB AREAS SHALL BE BLACK. ALL BOXES SHALL BE SECURED WITH A RAIN BIRD VB-LOCK-P PENTA HEAD BOLT, WASHER AND CLIP. BOXES SHALL BE AS SHOWN BELOW:

VB-10RND

TURF AREAS (GREEN) SHRUB AREAS (BLACK)

VB-7RNDBK
VB-10RVD-B BODY AND VB-10RNDBKL LID
VB-STD-B BODY AND VB-STDBKL LID
VB-JMB-B BODY AND VB-JMBBKL LID

STANDARD RECTANGULAR BOXES VB-STD
JUMBO RECTANGULAR BOXES VB-JMB

VALVE
SEQUENCE

X
G.P.M.

VALVE SIZE

DESCRIPTION

7" ROUND BOXES 10" ROUND BOXES

N (PROJECT)

SCALE
SHEET TITLE:

1ST FLOOR IRRIGATION PLAN

SHEET NO.

RAPHIC SCALE
SCALE: 1/8" = 1'-0"

CONSULTANT:

Landscape Studio Ph. 310 574 4460 Fx. 310 574 4462 4212 1/2 Glencoe Avenue Marina Del Rey, CA 90292

UNIVERSAL CITY GUEST HOME, L.P.

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

THE CRESCENT APARTMENTS

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PLAN CHECK SUBMITTAL

REVISION LIST:

12.15.22

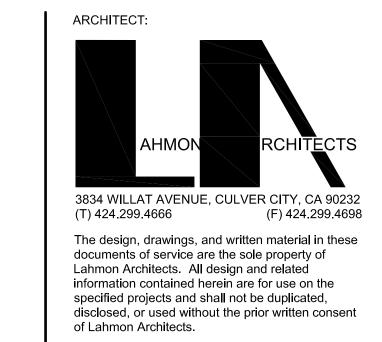
V# DESCRIPTION D

KEY PLAN:

KIKIOATIONTEA

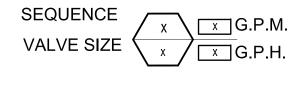
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# SCHEDULE

SYMBOL	MANUFACTURER	MODEL NO. / DESCRIPTION
MV	RAIN BIRD	MASTER VALVE RAIN BIRD 1 ½" BRASS VALVE
	RAIN BIRD	FLOW SENSOR RAIN BIRD FS150B 1½ " BRASS TEE FLOW SENSOR
×	NIBCO	T-113 CLASS 125, BRONZE GATE VALVE WITH HAND WHEEL (UP TO 2" SIZE) AND T-113-K CLASS 125, BRONZE GATE VALVE WITH BRONZE CROSS HANDLE (2 1/2" AND LARGER SIZES), FOR MAINLINE ISOLATION, LINE SIZE PER MAINLINE. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.
•	RAIN BIRD	44LRC 1" QUICK COUPLER VALVE WITH LOCKING VINYL COVER AND A LASCO G13S-218 SWING JOINT. INSTALL INSIDE A 10" ROUND VALVE BOX.
А	RAIN BIRD	ESP8LXME - x -STATION MODULAR IRRIGATION CONTROLLER CONNECTED TO RAINBIRD WR2RFC-48-WR2 ESP-SMTe SMART CONTROL SYSTEM W/ LXMMPED - NEW METAL PEDESTAL CABINET ESP-LX SERIES.
M	LOCAL AGENCY	Y NEW WATER METER DEDICATED TO THE NEW IRRIGATION SYSTEM AS SPECIFIED ON PLAN.
S	RAIN BIRD	WR2RFC-48-WR2 WIRELESS RAIN/FREEZE SENSOR, AS PART OF CONTROLLER ASSEMBLY. MOUNT WIRELESS RECEIVER IN ENCLOSURE ON THE SIDE OF THE CONTROLLER, WIRE TO THE CONTROLLER.
•	RAIN BIRD	HIGH FLOW COMMERCIAL CONTROL ZONE KITS W/ 2 PRESSURE REGULATING, BASKET FILTERS RAINBIRD XCZ-100-PRB-COM / FLOW 0.3 -20 GPM
•	RAIN BIRD	100-EFB-CP-PRS-D, PRESSURE REGULATED BRASS REMOTE CONTROL VALVE, SIZE AS SHOWN PRIOR TO STARTING WORK, CONTRACTOR TO CONFIRM VALVE LOCATION WITH OWNER'S REPRESENTATIVE
0	RAIN BIRD	THREE WAY BALL BALVE PER CIVIL ENGINEER
BFP	FEBCO	REDUCED PRESSURE BACKFLOW FEBCO 825-Y 2"
	<ul> <li>AS APPROVED</li> </ul>	MAIN LINE - PVC PIPE 1" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, INSTALLED 12" BELOW FINISHED GRADE
	— AS APPROVED	LATERAL LINE - PVC PIPE 1" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, AS LATERAL LINES INSTALLED 8 MIN." BELOW FINISHED GRADE PVC SUPPLY AND DISCHARGE HEADERS SHALL BE PVC LATERAL LINE PIPE, 1 1/4" MINIMUM SIZE WITH SCH. 40 PVC FITTINGS.
	AS APPROVED	PVC PIPE SCH. 40 AS SLEEVING, 2.5 TIMES THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED (2" MINIMUM SIZE) INSTALL ALL PIPE AND WIRE UNDER PAVING, HARDSCAPE, ETC. (OR AS DIRECTED BOWNER'S AUTHORIZED REPRESENTATIVE) INSIDE SLEEVES. SLEEVES UNDER PEDESTRIAN PAVING SHALL BE INSTALLED 24" BELOW FINISHED GRADE. SLEEVES UNDER VEHICULAR PAVING SHALL BE INSTALLED 36" BELOW FINISHED GRADE.
$\mathbb{Z} \otimes \mathbb{Q}$	RAIN BIRD	5CST-B RAIN BIRD BUBBLER NOZZLE 0-360 DEGREE AJUSTABLE PATTERN
•	RAIN BIRD	1404- 1.00 GPM PRESSURE COMPENSATING FULL-CIRCLE / LOW-FLOW BUBBLER. TWO BUBBLERS/ TRE
•	RAIN BIRD	1404- 1.00 GPM PRESSURE COMPENSATING FULL-CIRCLE / LOW-FLOW BUBBLER. ONE BUBBLER/ VINE
	RAIN BIRD	LANDSCAPE DRIP XFS-06-12 SUBSURFACE TUBING WITH COPPER SHIELD. SPACING SHALL BE 12 INCH WITH DRIP HOLES ALTERNATING AT CENTER (6 INCHES) FROM ADJACENT TUBING.
SHRUB AREA	<u> </u>	
NO SYMBOL	RAIN BIRD	XF SERIES 17mm BARBED FITTINGS FOR ALL CONNECTIONS BETWEEN DRIP TUBING (TUBING-TO-TUBING ONLY). ALL BARBED DRIP TUBING FITTINGS. SHALL BE INSTALLED USING A FITINS-TOOL FOR PROPER INSERTION OF THE FITTING INTO THE TUBING. NO HEATING OF TUBING SHALL BE ALLOWED.  THE CONTROLLER SHALL BE GROUNDED USING A #182000 5/8" X 10 FOOT COPPER CLAD GROUND ROLA #182005 CAST BRONZE ROD CLAMP AND THE REQUIRED LENGTH OF #6AWG BARE, SINGLE STRAND
	D. N. M. OTED	COPPER GROUND WIRE. INSTALL INSIDE A 10" ROUND VALVE BOX.
NO SYMBOL	RAIN MASTER	LSP-1-TURF LINE SURGE PROTECTION DEVICES SHALL BE INSTALLED ALONG THE TWO-WIRE PATH AT AN ON CENTER SPACING NOT TO EXCEED 500 FEET. INSTALL THE LSP DEVICE AND GROUND ROD IN A STANDARD RECTANGULAR VALVE BOX. INSTALL ONE LSP DEVICE WITHIN 10 FEET OF THE IRRIGATION CONTROLLER ASSEMBLY.
E	N/A	120 VOLT ELECTRICAL POWER FOR CONTROLLER, PROVIDED BY ELECTRICIAN, VERIFY ACTUAL LOCATION IN FIELD
NO SYMBOL	LASCO	ALL FITTINGS USED WITH SOLVENT WELD MAINLINE PIPE SHALL BE SCH. 80 PVC FITTINGS, GRAY IN COLOR, AND SIZED TO MATCH THE THR MAINLINE PIPE. ALL FITTINGS USED WITH SOLVENT WELD LATERAL LINE PIPE SHALL BE SCH. 40 PVC, WHITE IN COLOR, AND SIZED TO MATCH THE LATERAL LINE PIPE. ALL THREADED PVC NIPPLES SHALL BE SCH. 80 PVC PIPE, DARK GRAY IN COLOR, WITH MOLDED THREADS.
NO SYMBOL	CHRISTY'S	ALL SOLVENT WELD CONNECTIONS FOR BOTH MAINLINE AND LATERAL LINE SHALL BE MADE USING THE TWO-STEP PROCESS OF PRIMER AND SOLVENT CEMENT. PRIMER SHALL BE LOW VOC "PURPLE PRIMER". MAINLINE SOLVENT CEMENT SHALL BE LOW VOC, "GRAY-HEAVY BODY" CEMENT. LATERAL LINE SOLVENT CEMENT SHALL BE LOW VOC, "RED HOT BLUE GLUE" CEMENT. USE DAUBERS SIZED AT LEAST ONE-HALF THE SIZE OF THE LARGEST PIPE BEING JOINED. ALL SOLVENT CEMENTED JOINTS SHALL BE MADE PER THE PIPE AND FITTING MANUFACTURER'S RECOMMENDATIONS.
NO SYMBOL	AS APPROVED	1 1/4" SCH. 40 PVC, GRAY ELECTRICAL CONDUIT FOR FLOW SENSOR WIRES AND CONTROL WIRES, PROVIDE PULL BOX AT A MAXIMUM OF 200 FEET ON CENTER FOR A 3 FOOT WIRE LOOP OR ANY SPLICES. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.
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NO SYMBOL	3M	DBR/Y-6 DIRECT BURIAL (I.L. APPROVED) WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE SPLICES AND CONNECTIONS
NO SYMBOL	NDS (K.B.I.)	KSC-XXX-S SWING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS LOWER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER / DRIP ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
NO SYMBOL	NDS (K.B.I.)	KC-XXX-S SPRING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS HIGHER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER / DRIP ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAG
NO SYMBOL	RAIN BIRD	ALL VALVE BOXES SHALL BE VB SERIES, PLASTIC TYPE WITH OVERLAPPING LIDS. COVERS FOR BOXE IN TURF AREAS SHALL BE GREEN AND COVERS FOR VALVE BOXES IN SHRUB AREAS SHALL BE BLACK ALL BOXES SHALL BE SECURED WITH A RAIN BIRD VB-LOCK-P PENTA HEAD BOLT, WASHER AND CLIP BOXES SHALL BE AS SHOWN BELOW:
	7' 10 S	TURF AREAS (GREEN) SHRUB AREAS (BLACK)  "ROUND BOXES VB-7RND VB-7RNDBK 0" ROUND BOXES VB-10RND VB-10RVD-B BODY AND VB-10RNDBKL LID TANDARD RECTANGULAR BOXES VB-STD VB-STD-B BODY AND VB-STDBKL LID UMBO RECTANGULAR BOXES VB-JMB VB-JMB-B BODY AND VB-JMBBKL LID



CONSULTANT:



**UNIVERSAL CITY** GUEST HOME, L.P.

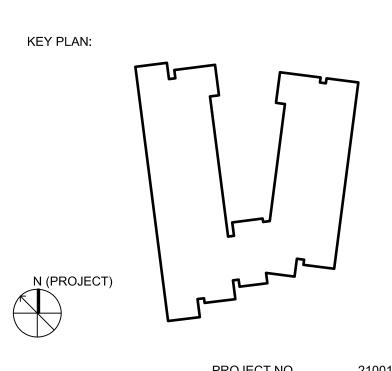
5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

PROJECT: THE CRESCENT **APARTMENTS** 

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PLAN CHECK SUBMITTAL 12.15.22

REVISION LIST:

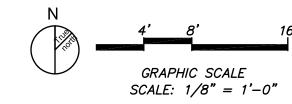


SHEET TITLE:

4TH FLOOR IRRIGATION PLAN

SHEET NO.

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of Lahmon Architects

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THE CRESCENT **APARTMENTS** 

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

PLAN CHECK SUBMITTAL 12.15.22

REVISION LIST:

KEY PLAN: SHEET TITLE:

5TH FLOOR **IRRIGATION PLAN** 



SCHEDULE MANUFACTURER MODEL NO. / DESCRIPTION MASTER VALVE RAIN BIRD 1 ½" BRASS VALVE FLOW SENSOR RAIN BIRD FS150B 11/2 " BRASS TEE FLOW SENSOR T-113 CLASS 125, BRONZE GATE VALVE WITH HAND WHEEL (UP TO 2" SIZE) AND T-113-K CLASS 125, BRONZE GATE VALVE WITH BRONZE CROSS HANDLE (2 1/2" AND LARGER SIZES), FOR MAINLINE ISOLATION, LINE SIZE PER MAINLINE. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX. 44LRC 1" QUICK COUPLER VALVE WITH LOCKING VINYL COVER AND A LASCO G13S-218 SWING JOINT. INSTALL INSIDE A 10" ROUND VALVE BOX. ESP8LXME - x -STATION MODULAR IRRIGATION CONTROLLER CONNECTED TO RAINBIRD WR2RFC-48-WR2 ESP-SMTe SMART CONTROL SYSTEM W/ LXMMPED - NEW METAL PEDESTAL CABINET ESP-LX SERIES. LOCAL AGENCY NEW WATER METER DEDICATED TO THE NEW IRRIGATION SYSTEM AS SPECIFIED ON PLAN. — — — — — AS APPROVED MAIN LINE - PVC PIPE 1" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, INSTALLED AS APPROVED PVC PIPE SCH. 40 AS SLEEVING, 2.5 TIMES THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED RAIN BIRD 5CST-B RAIN BIRD BUBBLER NOZZLE 0-360 DEGREE AJUSTABLE PATTERN SHRUB AREA NO SYMBOL NO SYMBOL

RAIN MASTER LSP-1-TURF LINE SURGE PROTECTION DEVICES SHALL BE INSTALLED ALONG THE TWO-WIRE PATH AT NO SYMBOL

NO SYMBOL CHRISTY'S

NO SYMBOL AS APPROVED 1 1/4" SCH. 40 PVC, GRAY ELECTRICAL CONDUIT FOR FLOW SENSOR WIRES AND CONTROL WIRES, RAIN BIRD NO SYMBOL

NO SYMBOL 3M NO SYMBOL

NO SYMBOL IN TURF AREAS SHALL BE GREEN AND COVERS FOR VALVE BOXES IN SHRUB AREAS SHALL BE BLACK. ALL BOXES SHALL BE SECURED WITH A RAIN BIRD VB-LOCK-P PENTA HEAD BOLT, WASHER AND CLIP. BOXES SHALL BE AS SHOWN BELOW:

DESCRIPTION TURF AREAS (GREEN) SHRUB AREAS (BLACK) 7" ROUND BOXES VB-7RNDBK VB-10RVD-B BODY AND VB-10RNDBKL LID 10" ROUND BOXES VB-10RND VB-STD-B BODY AND VB-STDBKL LID STANDARD RECTANGULAR BOXES VB-STD JUMBO RECTANGULAR BOXES VB-JMB VB-JMB-B BODY AND VB-JMBBKL LID

					IRRI	GATION	CONT	ROLLE	R RUN	TIMES						
POC or Controller				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	Total / Av
	E.	To / Month	(Inches):	2.84	2.92	3.47	3.78	4.81	4.73	5.28	4.53	4.92	5.40	4.33	3.31	50.28
Δ		ETo / Day	(Inches):	0.09	0.10	0.11	0.13	0.16	0.16	0.17	0.15	0.16	0.17	0.14	0.11	0.14
	Irrig	gation Day	s / Week:	6	6	6	6	6	6	6	6	6	6	6	6	
Plant / Irrig. Type	AKc	Pr Rate	IE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	
Shrubs	0.40	0.72	0.90	4.0	4.5	4.8	5.4	6.7	6.8	7.4	6.3	7.1	7.5	6.2	4.6	Min./Day/Zor
Drip Tubing	Number	of Zones:	1	4.0	4.5	4.8	5.4	6.7	6.8	7.4	6.3	7.1	7.5	6.2	4.6	Total Min./D
Tree	1.00	1.14	0.90	6.2	7.1	7.6	8.6	10.6	10.7	11.6	10.0	11.2	11.9	9.8	7.3	Min./Day/Zor
Bubblers	Number	of Zones:	1	6.2	7.1	7.6	8.6	10.6	10.7	11.6	10.0	11.2	11.9	9.8	7.3	Total Min./D
Tota	l Number	of Zones:	2	10	12	12	14	17	18	19	16	18	19	16	12	Total Min./Da
Total C	ontroller	Run Time	in Hours:	0.17	0.19	0.21	0.23	0.29	0.29	0.32	0.27	0.30	0.32	0.27	0.20	Total Hrs./D
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	
					IRRIG	GATION	CONT	ROLLE	R RUN	TIMES						
DOO O				LAN	FFD	MAD	ADD	MAN	11.18.1		A110	OFD	007	NOV	DEO	T-4-1 / A

					IRRI	GATION	CONT	ROLLE	R RUN	TIMES						
POC or Controller				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	Total / Avg.
<b>—</b>	ET	o / Month	(Inches):	2.84	2.92	3.47	3.78	4.81	4.73	5.28	4.53	4.92	5.40	4.33	3.31	50.28
В		ETo / Day	(Inches):	0.09	0.10	0.11	0.13	0.16	0.16	0.17	0.15	0.16	0.17	0.14	0.11	0.14
	Irrig	ation Days	s / Week:	6	6	6	6	6	6	6	6	6	6	6	6	
Plant / Irrig. Type	AKc	Pr Rate	IE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	
Turf	0.60	0.70	0.80	6.9	7.8	8.4	9.5	11.6	11.8	12.8	11.0	12.3	13.1	10.8	8.0	Min./Day/Zone
Rotors	Number	of <b>Z</b> ones:	2	13.7	15.6	16.8	18.9	23.3	23.6	25.5	21.9	24.6	26.1	21.7	16.0	Total Min./Day
Shrubs	0.40	0.72	0.90	4.0	4.5	4.8	5.4	6.7	6.8	7.4	6.3	7.1	7.5	6.2	4.6	Min./Day/Zone
Drip Tubing	120-271-100-012	of Zones:	3	11.9	13.5	14.5	16.3	20.1	20.4	22.1	18.9	21.3	22.6	18.7	13.8	Total Min./Day
Tree	1.00	1.14	0.90	6.2	7.1	7.6	8.6	10.6	10.7	11.6	10.0	11.2	11.9	9.8	7.3	Min./Day/Zone
Bubblers	Number	of Zones:	2	12.5	14.2	15.3	17.2	21.2	21.5	23.2	19.9	22.4	23.7	19.7	14.6	Total Min./Day
Palm	1.00	1.14	0.90	6.2	7.1	7.6	8.6	10.6	10.7	11.6	10.0	11.2	11.9	9.8	7.3	Min./Day/Zone
Bubblers	Number	of Zones:	1	6.2	7.1	7.6	8.6	10.6	10.7	11.6	10.0	11.2	11.9	9.8	7.3	Total Min./Day
Total	Number	of Zones:	8	44	50	54	61	75	76	82	71	79	84	70	52	Total Min./Day
Total C	ontroller I	Run Time	in Hours:	0.74	0.84	0.90	1.02	1.25	1.27	1.37	1.18	1.32	1.40	1.17	0.86	Total Hrs./Day
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	
Note:	These sc	hedules aı	re intende	d only fo	or compl	iance wi	th local r	nunicipa	l codes a	nd the v	vater effi	cient lan	dscape o	ordinance	e. These	calculations

These schedules are intended only for compliance with local municipal codes and the water efficient landscape ordinance. These calculations represent the MAXIMUM REASONABLE run times and are used to ensure that all irrigation may be completed during the specific watering window allowed. These schedules do not include rainfall, site soil types, specicic exposures (shade versus sun), actual irrigation days, or specific slope position. It is solely the responsibility of the irrigation contractor to program the controller as required to apply the correct amount of irrigation water for the landscape. All smart controllers shall be programmed using the specified ET or weather sensing equipment, satellite provided ET data, soil moisture sensors, and rain shut off devices as required. Contractor shall provide a controller schedule inside the controller cabinet prior to final turnover of the project to the owner.

	IRRIGATION CONTROLLER RUN TIMES															
POC or Controller				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	Total / Avg.
	ET	o / Month	(Inches):	2.84	2.92	3.47	3.78	4.81	4.73	5.28	4.53	4.92	5.40	4.33	3.31	50.28
		ETo / Day	(Inches):	0.09	0.10	0.11	0.13	0.16	0.16	0.17	0.15	0.16	0.17	0.14	0.11	0.14
O	Irrig	ation Days	s / Week:	6	6	6	6	6	6	6	6	6	6	6	6	
Plant / Irrig. Type	AKc	Pr Rate	IE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	
Shrubs	0.40	0.72	0.90	4.0	4.5	4.8	5.4	6.7	6.8	7.4	6.3	7.1	7.5	6.2	4.6	Min./Day/Zone
<b>Drip Tubing</b>	Number	of Zones:	2	7.9	9.0	9.7	10.9	13.4	13.6	14.7	12.6	14.2	15.0	12.5	9.2	Total Min./Day

Note: These schedules are intended only for compliance with local municipal codes and the water efficient landscape ordinance. These calculations represent the MAXIMUM REASONABLE run times and are used to ensure that all irrigation may be completed during the specific watering window allowed. These schedules do not include rainfall, site soil types, specicic exposures (shade versus sun), actual irrigation days, or specific slope position. It is solely the responsibility of the irrigation contractor to program the controller as required to apply the correct amount of irrigation water for the landscape. All smart controllers shall be programmed using the specified ET or weather sensing equipment, satellite provided ET data, soil moisture sensors, and rain shut off devices as required. Contractor shall provide a controller schedule inside the controller cabinet prior to final turnover of the project to the owner.

 Total Number of Zones:
 2
 8
 9
 10
 11
 13
 14
 15
 13
 14
 15
 12
 9
 Total Min./Day

 Total Controller Run Time in Hours:
 0.13
 0.15
 0.16
 0.18
 0.22
 0.23
 0.25
 0.21
 0.24
 0.25
 0.21
 0.15
 Total Hrs./Day

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

### IRRIGATION NOTES

- 1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
- 3. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
- 4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
- 5. THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS
- 6. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
- 7. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
- 8. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED
- 9. CONTRACTOR IS TO PROVIDE AN ADDITIONAL PILOT WIRE FROM CONTROLLER ALONG ENTIRETY OF MAIN LINE TO THE LAST RCV ON EACH AND EVERY LEG OF MAIN LINE. LABEL SPARE WIRES AT
- 10. ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN SLEEVING TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
- 11. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER AND REMOTE CONTROL VALVES WITHIN 18" OF HARDSCAPE.
- 12. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
- 13. CONTRACTOR SHALL INSTALL ADDITIONAL CHECK VALVES TO HEADS AND LATERALS AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
- 14. THE CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURERS SPECIFICATIONS. SWEENEY AND ASSOCIATES RECOMMENDS MEASURING FOR PROPER GROUND AT LEAST ONCE ANNUALLY, AND NECESSARY ADJUSTMENTS MADE TO COMPLY WITH MANUFACTURER SPECIFICATIONS.

# GENERAL NOTES 1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. IN CASE OF CONFLICT BETWEEN THE SPECIFICATIONS, DRAWINGS, AND/OR CODE, THE MORE STRINGENT

- 2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
- 3. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.

REQUIREMENT SHALL PREVAIL.

- 4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
- 5. THE MAINLINE AND SLEEVING IS DIAGRAMMATIC. ALL PIPING IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WITHIN LIMIT OF WORK BOUNDARIES. AVOID ANY CONFLICTS BETWEEN THE IRRIGATION SYSTEM, PLANTING AND ARCHITECTURAL FEATURES.
- 6. IRRIGATION EQUIPMENT AS SHOWN IS DIAGRAMMATIC. INSTALL ALL THE IRRIGATION REMOTE CONTROL VALVES, QUICK COUPLERS, MASTER VALVES, FLOW SENSORS, BACKFLOWS, AIR/VACUUM DEVICES, BALL VALVES, AND ANCILLARY EQUIPMENT IN SHRUB PLANTING AREAS WHEN FEASIBLE OR AS APPROVED BY OWNER'S REPRESENTATIVE AND THE LANDSCAPE IRRIGATION DESIGNER.
- 7. DO NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD REVISIONS DEEMED NECESSARY BY THE OWNER.
- 8. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY, AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION. ACTUAL LOCATION FOR THE INSTALLATION OF ANCILLARY EQUIPMENT INCLUDING, BUT NOT LIMITED TO, THE BACKFLOW PREVENTER, PUMP STATION (IF APPLICABLE) AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- 9. CONTRACTOR IS TO PROVIDE THREE (3) ADDITIONAL PILOT WIRES AND ONE (1) COMMON WIRE TO THE END OF THE MAINLINE RUN IN TWO DIRECTIONS FROM THE CONTROLLER. THE ADDITIONAL WIRE SHALL BE EXTENDED 10', MAKING A COIL TO FIT INSIDE A RECTANGULAR PULL BOX. LABEL THE LID OF THE PULL BOX 'SW'.
- 10. ALL PIPE UNDER PAVED AREAS, HARDSCAPE, OR AS DIRECTED BY OWNERS REPRESENTATIVE TO BE INSTALLED IN SLEEVING, TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED. ALL 4" AND SMALLER SLEEVING SHALL BE PVC1220 SCH. 40, TYPE 1, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-1785-4. ALL 6" AND LARGER SLEEVING SHALL BE PVC1220 CLASS 200 SDR21, TYPE 1, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-2241. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF PAVING.
- 11. ALL QUICK COUPLER VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL QUICK COUPLER VALVES WITHIN 18" OF HARDSCAPE OR AS NOTED ON PLANS.
- 12. THE IRRIGATION CONTRACTOR SHALL ADJUST THE PRESSURE REGULATOR ON EACH ELECTRIC CONTROL VALVE SO THAT THE SPRINKLER HEAD FARTHEST AND HIGHEST IN ELEVATION FROM ITS RESPECTIVE CONTROL VALVE OPERATES WITHIN THE OPERATING PRESSURE SHOWN ON THE IRRIGATION LEGEND. NOT TO EXCEED FIVE (5) PSI ABOVE THE GIVEN OPERATING PRESSURE FROM THE SPECIFIED PRESSURE LOCATED ON THE IRRIGATION LEGEND.
- THE SPECIFIED PRESSURE LOCATED ON THE IRRIGATION LEGEND.

  13. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION.

  THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE BY DIRECT FIELD MEASUREMENT PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE

INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT PRESSURE

- DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY AND COSTS FOR ANY REVISIONS.

  14. SHOULD FIELD CONDITIONS REQUIRE PIPE INSTALLATION OTHER THAN THAT SHOWN ON PLANS, THE CONTRACTOR SHALL LIMIT EXCESS FLOW AND SIZE ALL PIPE NOT TO EXCEED A VELOCITY OF 5 FEET PER SECOND (FPS) IN PVC PIPE AND CAST IRON PIPE. FLOW THROUGH ANCILLARY EQUIPMENT, STEEL AND COPPER PIPE SHALL NOT EXCEED A VELOCITY OF 7.5 FPS. ALL ADJUSTMENTS
- SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

  15. ELECTRICAL POWER SOURCE FOR THE IRRIGATION CONTROLLER AND/OR BOOSTER PUMP (IF APPLICABLE) SHALL BE PROVIDED UNDER THE ELECTRICAL SECTION OF THE SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE ELECTRICAL SERVICE WITH THE GENERAL CONTRACTOR AND SHALL MAKE THE FINAL CONNECTION FROM THE
- ELECTRICAL SOURCE TO THE CONTROLLER AND/OR BOOSTER PUMP.

  16. LANDSCAPE CONTRACTOR SHALL PROVIDE CLIENT WITH "AS BUILT" IRRIGATION ZONE PLAN CONTAINING ALL IRRIGATION ZONES, VALVE BOXES, MAIN LINES, HOSE BIBS, CONTROLLER, AND MASTER
- 17. THE IRRIGATION DESIGNER OR LANDSCAPE DESIGNER OR LANDSCAPE ARCHITECT SHALL NOT BE RESPONSIBLE UNDER ANY CIRCUMSTANCES FOR THE QUALITY OR TIMELINESS OF PERFORMANCE OF THE WORK INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF THE BACKFLOW PREVENTION ASSEMBLY MAINLINE, LATERALS, VALVES, SPRINKLER HEADS, DRIP IRRIGATION EQUIPMENT, CONTROL WIRE, CONTROLLERS AND SENSORS (if applicable). THE RESPONSIBILITY FOR SAME SHALL REST WITH THE CONTRACTOR PERFORMING THE WORK.
- 18. THE OWNER IS RESPONSIBLE FOR THE SCHEDULING OF THE IRRIGATION SYSTEM TO MEET HORTICULTURAL REQUIREMENTS AND TO INSURE THAT EXCESSIVE SOIL SATURATION AND/OR SOIL EROSION DOES NOT OCCUR.
- 19. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF THE IRRIGATION SYSTEM.

OWNERS RESPONSIBILITY

20. IT IS THE OWNER'S RESPONSIBILITY TO INSPECT THE IRRIGATION SYSTEM PERIODICALLY TO INSURE THAT THE SYSTEM IS OPERATING EFFICIENTLY AND THAT ALL NECESSARY REPAIRS ARE MADE TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC.

A SOILS REPORT HAS NOT BEEN PROVIDED. THIS IRRIGATION DESIGN ASSUMES THE PROPERTY IS SITED ON LOAM SOILS. IF THIS IS NOT THE CASE, PLEASE CONTACT IRRIGATION DESIGNER IMMEDIATELY FOR REDESIGN.

CONTROL OF IRRIGATION WATER IS A NECESSARY PART OF SITE MAINTENANCE. SOGGY GROUND AND PERCHED WATER MAY RESULT IF IRRIGATION WATER IS EXCESSIVELY APPLIED. IRRIGATION SYSTEMS SHOULD BE ADJUSTED TO PROVIDE THE MINIMUM WATER NEEDED. ADJUSTMENTS SHOULD BE MADE FOR CHANGES IN CLIMATE AND RAINFALL.

SLEEVES ARE REQUIRED FOR ALL IRRIGATION PIPING INSTALLED UNDER OR THROUGH PAVING/RETAINING WALLS. REFER TO IRRIGATION SLEEVE SIZING CHART SHOWN ON THIS SHEET.

IT IS RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIM/HER SELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, FOOTINGS AND COORDINATE THIS WORK WITH OTHER TRADES.

## SCHEDULE

NAV /		
MV	RAIN BIRD	MASTER VALVE RAIN BIRD 1 ½" BRASS VALVE
	RAIN BIRD	FLOW SENSOR RAIN BIRD FS150B 1½ " BRASS TEE FLOW SENSOR
×	NIBCO	T-113 CLASS 125, BRONZE GATE VALVE WITH HAND WHEEL (UP TO 2" SIZE) AND T-113-K CLASS 125, BRONZE GATE VALVE WITH BRONZE CROSS HANDLE (2 1/2" AND LARGER SIZES), FOR MAINLINE ISOLATION, LINE SIZE PER MAINLINE. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.
•	RAIN BIRD	44LRC 1" QUICK COUPLER VALVE WITH LOCKING VINYL COVER AND A LASCO G13S-218 SWING JOINT. INSTALL INSIDE A 10" ROUND VALVE BOX.
А	RAIN BIRD	ESP8LXME - x -STATION MODULAR IRRIGATION CONTROLLER CONNECTED TO RAINBIRD WR2RFC-48-WR2 ESP-SMTe SMART CONTROL SYSTEM W/ LXMMPED - NEW METAL PEDESTAL CABINET ESP-LX SERIES.
M	LOCAL AGENC	Y NEW WATER METER DEDICATED TO THE NEW IRRIGATION SYSTEM AS SPECIFIED ON PLAN.
S	RAIN BIRD	WR2RFC-48-WR2 WIRELESS RAIN/FREEZE SENSOR, AS PART OF CONTROLLER ASSEMBLY. MOUNT WIRELESS RECEIVER IN ENCLOSURE ON THE SIDE OF THE CONTROLLER, WIRE TO THE CONTROLLER.
•	RAIN BIRD	HIGH FLOW COMMERCIAL CONTROL ZONE KITS W/ 2 PRESSURE REGULATING, BASKET FILTERS RAINBIRD XCZ-100-PRB-COM / FLOW 0.3 -20 GPM
•	RAIN BIRD	100-EFB-CP-PRS-D, PRESSURE REGULATED BRASS REMOTE CONTROL VALVE, SIZE AS SHOWN PRIOR TO STARTING WORK, CONTRACTOR TO CONFIRM VALVE LOCATION WITH OWNER'S REPRESENTATIVE
0	RAIN BIRD	THREE WAY BALL BALVE PER CIVIL ENGINEER
BFP	FEBCO	REDUCED PRESSURE BACKFLOW FEBCO 825-Y 2"
	- AS APPROVED	MAIN LINE - PVC PIPE 1" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, INSTALLED 12" BELOW FINISHED GRADE
	AS APPROVED	
	AS APPROVED	· · · · · · · · · · · · · · · · · · ·
$\mathcal{P} \otimes \otimes$	RAIN BIRD	5CST-B RAIN BIRD BUBBLER NOZZLE 0-360 DEGREE AJUSTABLE PATTERN
•••	RAIN BIRD	1404- 1.00 GPM PRESSURE COMPENSATING FULL-CIRCLE / LOW-FLOW BUBBLER. TWO BUBBLERS/ TREE
• 	RAIN BIRD	1404- 1.00 GPM PRESSURE COMPENSATING FULL-CIRCLE / LOW-FLOW BUBBLER. ONE BUBBLER/ VINE
	RAIN BIRD	LANDSCAPE DRIP XFS-06-12 SUBSURFACE TUBING WITH COPPER SHIELD. SPACING SHALL BE 12 INCHE WITH DRIP HOLES ALTERNATING AT CENTER (6 INCHES) FROM ADJACENT TUBING.
SHRUB AREA		
NO SYMBOL	RAIN BIRD	XF SERIES 17mm BARBED FITTINGS FOR ALL CONNECTIONS BETWEEN DRIP TUBING (TUBING-TO-TUBIN ONLY). ALL BARBED DRIP TUBING FITTINGS. SHALL BE INSTALLED USING A FITINS-TOOL FOR PROPER INSERTION OF THE FITTING INTO THE TUBING. NO HEATING OF TUBING SHALL BE ALLOWED.  THE CONTROLLER SHALL BE GROUNDED USING A #182000 5/8" X 10 FOOT COPPER CLAD GROUND ROD.
		A #182005 CAST BRONZE ROD CLAMP AND THE REQUIRED LENGTH OF #6AWG BARE, SINGLE STRAND COPPER GROUND WIRE. INSTALL INSIDE A 10" ROUND VALVE BOX.
NO SYMBOL	RAIN MASTER	LSP-1-TURF LINE SURGE PROTECTION DEVICES SHALL BE INSTALLED ALONG THE TWO-WIRE PATH AT AN ON CENTER SPACING NOT TO EXCEED 500 FEET. INSTALL THE LSP DEVICE AND GROUND ROD IN A STANDARD RECTANGULAR VALVE BOX. INSTALL ONE LSP DEVICE WITHIN 10 FEET OF THE IRRIGATION CONTROLLER ASSEMBLY.
E	N/A	120 VOLT ELECTRICAL POWER FOR CONTROLLER, PROVIDED BY ELECTRICIAN, VERIFY ACTUAL LOCATION IN FIELD
NO SYMBOL	LASCO	ALL FITTINGS USED WITH SOLVENT WELD MAINLINE PIPE SHALL BE SCH. 80 PVC FITTINGS, GRAY IN COLOR, AND SIZED TO MATCH THE THR MAINLINE PIPE. ALL FITTINGS USED WITH SOLVENT WELD LATERAL LINE PIPE SHALL BE SCH. 40 PVC, WHITE IN COLOR, AND SIZED TO MATCH THE LATERAL LINE PIPE. ALL THREADED PVC NIPPLES SHALL BE SCH. 80 PVC PIPE, DARK GRAY IN COLOR, WITH MOLDED THREADS.
NO SYMBOL	CHRISTY'S	ALL SOLVENT WELD CONNECTIONS FOR BOTH MAINLINE AND LATERAL LINE SHALL BE MADE USING THE TWO-STEP PROCESS OF PRIMER AND SOLVENT CEMENT. PRIMER SHALL BE LOW VOC "PURPLE PRIMER". MAINLINE SOLVENT CEMENT SHALL BE LOW VOC, "GRAY-HEAVY BODY" CEMENT. LATERAL LINE SOLVENT CEMENT SHALL BE LOW VOC, "RED HOT BLUE GLUE" CEMENT. USE DAUBERS SIZED AT LEAST ONE-HALF THE SIZE OF THE LARGEST PIPE BEING JOINED. ALL SOLVENT CEMENTED JOINTS
NO SYMBOL	AS APPROVED	SHALL BE MADE PER THE PIPE AND FITTING MANUFACTURER'S RECOMMENDATIONS.  1 1/4" SCH. 40 PVC, GRAY ELECTRICAL CONDUIT FOR FLOW SENSOR WIRES AND CONTROL WIRES, PROVIDE PULL BOX AT A MAXIMUM OF 200 FEET ON CENTER FOR A 3 FOOT WIRE LOOP OR ANY SPLICES. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.
NO SYMBOL	RAIN BIRD	P7072D DIRECT BURIAL IRRIGATION CONTROL CABLE (TWO-WIRE PATH) WITH TWO, PARALLEL, PVC INSULATED, SOLID COPPER CONDUCTOR IRRIGATION CONTROL WIRES, #14UF SIZE, WITH A IMPREGNATED POLYETHYLENE, COLOR CODED JACKET. JACKET COLOR SHALL BE RED AND THE CONDUCTORS INSULATION SHALL BE RED AND BLACK. WHERE MULTIPLE CONTROLLERS ARE USED ON THE PROJECT, EACH CONTROLLER SHALL HAVE A CONTROL CABLE OF A DIFFERENT COLOR. THE CONTRACTOR SHALL ROUTE THE CONTROL CABLE FROM THE CONTROLLER ALONG THE MAINLINE IN ALL DIRECTIONS AWAY FROM THE CONTROLLER. LOOP THE CONTROL CABLE UP AND INTO EACH VALVE BOX ALONG THE MAINLINE, PROVIDING A 3 FOOT MINIMUM LOOP IN EACH VALVE BOX.
NO SYMBOL	3M	DBR/Y-6 DIRECT BURIAL (I.L. APPROVED) WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE SPLICES AND CONNECTIONS
NO SYMBOL	NDS (K.B.I.)	KSC-XXX-S SWING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS LOWER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER / DRIP ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
NO SYMBOL	NDS (K.B.I.)	KC-XXX-S SPRING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS HIGHER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER / DRIP ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE
NO SYMBOL	RAIN BIRD	ALL VALVE BOXES SHALL BE VB SERIES, PLASTIC TYPE WITH OVERLAPPING LIDS. COVERS FOR BOXES IN TURF AREAS SHALL BE GREEN AND COVERS FOR VALVE BOXES IN SHRUB AREAS SHALL BE BLACK. ALL BOXES SHALL BE SECURED WITH A RAIN BIRD VB-LOCK-P PENTA HEAD BOLT, WASHER AND CLIP. BOXES SHALL BE AS SHOWN BELOW:
	7	TURF AREAS (GREEN) SHRUB AREAS (BLACK)  "ROUND BOXES VB-7RND VB-7RNDBK  "ROUND BOXES VB-10PND VB-10PND ROUND AND VB-10PNDRK LIP
1/11	S	0" ROUND BOXES VB-10RND VB-10RVD-B BODY AND VB-10RNDBKL LID VB-STD-B BODY AND VB-STDBKL LID VB-STD-B BODY AND VB-STDBKL LID VB-JMBO RECTANGULAR BOXES VB-JMB VB-JMB-B BODY AND VB-JMBBKL LID
VALV SEQUENC	F —	G.P.M.

<b>IRRIGATION SLEE</b>	VE SIZES						
PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
SLEEVE SIZE	2"	2"	2-1/2"	3"	4"	5"	6"

GENERAL IRRIGATION NOTES:

PRESSURE REGULATING DEVICES ARE REQUIRED IF
WATER PRESSURE IS BELOW OR EXCEEDS THE
RECOMMENDED PRESSURE OF THE SPECIFIED DEVICE.

COULD OCCUR.

PURPOSES.

RECOMMENDED PRESSURE OF THE SPECIFIED DEVICES.

CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED
ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE

A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT

A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT THE TIME OF THE FINAL INSPECTION.

A MINIMUM 3-INCH LAYER OF MULCH SHALL BE ALLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS

WHERE MULCH IS CONTRAINDICATED.

AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN HTE LANDSCAPE DESIGN PLANS.

UNLESS CONTRADICTED BY A SOILS TEST, COMPOST AT A RATE OF MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.



(T) 424.299.4666 (F) 424.299.4698

The design, drawings, and written material in these documents of service are the sole property of Lahmon Architects. All design and related information contained herein are for use on the specified projects and shall not be duplicated, disclosed, or used without the prior written consent of Lahmon Architects.

CONSULTANT:



UNIVERSAL CITY GUEST HOME, L.P

5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

THE CRESCENT APARTMENTS

4260 N. ARCH DRIVE STUDIO CITY, CA 91604

RUC

PLAN CHECK SUBMITTAL 12.15.22

REVISION LIST:

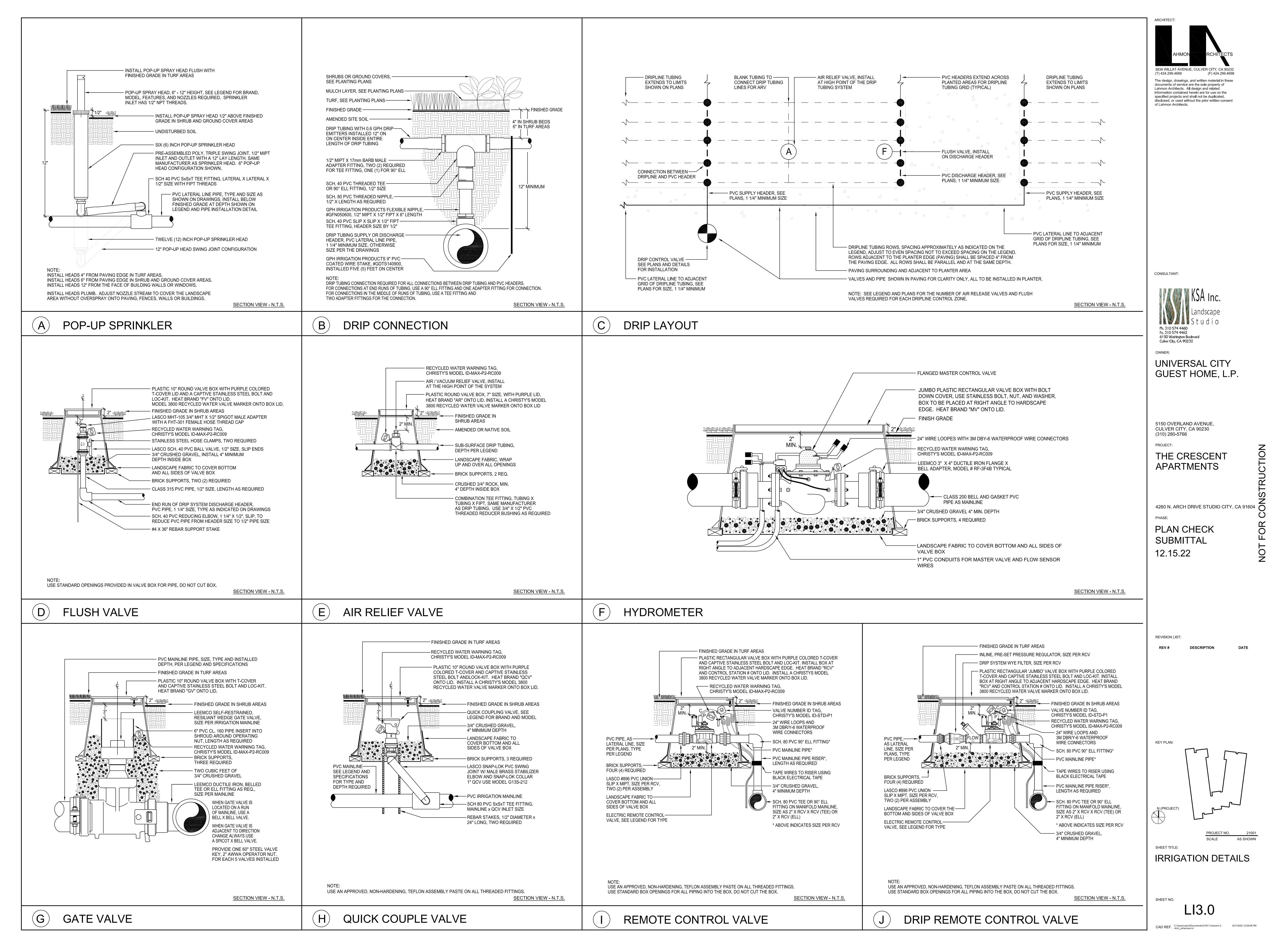
KEY PLAN:

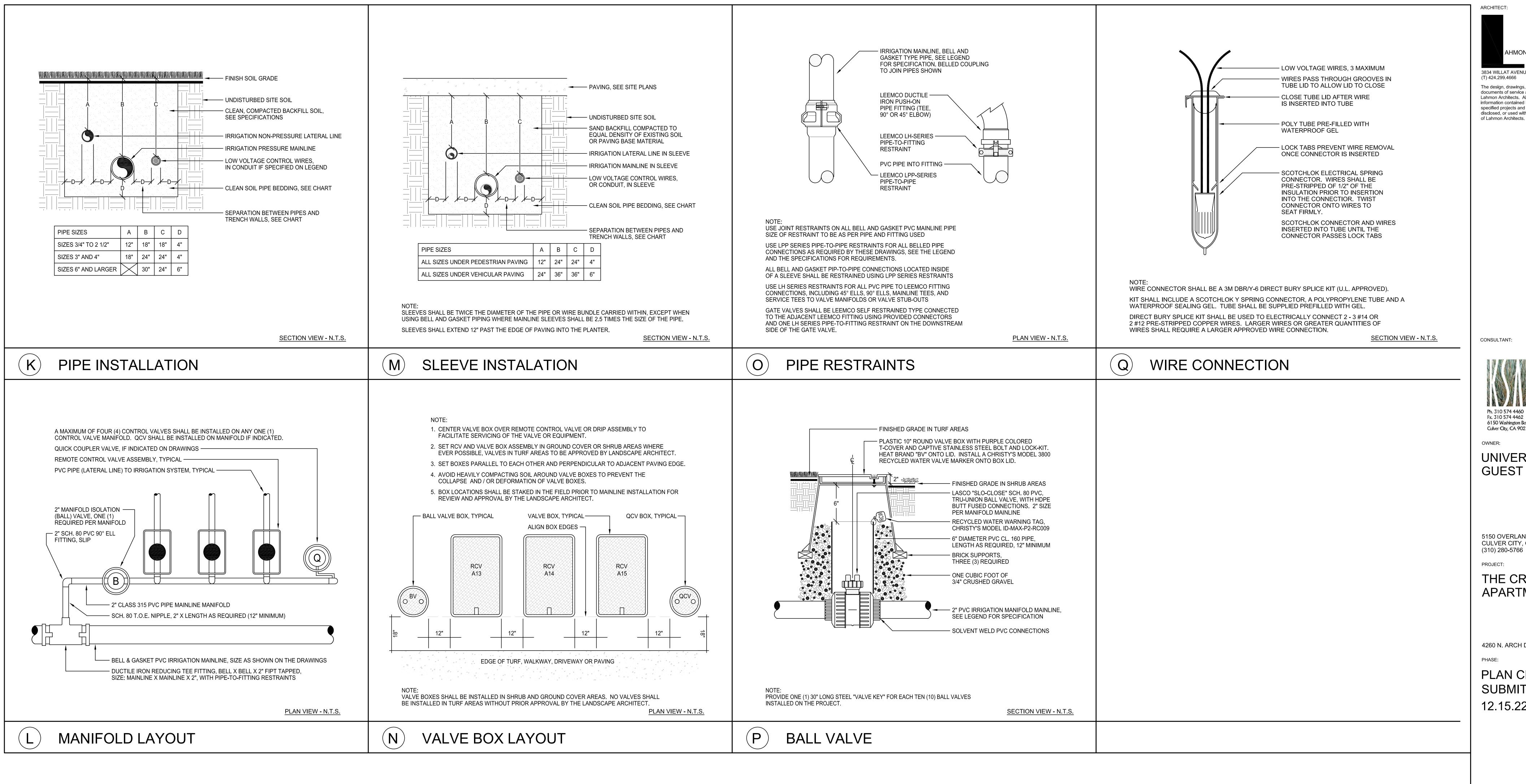
PROJECT NO. 2°
SCALE AS SHO

IRRIGATION LEGEND
AND NOTES

SHEET NO.

CAD REF. C:\Users\user3\Documents\21001 Crescent 2Arch\_Johannes.rvt 8/31/2022 12:09:08 P







CONSULTANT:

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5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5766

PROJECT:

THE CRESCENT **APARTMENTS** 

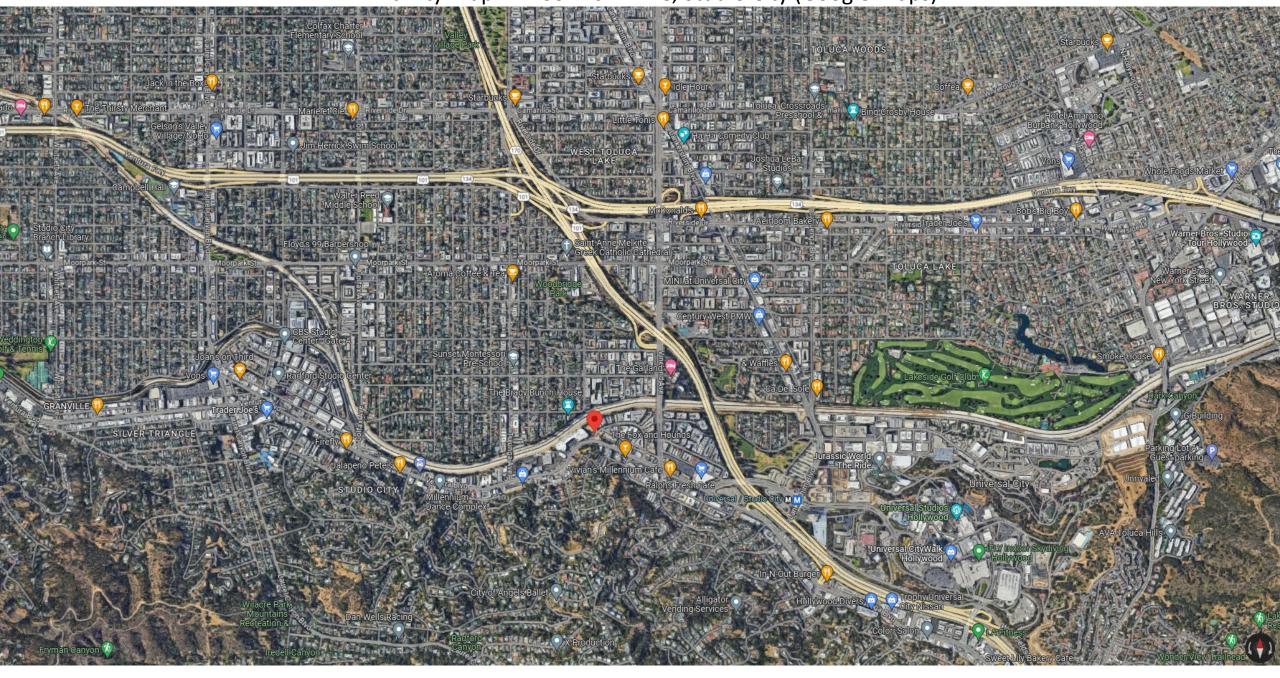
4260 N. ARCH DRIVE STUDIO CITY, CA 91604 PLAN CHECK

SUBMITTAL 12.15.22

REVISION LIST:

IRRIGATION DETAILS

Vicinity Map – 4260 Arch Drive, Studio City (Google Maps)



Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA -- Exhibit C.1 to the Staff Report

COUNTY CLERK'S USE

#### **CITY OF LOS ANGELES**

OFFICE OF THE CITY CLERK 200 NORTH SPRING STREET, ROOM 395 LOS ANGELES, CALIFORNIA 90012

**CALIFORNIA ENVIRONMENTAL QUALITY ACT** 

### NOTICE OF EXEMPTION

(PRC Section 21152; CEQA Guidelines Section 15062)

Pursuant to Public Resources Code § 21152(b) and CEQA Guidelines § 15062, the notice should be posted with the County Clerk by mailing the form and posting fee payment to the following address: Los Angeles County Clerk/Recorder, Environmental Notices, P.O. Box 1208, Norwalk, CA 90650. Pursuant to Public Resources Code § 21167 (d), the posting of this notice starts a 35-day statute of limitations on court challenges to reliance on an exemption for the project. Failure to file this notice as provided above, results in the statute of limitations being extended to 180 days.

	i limitations being extended to 160 days.	
	CASE NUMBER(S) / REQUESTED ENTITLEMENTS 021-10345-DB-SPP-SPR-VHCA	
	TY AGENCY	CASE NUMBER
	Los Angeles (Department of City Planning)	ENV-2020-10346-CE
•	T TITLE	COUNCIL DISTRICT
	orth Arch Drive	4
PROJEC	CT LOCATION (Street Address and Cross Streets and/or Attached Map)	☐ Map attached.
4260 N	lorth Arch Drive and 11201 West Ventura Boulevard	
		☐ Additional page(s) attached.
floor are subterra ncludes route, st 17,000 c	ction, use, maintenance of a multifamily building with 129 dwelling units, including 17 Ver a; maximum height 76 feet; 132 parking spaces, 43 of which will be compact spaces; nean garage; construction of a publicly accessible pedestrian path between Arch Drive and any additional actions as deemed necessary or desirable, including but not limited to direct tree removal, on-site tree removal, and building permits. The amount of materials equitic yards.  OF APPLICANT / OWNER:  est, Universal City Guest Home, L.P.	parking provided within a partially d the Los Angeles River. The project emolition, grading, excavation, haul
	CT PERSON (If different from Applicant/Owner above) (AREA CODE) TELEPH	HONE NUMBER   EXT.
	an Riker, Venable LLP (AREA CODE) TELEPT	•
EXEMP	T STATUS: (Check all boxes, and include all exemptions, that apply and provide relevant	citations.)
	STATE CEQA STATUTE & GUIDELINES	
	STATUTORY EXEMPTION(S)	
	Public Resources Code Section(s)	
$\boxtimes$	CATEGORICAL EXEMPTION(S) (State CEQA Guidelines Sec. 15301-15333 / Class 1	-Class 33)
	CEQA Guideline Section(s) / Class(es)15332 / Class 32	
	OTHER BASIS FOR EXEMPTION (E.g., CEQA Guidelines Section 15061(b)(3) or (b)(4)	or Section 15378(b) )
JUSTIFI	CATION FOR PROJECT EXEMPTION:	Additional page(s) attached
□ The	e of the exceptions in CEQA Guidelines Section 15300.2 to the categorical exemption(s) approject is identified in one or more of the list of activities in the City of Los Angeles CEQA G	Guidelines as cited in the justification.
THE DE	D BY APPLICANT, ATTACH CERTIFIED DOCUMENT ISSUED BY THE CITY PLANNING PARTMENT HAS FOUND THE PROJECT TO BE EXEMPT.  Int from the applicant, the identity of the person undertaking the project.	S DEPARTMENT STATING THAT
	TAFF USE ONLY:	
	AFF NAME AND SIGNATURE STAFF	TITLE lanner
ENTITLE	EMENTS APPROVED	
Density	Bonus, Site Plan Review, Specific Plan conformance.	

DISTRIBUTION: County Clerk, Agency Record

Rev. 6-22-2021

### DEPARTMENT OF CITY PLANNING

COMMISSION OFFICE (213) 978-1300

CITY PLANNING COMMISSION

SAMANTHA MILLMAN PRESIDENT

CAROLINE CHOE

MARIA CABILDO MONIQUE LAWSHE HELEN LEUNG KAREN MACK DANA M. PERLMAN ELIZABETH ZAMORA

## CITY OF LOS ANGELES



KAREN BASS

#### **EXECUTIVE OFFICES**

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ARTHI L. VARMA, AICP
DEPUTY DIRECTOR

LISA M. WEBBER, AICP

# JUSTIFICATION FOR PROJECT EXEMPTION CASE NO. ENV-2020-10346-CE

On June 14, 2023 the Planning Department determined that the City of Los Angeles Guidelines for the implementation of the California Environmental Quality Act of 1970 and the State CEQA Guidelines designate the subject project as Categorically Exempt under Article 19, Section 15332, Class 32.

A project qualifies for a Class 32 Categorical Exemption if it is developed on an infill site and meets the following criteria:

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with the applicable zoning designation and regulations;
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses;
- (c) The project site has no value as habitat for endangered, rare or threatened species;
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and
- (e) The site can be adequately served by all required utilities and public services.

The project is for the demolition of existing uses and the construction, use and maintenance of a new multifamily residential building with 129 dwelling units, including 17 set aside for Very Low Income Households. The proposed building will have approximately 117,000 square feet of floor area and will reach a maximum height of 76 feet with stepbacks at the upper floors at the rear of the building. The proposed project will provide 132 parking spaces, 43 of which will be compact spaces. Parking is provided within a partially subterranean garage. The proposed project will provide a publicly accessible path between Arch Drive and the Los Angeles River, providing public pedestrian access to the Los Angeles River path. The project includes any additional actions as deemed necessary or desirable, including but not limited to demolition, grading, excavation, haul route, street tree removal, on-site tree removal, and building permits. The amount of materials exported will be up to approximately 17,000 cubic yards. As 129 unit multifamily project, and a project which is characterized as in-fill development, the project qualifies for the Class 32 Categorical Exemption.

The site is zoned C2-1VL-RIO and has a General Plan Land Use Designation of General Commercial. As shown in the case file, the project is consistent with the applicable Sherman Oaks – Studio City Community Plan designation and policies and all applicable zoning designations and regulations. The subject site is wholly within the City of Los Angeles, on a site that is approximately 1.03 acres. Lots adjacent to the subject site are developed with the following urban

ENV-2020-10346-CE June 2023

uses: commercial shopping center to the west, multifamily residential to the east, commercial to the south, public facilities to the southeast, and the Los Angeles River path to the north. The site is previously disturbed and surrounded by development and therefore is not, and has no value as, a habitat for endangered, rare or threatened species. There are no protected trees on or near the site, as identified in the Tree Report prepared by Carlberg Associates dated June 2023. There are also no street trees.

The project will be subject to Regulatory Compliance Measures (RCMs), which require compliance with the City of Los Angeles Noise Ordinance as well as other local and state regulations regarding pollutant discharge, dewatering, and stormwater mitigations. These RCMs will ensure the project will not have significant impacts on noise and water. The Department of Transportation (LADOT) has reviewed the transportation assessment prepared by Overland Traffic Consultants, Inc., dated April 2022, and concluded the project will not result in a significant transportation impact on VMT. Therefore, the project will not have any significant impacts to traffic or transportation. The Noise and Air Quality Studies prepared by MD Acoustics, LLC, dated October 11, 2022 concluded the project will not result in impacts to air quality or noise. The project site will be adequately served by all public utilities and services given that the construction of a 129 unit apartment building will be on a site which has been previously developed and is consistent with the General Plan. Therefore, the project meets all of the Criteria for the Class 32.

#### Exceptions Narrative for Class 32 Categorical Exemption

There are five (5) Exceptions which must be considered in order to find a project exempt under Class 32: (a) Cumulative Impacts; (b) Significant Effect; (c) Scenic Highways; (d) Hazardous Waste Sites; and (e) Historical Resources.

There is not a succession of known projects of the same type and in the same place as the subject project. As mentioned, the project proposes 129 apartment units in an area zoned and designated for such development. All adjacent lots are developed with commercial, multifamily residential, public facilities, or open space uses, and the subject site is of a similar size and slope to nearby properties. The project proposes a Floor Area Ratio (FAR) of 3:1 on a site that is permitted to have a maximum FAR of 1:1 by-right and a height of 76 feet on a site that is permitted to have a maximum of 45 feet by-right. The proposed FAR and height are requested properly in conjunction with a Density Bonus request and in exchange for the provision of on-site deed-restricted affordable dwelling units are subject to the City Planning Commissions approval. Multistory buildings are not unusual for the vicinity of the subject site, and is similar in scope to other existing multifamily developments in the area. Thus, there are no unusual circumstances which may lead to a significant effect on the environment. Additionally, the only State Scenic Highway within the City of Los Angeles is the Topanga Canyon State Scenic Highway, State Route 27, which travels through a portion of Topanga State Park which is not near the subject site. Therefore the subject site will not create any impacts within a designated as a state scenic highway. Furthermore, according to Envirostor, the State of California's database of Hazardous Waste Sites, neither the subject site, nor any site in the vicinity, is identified as a hazardous waste site. The project site has not been identified as a historic resource by local or state agencies, and the project site has not been determined to be eligible for listing in the National Register of Historic Places, California Register of Historical Resources, the Los Angeles Historic-Cultural Monuments Register, and/or any local register; and was not found to be a potential historic resource based on the City's HistoricPlacesLA website or SurveyLA, the citywide survey of Los Angeles. Finally, the City does not choose to treat the site as a historic resource. Based on this, the project will not result in a substantial adverse change to the significance of a historic resource and this exception does not apply.

## Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA Exhibit C.2 to the Staff Report



Horticulturists and Registered Consulting

ARBORISTS

CITY OF LOS ANGELES TREE REPORT THE CRESCENT APARTMENTS 4260 N. ARCH DRIVE LOS ANGELES, CALIFORNIA 91604

#### SUBMITTED TO:

MADISON BAKER
DEVELOPMENT MANAGER
GOLDRICH KEST
5150 OVERLAND AVENUE
CULVER CITY, CALIFORNIA 90230

#### PREPARED BY:

CY CARLBERG
ASCA REGISTERED CONSULTING ARBORIST #405
ISA CERTIFIED ARBORIST #WE 0575A
ISA QUALIFIED TREE RISK ASSESSOR
CAUFC CERTIFIED URBAN FORESTER #013

SCOTT McALLASTER
ISA CERTIFIED ARBORIST #WE 7011A
ISA QUALIFIED TREE RISK ASSESSOR

DANIEL COWELL STAFF ARBORIST, BIOLOGIST

#### Santa Monica Office

828 Fifth Street, Suite 3 Santa Monica, California 90403 Office: 310.451.4804

#### Sierra Madre Office

80 West Sierra Madre Boulevard, #241 Sierra Madre, California 91024 Office: 626.428.5072





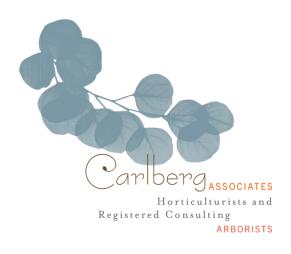
#### TREE INVENTORY AND REPORT - 4260 N. ARCH DRIVE, LOS ANGELES, CA

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July 14, 2023

Madison Baker Development Manager Goldrich Kest 5150 Overland Avenue Culver City, California 90230

Re: The Crescent Apartments, 4260 N. Arch Drive, Los Angeles, California 91604 City of Los Angeles Tree Report

Dear Ms. Baker.

This report is submitted in response to your request for arboricultural consulting services for the properties located at 4260 North Arch Drive in the Studio City area of Los Angeles, California.

#### **EXECUTIVE SUMMARY**

The future site of The Crescent Apartments (Project) encompasses approximately 1 acre (43,560 sq. ft.) and is located at 4260 N. Arch Drive in the City of Los Angeles. Commercial buildings and surface parking were recently demolished and the site has been graded and is vacant of any structures or hardscape. The property is bounded by existing retail structures to the west, Arch Drive to the east, the Los Angeles River to the north, and Ventura Boulevard to the south.

Carlberg prepared a Tree Inventory Report on August 30, 2017 and inventoried 36 non-protected private property trees and 10 non-protected offsite trees. Since then, nine non-protected private property trees (nos. 1-5, 13-14, and 26-27) were removed in accordance with a City Planning Demolition Permit. Tree no. 15, although approved for removal, is still standing as of June 2023. Sometime in 2022, the property owner to the west of the subject property cut down seven non-protected eucalyptus trees (tree nos. 6-12) at the southwest edge of the subject property; six of the tree stumps are sprouting new growth and one stump is no longer present.

Santa Monica Office

828 Fifth Street, Suite 3 Santa Monica, California 90403 Office: 310.451.4804

Sierra Madre Office

80 West Sierra Madre Boulevard, #241 Sierra Madre, California 91024 Office: 626.428.5072



The Project proposes 13 additional non-protected tree removals. Remaining are 28 non-protected private property trees and ten offsite trees.

Carlberg Associates (Carlberg) was retained to conduct a tree inventory and to prepare a Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance and Tree Report Template. We prepared a Tree Inventory Report on August 30, 2017 and updated the inventory and report to be in accordance with the City's Template requirements in July 2023.

Carlberg arborists conducted the tree inventory on June 29, 2023. The one-acre property was walked in order to capture all trees, regardless of species or size, in the inventory. The inventory included offsite trees whose canopies or protected zones overhang the project site boundaries.

Carlberg inventoried a total of 51 private property trees. Ten of the private property trees are off-site trees whose canopies overhang the project site. No Ordinance-protected trees (of size) were encountered.

#### ASSIGNMENT AND PURPOSE OF THE TREE REPORT

Carlberg was retained to conduct a tree inventory and to prepare a Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance and Tree Report Template.

#### City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance)

Protected trees and shrubs as set forth in the Ordinance comprise the following species that measure four inches or greater in "cumulative" 1 trunk diameter (measured at 4.5 feet above natural grade):

- coast live oak (Quercus agrifolia)
- valley oak (Quercus lobata)
- any other southern California indigenous oak trees but excluding scrub oak (Quercus berberidifolia)
- western sycamore (Platanus racemosa)
- Southern California black walnut (Juglans californica)
- California bay laurel (*Umbellularia californica*)
- Mexican elderberry (Sambucus mexicana)
- toyon (Heteromeles californica)

Public rights-of-way, parkway, median, and street trees are protected regardless of species or size and must be included in the tree inventory and report.

#### Los Angeles City Planning CP-4068 [07.07.2022] Tree Report Template (Template)

The Template (dated September 7, 2022) requires the collection and reporting on additional data beyond that required by the Ordinance, both on- and offsite. Some key requirements of the Template include inventory and assessment of all onsite trees regardless of species or size, inventory of offsite trees whose protected zones (15-feet from the edge of their canopy) may be impacted by the project, inventory of all adjacent street trees, photographs of each tree along with a photograph of a leaf from each tree type, mapping of all trees' locations and their canopies (driplines) plus protected zones, and the tree expert's opinion as to whether the tree occurs naturally or was planted. The Template also requires an analysis of impacts to Ordinance-

<sup>&</sup>lt;sup>1</sup> For purposes of value assessments and other analyses, trunk diameters of multi-stemmed trees will be converted to a single trunk diameter using the methodology set forth in the Guide for Plant Appraisal, 10th Edition.





protected trees that occur within 200 feet of the property boundaries. These impacts may be estimated if access is restricted. *There are no additional trees of concern existing within 200 feet of the property boundaries.* 

This Tree Report will be used during the entitlement and environmental approval process to aid decision-makers and the public in understanding the existing tree resources present on and immediately adjacent to the project site, the potential impacts of the project on the existing tree resources, and the proposed recommendations for tree protection, monitoring, and required mitigation during implementation of the Project.

#### **PROJECT OVERVIEW**

#### **Project Location**

**Table 1** includes basic project information for the Project.

#### **TABLE 1 – PROJECT INFORMATION**

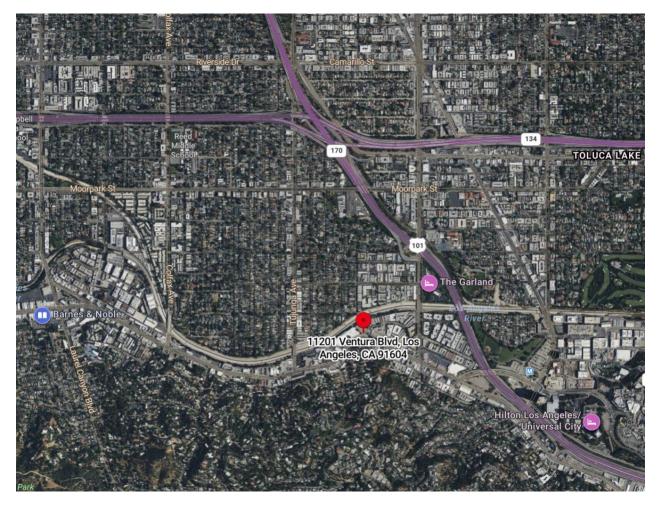
Project Name	The Crescent Apartments
Project Address	4260 N. Arch Drive, Los Angeles, CA 91604
Project APN	
Project Site Area	Approximately one acre
Entitlement Case No.	TBD
Environmental Case No.	TBD
Owner / Applicant	Goldrich Kest
Owner Representative	Madison Baker
	Development Manager
	Goldrich Kest
	5150 Overland Avenue
	Culver City, California 90230

**Exhibits A and B** on the following pages illustrate the general project location and an aerial image of the site.





#### **EXHIBIT A - PROJECT LOCATION MAP**



Source – Bing Maps No Scale

4260 N. Arch Drive, Los Angeles, CA 91604





#### **EXHIBIT B - AERIAL IMAGE OF THE PROJECT SITE**



Source – Bing Maps No Scale

4260 N. Arch Drive, Los Angeles, CA 91604





#### **Project Description**

The future site of The Crescent Apartments (Project) encompasses approximately 1 acre (43,560 sq. ft.) and is located at 4260 N. Arch Drive in the City of Los Angeles. Commercial buildings and surface parking were recently demolished and the site has been graded and is vacant of any structures or hardscape. The property is bounded by existing retail structures to the west, Arch Drive to the east, the Los Angeles River to the north, and Ventura Boulevard to the south.

A 2020 Demolition Permit allowed the removal of 10 non-protected private property trees, and as stated above, the property owner to the west removed 7 non-protected private property trees on the southwest edge of the site immediately adjacent to their building. No Ordinance-protected trees were encountered on or directly adjacent to the property.

#### TREE ASSESSMENT METHODOLOGY AND DATA PRESENTATION

#### **Project Trees**

Carlberg arborists and field technicians conducted the tree inventory on June 29, 2023. Weather conditions were mostly sunny throughout the duration of the inventory.

The tree inventory was conducted on foot. We walked the entire project site to inventory and assess all onsite trees and all offsite trees whose canopies or protected zones<sup>2</sup> extended into the project site.

The trees were identified, their health and structural condition evaluated<sup>3</sup>, trunk diameters measured, heights and canopy spreads approximated, and trunk locations plotted on the topographic survey map provided to us by the project team. More specifically, the inventory included the following assessment factors for protected and non-protected, onsite, immediately offsite, and street trees:

- Tree Number (unique tree number engraved on an aluminum tag affixed to each tree, as access allowed)
- **Botanical and Common Name**
- Trunk Diameter (diameter at standard height (DSH) / diameter at breast height (DBH) is measured at 4.5 feet above natural grade, or as indicted in the spreadsheet if deviated)
- **Indication** if the tree is a sapling or has a diameter of less than 4 inches
- Height and Canopy Spread (approximated)
- **Physiological Condition (health)**
- Structural Condition
- Presence of infectious tree diseases and / or pests
- Treatments (if pests or diseases are outwardly apparent, treatment is generally recommended, but no specific treatment will be called out since only a licensed pest control advisor may opine on specific treatments)
- **Expert opinion** if the tree appears to be naturally occurring or intentionally planted
- Photographs of All Trees (or groups of trees where applicable)
- Leaf photographs close-up of the individual leaf

appendices of this report.



<sup>&</sup>lt;sup>2</sup> 'Protected zone' equals 15 feet from the dripline of a tree or 15 feet from the trunk of an unbalanced or young tree, whichever is greater. <sup>3</sup> Each tree is assigned two letter grades, one for overall health and one for structure. Definitions for the letter grades are included in the



Field data was collected on tablets, tree trunk locations were generally mapped on a 50-scale, 36" x 48" topographic sheet map, and photographs were recorded with digital cameras. Tree identification numbers, trunk locations, and tree canopies with protection zones are graphically represented on the Tree Location Exhibit prepared by Carlberg in AutoCAD. Protected and non-protected trees are color-coded as required by the Template and the Ordinance.

A Tree Photograph Exhibit provides captioned photographs of the trees and provides an idea of site context, tree densities, conformation, and vigor. Photographs of a leaf or leaves, as appropriate, for each of the different inventoried tree species are included in the Tree Leaf Photographic Exhibit.

#### **OBSERVATIONS**

#### **PROJECT SITE TREES**

We inventoried and assessed 51 trees of 10 species on and immediately adjacent to the one-acre property: ten of the inventoried trees are off-site, overhanging trees.

Of the 51 trees, none are Ordinance-Protected trees (of size). **Table 2** summarizes the 10 types of trees found, their onsite, offsite, or street tree status, and how many of each type are included in the inventory.

TABLE 2 – SUMMARY OF INVENTORIED PROJECT SITE, IMMEDIATE OFFSITE AND IMMEDIATELY ADJACENT STREET TREES

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE PRIVATE	TOTAL NO. STREET TREE	TOTAL NO. TREE SPECIES
Chinese elm	Ulmus parvifolia	1			1
coast live oak	Quercus agrifolia	1			1
glossy privet	Ligustrum lucidum	5			5
holly oak	Quercus ilex	1			1
Indian laurel fig	Ficus microcarpa	13			13
lemon-scented gum	Corymbia citriodora	1			1
shamel ash	Fraxinus uhdei	2			2
silk oak	Grevillea robusta	9	10		19
silver dollar gum	Eucalyptus polyanthemos	7			7
Southern California black walnut	Juglans californica	1			1
		41	10	0	51





Exhibit C – Reduced Copy of the Tree Location Exhibit on page 13 provides an illustrative presentation of the existing trees

**Exhibit H** of the appendices includes **Table 8 - Tree Inventory Field Data**, which comprises the complete field data spreadsheets for all trees. The Tree Photograph Exhibit, included as **Exhibit I**, provides captioned photographs of the trees, and provides an idea of site context, tree densities, conformation, and vigor. Photographs of leaves for each of the different inventoried tree species are included in **Exhibit J** – Tree Leaf Photographs.

The following **Tables 3-5** summarize the offsite trees and private property trees. Complete field data information on all other inventoried trees can be found in **Exhibit H** as mentioned above.

**TABLE 3 – SUMMARY OF OFFSITE TREES** 

OFF SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.) 2017	DSH /DBH (IN.) 2023	DSH < 4" OR SAPLING	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	37	silk oak	Grevillea robusta	10.5	11.1		35	4	1	15	8	A-	В
OS	38	silk oak	Grevillea robusta	20	21.2		40	18	15	15	15	А	B+
OS	39	silk oak	Grevillea robusta	16	16.9		40	14	9	12	13	А	В
OS	40	silk oak	Grevillea robusta	12.5	12.8		35	15	11	16	10	А	В
OS	41	silk oak	Grevillea robusta	20	21.8		40	9	11	13	10	А	A-
OS	42	silk oak	Grevillea robusta	9.5	10.3		30	15	4	5	14	В	В
OS	43	silk oak	Grevillea robusta	20.5	21.7		40	7	5	25	14	А	С
OS	44	silk oak	Grevillea robusta	14	15		40	15	10	12	15	A-	В
OS	45	silk oak	Grevillea robusta	18	19.5		35	10	4	12	12	А	В
OS	46	silk oak	Grevillea robusta	32.5	33.1		40	30	20	18	22	Α	С



#### **TABLE 4 – SUMMARY OF PRIVATE PROPERTY TREES**

OFFSITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.) 2017	DSH /DBH (IN.) 2023	DSH < 4" OR SAPLING	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	1	fern pine	Afrocarpus falcatus	14		Tr 2020 De	ee remo emolition						
	2	fern pine	Afrocarpus falcatus	14.5			remove emolitio	d per n Permit					
	3	queen palm	Syagrus romanzoffiana	18' BT		Tre 2020 Der	e remov						
	4	queen palm	Syagrus romanzoffiana	18′ BT		Tree 2020 De	e remov molitior						
	5	fern pine	Afrocarpus falcatus	8.5		Tree 2020 De	e remov molitior						
	6	silver dollar gum	Eucalyptus polyanthemos	23	Stump sprout		8	6	6	4	4	В	В
	7	silver dollar gum	Eucalyptus polyanthemos	21.5	Stump sprout		8	6	6	4	4	В	В
	8	silver dollar gum	Eucalyptus polyanthemos	15	Stump sprout		8	6	6	3	3	В	В
	9	silver dollar gum	Eucalyptus polyanthemos	16	Stump sprout		8	7	7	7	7	В	В
	10	lemon- scented gum	Corymbia citriodora	20.5	No stump remaining								
	11	silver dollar gum	Eucalyptus polyanthemos	31.5	Stump sprout		7	5	4	2	2	В	В
	12	silver dollar gum	Eucalyptus polyanthemos	20	Stump sprout		10	5	5	2	2	В	В
	13	silver dollar gum	Eucalyptus polyanthemos	9, 12, 19	Stump sprout		7	9	11	4	4	В	В



#### **TABLE 4 – SUMMARY OF PRIVATE PROPERTY TREES**

OFFSITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.) 2017	DSH /DBH (IN.) 2023	DSH < 4" OR SAPLING	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	14	lemon- scented gum	Corymbia citriodora	18.5	Stump sprout		14	5	2	2	0	В	В
	15	silk oak	Grevillea robusta	13	13.7		40	10	10	15	13	A-	С
	16	Indian laurel fig	Ficus microcarpa	14	15.6		45	5	13	15	6	Α	Α
	17	Indian laurel fig	Ficus microcarpa	12.5	14.4		45	4	13	7	3	А	А
	18	Indian laurel fig	Ficus microcarpa	15.5	17.9		45	2	10	25	21	Α	А
	19	Indian laurel fig	Ficus microcarpa	11	12.3		45	2	10	4	10	Α	А
	20	Indian laurel fig	Ficus microcarpa	11	11.3		45	4	15	3	3	Α	А
	21	Indian laurel fig	Ficus microcarpa	13.5	15.3		45	6	7	10	25	Α	А
	22	Indian laurel fig	Ficus microcarpa	9.5	9.5		40	3	15	4	0	Α	Α
	23	Indian laurel fig	Ficus microcarpa	9.5	10.6		40	5	5	7	5	Α	Α
	24	Indian laurel fig	Ficus microcarpa	9.5	10.5		40	4	4	6	6	Α	Α
	25	Indian laurel fig	Ficus microcarpa	9	10.3		40	3	4	4	15	А	А
	26	Indian laurel fig	Ficus microcarpa	12	N/A		Tree	remove	d per 202	20 Demo	olition Pe	rmit	
	27	Indian laurel fig	Ficus microcarpa	9	N/A		Tree	remove	d per 202	20 Demo	olition Pe	rmit	



#### **TABLE 4 – SUMMARY OF PRIVATE PROPERTY TREES**

OFFSITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.) 2017	DSH /DBH (IN.) 2023	DSH < 4" OR SAPLING	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	28	Indian laurel fig	Ficus microcarpa	11	13.8, 4.8		40	7	3	7	15	Α	Α
	29	holly oak	Quercus ilex	3, 5.5	4.1, 6.4		20	12	4	0	8	А	В
	30	silk oak	Grevillea robusta	18	18.6		40	8	15	20	10	А	В
	31	silk oak	Grevillea robusta	15	16.4		40	15	10	14	9	A-	B-
	32	silk oak	Grevillea robusta	9	10		30	12	10	10	0	В	B-
	33	silk oak	Grevillea robusta	13	14.2		40	16	8	14	12	В	В
	34	silk oak	Grevillea robusta	12	12.9		40	13	10	15	8	А	В
	35	silk oak	Grevillea robusta	16	17.3		35	10	10	11	10	А	B+
	36	silk oak	Grevillea robusta	13	13.7		35	14	11	15	15	Α	В
	47	Indian laurel fig	Ficus microcarpa	Not of size	10, 7, 5		30	12	14	12	12	А	В
	48	Chinese elm	Ulmus parvifolia	Not of size	1.3		12	6	7	7	7	Α	A-
	49	glossy privet	Ligustrum lucidum	Not of size	1.4		14	5	5	3	3	А	A-
	50	glossy privet	Ligustrum lucidum	Not of size	1		14	5	5	3	3	А	A-
	51	glossy privet	Ligustrum lucidum	Not of size	1, 1		10	4	4	3	3	Α	A-



**TABLE 4 – SUMMARY OF PRIVATE PROPERTY TREES** 

OFFSITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.) 2017	DSH /DBH (IN.) 2023	DSH < 4" OR SAPLING	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	52	glossy privet	Ligustrum lucidum	Not of size	1.2		12	5	5	3	3	А	A-
	53	glossy privet	Ligustrum lucidum	Not of size	1.2		10	4	4	3	3	А	A-
	54	Southern California black walnut	Juglans californica	Not of size	1		8	7	6	4	4	А	A-
	55	coast live oak	Quercus agrifolia	Not of size	3.6		14	10	5	5	9	А	B+
	56	Indian laurel fig	Ficus microcarpa	N/A	10.6, 4.6		25	10	10	8	9	Α	В
	57	shamel ash	Fraxinus uhdei	Not of size	3.9		20	4	10	7	7	A-	B-
	58	shamel ash	Fraxinus uhdei	Not of size	2.9		20	4	12	6	4	A-	B-
	59	silk oak	Grevillea robusta	Not of size	3.4		22	8	7	7	8	Α	В

In our opinion, it is obvious that the private property and street trees associated with this project have been planted into the landscape.

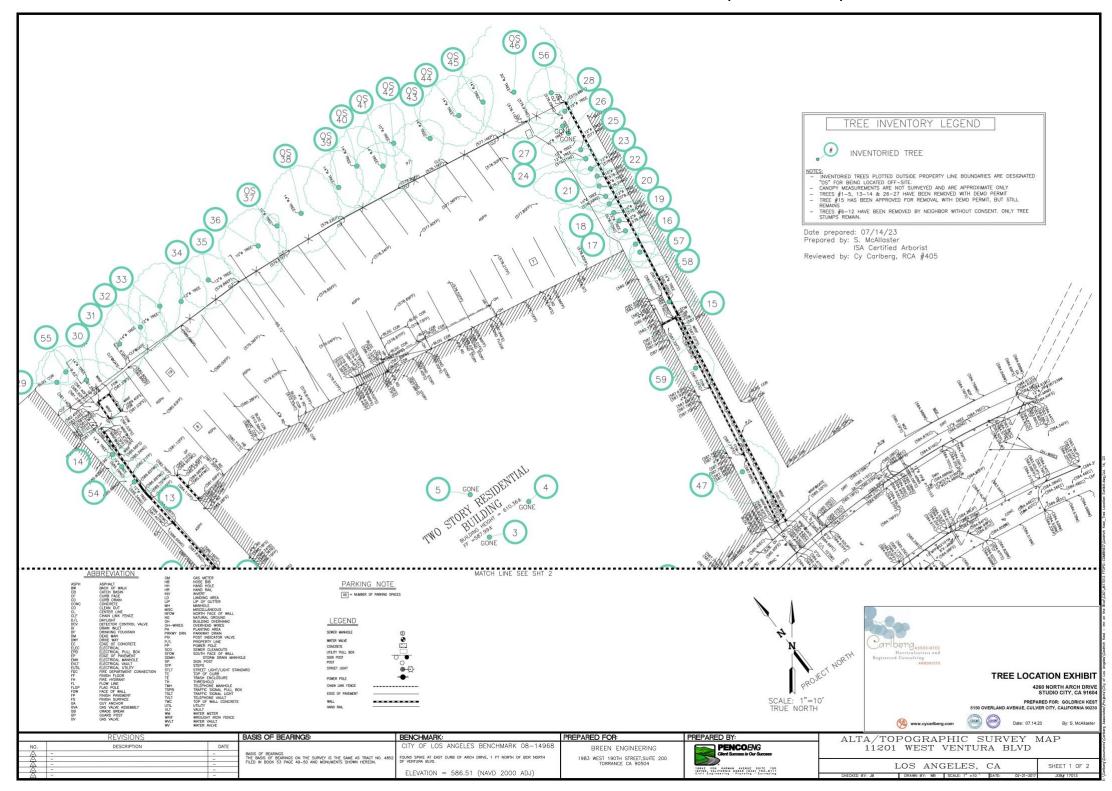
Dbh: diameter at breast height – a forestry term used to describe a tree trunk's diameter measured at 4.5 feet above grade; typically used as a representation of tree size. Also known as Diameter at Shoulder Height.

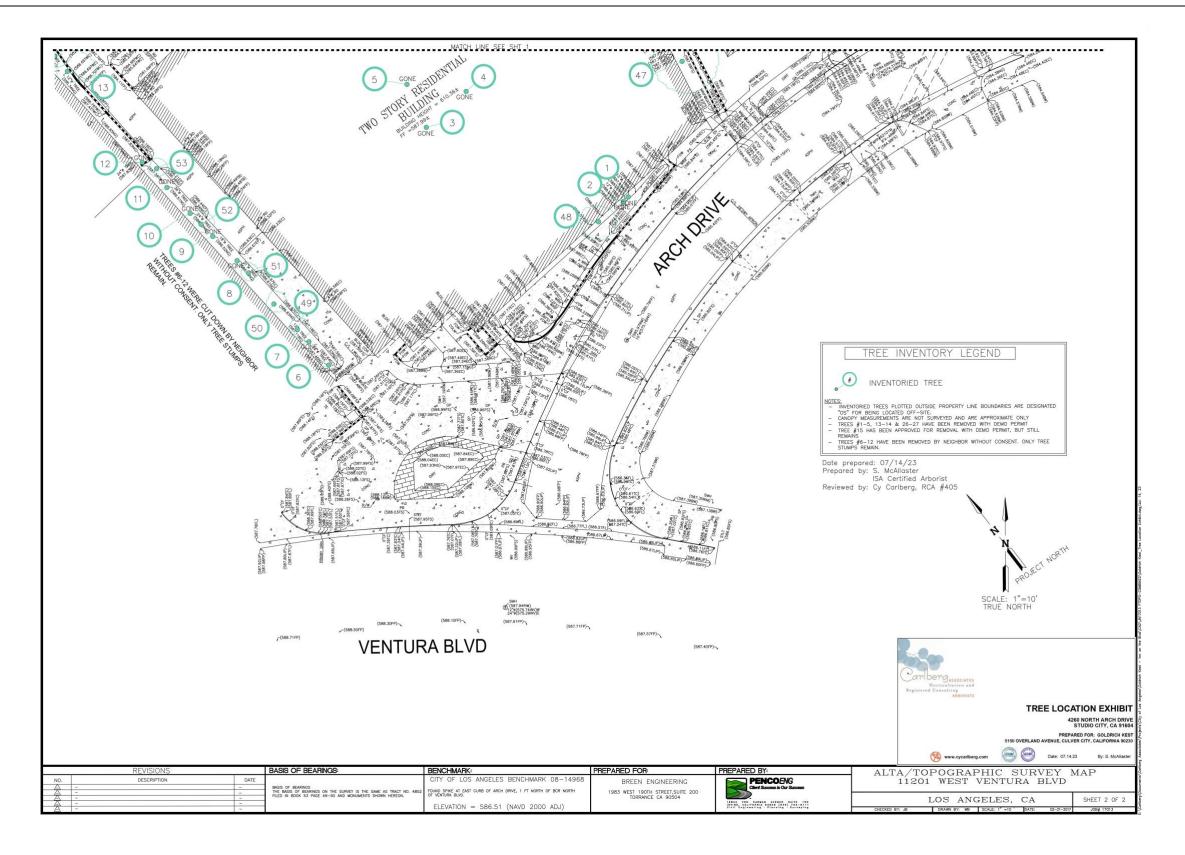
BT – Brown Trunk. Because palms do not generally increase in trunk diameter as they mature, they are measured in their brown trunk height, the distance between natural grade and the newest emerging spear.





#### EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (NOT TO SCALE)







#### **DISCUSSION OF PROJECT IMPACTS**

There are numerous potential consequences related to residential construction that may affect trees during and after a typical construction process. They are as follows:

- **EXCAVATION ROOT SEVERANCE**
- SOIL COMPACTION (DURING AND POST-CONSTRUCTION)
- ALTERATION OF THE WATER TABLE/SITE DRAINAGE
- CHANGES IN GRADE CUT OR FILL
- SUBSTANTIAL TRIMMING OF CANOPY OR ROOTS

#### A. Excavation/Trenching—Root Severance

Trenching can include excavation for irrigation, utility, or drainage lines. Trenching and excavation can also be required for foundations of structures and free-standing walls. Trenching and excavation removes soil and tree roots. When performed in the critical root zone (approximately 5x the trunk diameter of any tree) or within the dripline (outer edge of the natural canopy), there is the potential to remove large areas of root mass, and to shatter and tear roots that will remain connected to the tree(s). Torn and shattered roots cannot callous over or generate new roots in the manner of cleanly-cut roots. Torn and shattered roots are potentially unstable, are entry points for disease and decay organisms, and eventually die. Significant root loss and/or severance can be critical to the health and structure of trees to remain in a landscape.

#### B. Soil Compaction

Soil compaction is a complex set of physical, chemical, and biological constraints on tree growth. Principal components leading to limited growth are the loss of aeration and pore space, poor gas exchange with the atmosphere, lack of available water, and mechanical hindrance of root growth. Soil compaction is considered the largest single factor responsible for the decline of trees on construction sites.

#### C. Changes in Grade

Changes in grade, by the addition or removal of soil (filling or cutting), can be injurious. Lowering the grade around trees can have immediate and long-term effects on trees. The addition of soil and compaction for common engineering practices also results in long-term effects on trees. Typically, the vast majority of the root mass exists within the top three feet of soil, and most of the fine roots active in water and nutrient absorption are in the top 12 inches.

#### D. Alteration of the Water Table/Site Drainage

The water table is the upper surface of the zone in which soil macropores are saturated with water; water tables may vary seasonally. Rather than a flat, static surface, the water moves down a gradient. Its depth varies, depending on the structure of the soil and rocks through which it flows. A perched water table may form in soils that have impermeable strata. Swamps are created where the water table intersects level ground.

Structures such as footings, basements, subterranean buildings, and retaining walls may intercept impermeable layers in the soil on which water perches. If adequate drainage is not provided, the water table uphill may gradually rise and interfere with tree roots. This type of damage usually takes a period of time to be recognized and diagnosed.4

<sup>&</sup>lt;sup>4</sup> Nelda Matheny and James R. Clark, <u>Trees and Development</u>: A <u>Technical Guide to Preservation of Trees During Land Development</u>, (Champaign, Illinois: International Society of Arboriculture, 1998), pp. 88-89.





Numerous trees are particularly susceptible to root infections, such as Armillaria and Phytophthora. Both of these fungal diseases can progressively weaken a root system, resulting in dead branches in the canopy of the tree, loss of stability of the entire tree because of decaying roots, and premature death of the tree. Trees form roots in accordance with existing soil composition and water availability. Minor drainage changes in the winter and spring months are significant to the health of the trees.

#### E. Canopy and Root Pruning

Leaves perform vital functions for trees. Through photosynthesis, they manufacture sugars that feed the tree and are used to create the building blocks of wood. Leaves help to move water and nutrients up from the roots and around the tree through their vascular system and cool the tree down through transpiration. Leaves moderate temperatures beneath the tree, lessen the drying action of winds, and intercept rainfall, which reduces erosion. On the ground, they moderate soil temperatures, retain moisture, and as they decompose, return their nutrients back to the soil to be recycled and reused by the tree. A healthy canopy of leaves is essential to ensure an adequate food supply for the roots to perform their important functions.

Typically, root systems extend outward past the dripline, two to four times the diameter of the average tree's crown. Main root functions include water and mineral conduction, food and water storage, and anchorage of the tree to the soil. Root systems consist of short-lived, fine-textured, feeder roots and larger, woody, perennial roots. Feeder roots, while averaging only 1/16 inch in diameter, constitute the major portion of the root system's surface area. Feeder roots act like sponges, growing predominantly outward and upward from the large roots near the soil surface where minerals, water, and oxygen are usually abundant. Larger, woody roots and their subordinates tend to annually increase in diameter and grow horizontally. Predominantly located in the top 6 to 24 inches of the soil, these structural and storage roots usually do not grow deeper than three to seven feet. Root growth is generally inhibited by soil compaction and temperature. As the depth increases, soil compaction increases, and the availability of water, minerals, oxygen, and soil temperature all decrease.

Removal of significant amounts of the canopy and/or root system can lead to both immediate and long-term detrimental effects on trees. Effects can be physiological, structural, or both.

Trees to be preserved or removed, along with the proposed location of recommended protective fencing, are illustrated on the reduced and full-sized copies of the Tree Impact Exhibit and Protection Plan. The reduced copies are included as **Exhibit D** on page 23.

**Tables 5-7** on the following pages provide details of the trees proposed for preservation and removal. As summarized in the tables:

- 0 street trees will be removed
- 0 street trees will be preserved
- 23 non-protected tree will be removed
- · 16 non-protected trees will be preserved
- 0 offsite trees will be removed
- 10 offsite trees will be preserved





TABLE 5 – OFF-SITE TREES TO BE PRESERVED

Street or Parkway (ST)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
os	37	silk oak	Grevillea robusta	11.1		35	4	1	15	8	A-	В	Р		
os	38	silk oak	Grevillea robusta	21.2		40	18	15	15	15	Α	B+	P		
OS	39	silk oak	Grevillea robusta	16.9		40	14	9	12	13	Α	В	Р		
OS	40	silk oak	Grevillea robusta	12.8		35	15	11	16	10	А	В	Р		
OS	41	silk oak	Grevillea robusta	21.8		40	9	11	13	10	Α	A-	Р		
OS	42	silk oak	Grevillea robusta	10.3		30	15	4	5	14	В	В	Р		
OS	43	silk oak	Grevillea robusta	21.7		40	7	5	25	14	Α	С	Р		
OS	44	silk oak	Grevillea robusta	15		40	15	10	12	15	A-	В	Р		
OS	45	silk oak	Grevillea robusta	19.5		35	10	4	12	12	А	В	Р		



OS 46 silk oak <i>Grevillea robusta</i> 33.1 40 30 20 18 22 A C P
---

#### TABLE 6 - NON-PROTECTED TREES TO BE REMOVED

Off- Site (OS)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
	6	silver dollar gum	Eucalyptus polyanthemos	20 x <1		8	6	6	4	4	A-	С	P	Development	
	7	silver dollar gum	Eucalyptus polyanthemos	20 x <1		8	6	6	4	4	A-	С	P	Development	
	8	silver dollar gum	Eucalyptus polyanthemos	15 x <1		28	6	6	3	3	A-	С	Р	Development	
	9	silver dollar gum	Eucalyptus polyanthemos	15 x <1		50	7	7	7	7	A-	С	P	Development	
	11	silver dollar gum	Eucalyptus polyanthemos	12 x <1		7	5	4	2	2	B+	С	Р	Development	
	12	silver dollar gum	Eucalyptus polyanthemos	15 x <1		10	5	5	2	2	В	С	P	Development	
	15	silk oak	Grevillea robusta	13.9		40	10	10	15	13	A-	С	Р	Demolition Permit	



16	Indian laurel fig	Ficus microcarpa	15.6	45	5	13	15	6	А	Α	Р	Development
30	silk oak	Grevillea robusta	18.6	40	8	15	20	10	Α	В	Р	Development
31	silk oak	Grevillea robusta	16.4	40	15	10	14	9	A-	B-	Р	Development
32	silk oak	Grevillea robusta	10	30	12	10	10	0	В	B-	Р	Development
34	silk oak	Grevillea robusta	12.9	40	13	10	15	8	А	В	Р	Development
35	silk oak	Grevillea robusta	17.3	35	10	10	11	10	Α	B+	Р	Development
36	silk oak	Grevillea robusta	13.7	35	14	11	15	15	А	В	Р	Development
47	Indian laurel fig	Ficus microcarpa	10, 7, 5	30	12	14	12	12	Α	В	Р	Development
48	Chinese elm	Ulmus parvifolia	1.3	12	6	7	7	7	А	A-	N	Development
49	glossy privet	Ligustrum lucidum	1.4	14	5	5	3	3	Α	A-	Р	Development
51	glossy privet	Ligustrum lucidum	1, 1	10	4	4	3	3	Α	A-	Р	Development



53	glossy privet	Ligustrum lucidum	1.2	10	4	4	3	3	Α	A-	Р	Development
54	Southern California black walnut	Juglans californica	1	8	7	6	4	4	Α	A-	N	Development
56	Indian laurel fig	Ficus microcarpa	10.6, 4.6	25	10	10	8	9	Α	В	Р	Development
57	shamel ash	Fraxinus uhdei	3.9	20	4	10	7	7	A-	B-	N	Development
58	shamel ash	Fraxinus uhdei	2.9	20	4	12	6	4	A-	B-	N	Development

#### TABLE 7 - NON-PROTECTED TREES TO BE PRESERVED

Street or Parkway (ST)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
	17	Indian laurel fig	Ficus microcarpa	14.4		45	4	13	7	3	А	Α	Р		
	18	Indian laurel fig	Ficus microcarpa	17.9		45	2	10	25	21	А	Α	Р		
	19	Indian laurel fig	Ficus microcarpa	12.3		45	2	10	4	10	А	А	P		
	20	Indian laurel fig	Ficus microcarpa	11.3		45	4	15	3	3	А	А	Р		



21	Indian laurel fig	Ficus microcarpa	15.3	45	6	7	10	25	А	Α	Р	
22	Indian laurel fig	Ficus microcarpa	9.5	40	3	15	4	0	А	А	Р	
23	Indian laurel fig	Ficus microcarpa	10.6	40	5	5	7	5	А	А	Р	
24	Indian laurel fig	Ficus microcarpa	10.5	40	4	4	6	6	Α	Α	Р	
25	Indian laurel fig	Ficus microcarpa	10.3	40	3	4	4	15	А	Α	Р	
28	Indian laurel fig	Ficus microcarpa	13.8, 4.8	40	7	3	7	15	А	Α	Р	
29	holly oak	Quercus ilex	4.1, 6.4	20	12	4	0	8	А	В	Р	
33	silk oak	Grevillea robusta	14.2	40	16	8	14	12	В	В	Р	
50	glossy privet	Ligustrum Iucidum	1	14	5	5	3	3	А	A-	Р	
52	glossy privet	Ligustrum Iucidum	1.2	12	5	5	3	3	А	A-	Р	
55	coast live oak	Quercus agrifolia	3.6	14	10	5	5	9	А	B+	N	

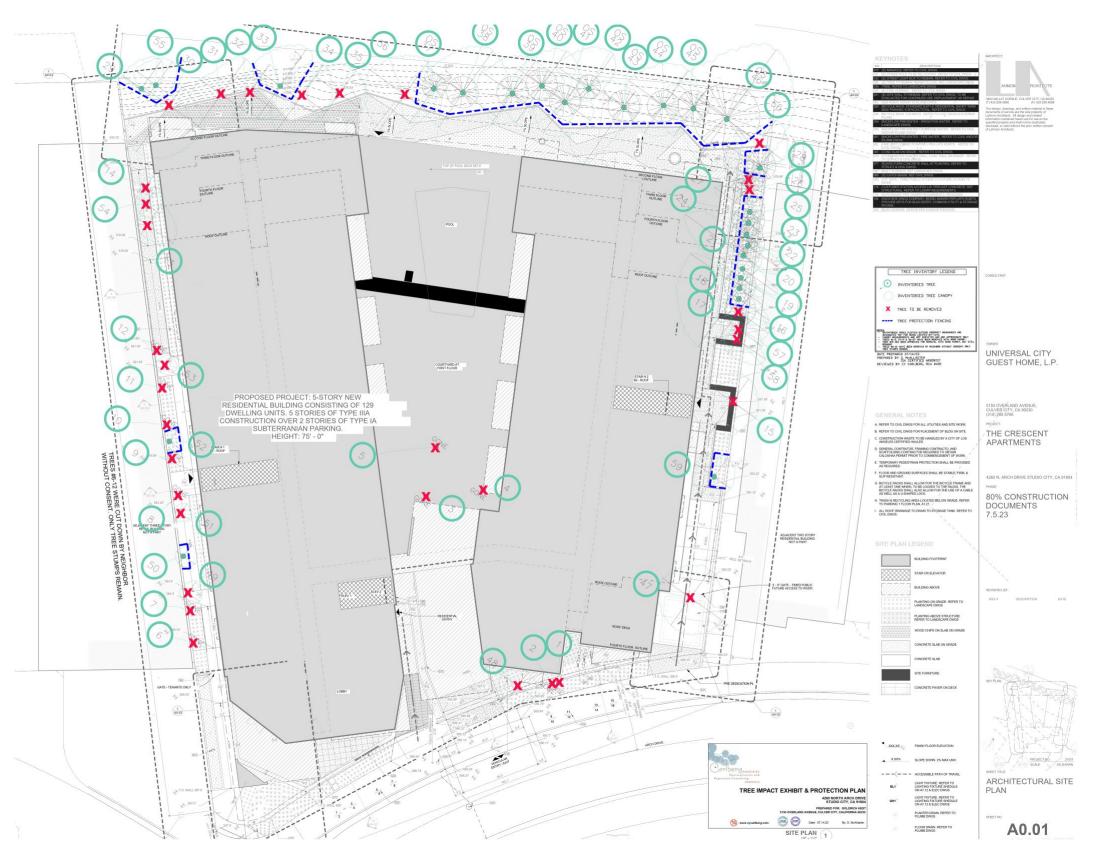


59 silk oak *Grevillea robusta* 3.4 22 8 7 7 8 A B N

No Ordinance-Protected or off-site trees are proposed for removal, therefore there are no tables for removals of Ordinance-protected or off-site trees.



#### **EXHIBIT D – TREE IMPACT EXHIBIT AND PROTECTION PLAN**





#### **CONCLUSION AND RECOMMENDATIONS**

Implementation of the Project, including demolition, grading, construction of improvements, and installation of streets and utilities for the proposed new parking, roads (driveways), new entry, buildings and utility changes will likely result in the following:

**Total Offsite Ordinance- Protected trees = 0** 

Removals = 0

Preserve = 0

**Total Onsite Ordinance- Protected trees = 0** 

Removals = 0

Preserve = 0

Total Street trees = 0

Removals = 0

Preserve = 0

**Total Offsite Non-Protected trees = 10** 

Removals = 0

Preserve = 10

**Total Non-Protected trees = 41** 

Removals = 25

Preserve = 16



In my professional opinion, the following Best Management Practices (BMPs), recommendations, and conditions should be implementation:

#### General Recommendations and Best Management Practices:

- 1. Any demolition, digging, excavating, or trenching within the protected zone of any tree to remain shall be monitored by the project arborist.
- 2. Exposed roots to remain should be covered with burlap, carpet remnants or other material that may be kept moist until soil can be replaced.
- 3. This report shall be part of the set of plans given to the contractors. Contractors should be familiar with the specific instructions and responsibilities pertaining to protected trees. It is recommended that a professional arborist be retained and meet with the contractor and his personnel prior to commencement of the project.
- 4. If canopy pruning is found to be necessary for trees to remain, it should only be performed by a qualified ISA Certified Arborist or ISA Certified Tree Worker. Climbing "gaffs" shall not be used by any tree climber except in an emergency to reach an injured climber or when removing a tree.
- 5. Pruning or Removals shall occur outside of the nesting bird season as defined by the California Department of Fish and Wildlife and other jurisdictional agencies. If removals must occur in nesting bird season, biological monitoring should be required.
- 6. If required, a maintenance and monitoring program for mitigation trees will be included in the monitoring and reporting program that will be developed by the project arborist. This program will be developed in coordination with the project landscape architect. At least three (3) years of monitoring for mitigation trees is recommended. The Urban Forestry Division will dictate the actual monitoring period for mitigation trees.
- 7. Equipment, materials, and vehicles shall not be stored, parked, or operated within the protected zones of trees to remain.
- 8. Equipment with overhead exhaust shall not be placed in such a manner as to scorch overhanging branches or foliage. Smaller equipment shall be used in such areas as deemed necessary by the monitoring arborist.
- 9. Five (5) foot high chain link fencing shall be installed as illustrated on the Tree Protection Plan prior to submission of this report to the Urban Forestry Division of the City of Los Angeles (reports may not be deemed complete by the Division if fencing is not in place). Photographs of the fencing should be submitted with the report. When performing their inspection, Urban Forestry requires that the protective fencing be in place.

Please feel welcome to contact me at our Santa Monica office if you have any immediate questions or concerns.

Respectfully submitted,

Cy Carlberg, Registered Consulting Arborist

Principal, Carlberg Associates





This report comprises a total of 64 pages. Reduced copies of graphics are within the report; full-size graphic files have been submitted electronically. Unauthorized separation or removal of any portion of this report deems it invalid as a whole.

Conditions represented in this report are limited to the inventory dates and times. Formal risk assessments were not performed for the purposes of this report. Ratings for health, aesthetics, and structure do not constitute a health or structural guarantee beyond that date and time.

#### **CERTIFICATION OF PERFORMANCE**

I, Cy Carlberg, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report and have stated
  my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the
  Terms of Assignment.
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
- That the analysis, opinions, and conclusions stated herein are my own.
- That my analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.
- That no one provided significant professional assistance to the consultant, except as indicated within the report.
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I further certify that I am a Registered Consulting Arborist and member of the American Society of Consulting Arborists, and that I acknowledge, accept, and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Certified Arborist and Qualified Tree Risk Assessor and have been involved in the practice of arboriculture and the study of trees for over twenty-five years.

Signed:

Date: July 14, 2023

Cy Carlberg
ASCA Registered Consulting Arborist #405
ISA Certified Arborist, WE-0575A

Qualified Tree Risk Assessor CAUFC Certified Urban Forester #013





#### ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees contribute greatly to our enjoyment and appreciation of life. Nonetheless, they are subject to the laws of gravity and physiological decline. Therefore, neither arborists nor tree owners can be reasonably expected to warrant unfailing predictability or elimination of risk.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.





#### LIST OF CONTIBUTORS AND RESUMES OF KEY STAFF

Ms. Cy Carlberg, Principal Ms. Christy Cuba, Senior Arborist

Mr. Scott McAllaster, Staff Arborist and AutoCAD Master

Mr. Daniel Cowell, Staff Arborist, Biologist





### CY CARLBERG CARLBERG ASSOCIATES

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Education B.S., Landscape Architecture, California State Polytechnic University, Pomona, 1985

Graduate, Arboricultural Consulting Academy, American Society of Consulting Arborists, Chicago, Illinois,

February 2002

Graduate, Municipal Forestry Institute, Lied, Nebraska, 2012

Experience Consulting Arborist, Carlberg Associates, 1998-present

Manager of Grounds Services, California Institute of Technology, Pasadena, 1992-1998

Director of Grounds, Scripps College, Claremont, 1988-1992

<u>Certificates</u> Certified Arborist (#WE-0575A), International Society of Arboriculture, 1990

Registered Consulting Arborist (#405), American Society of Consulting Arborists, 2002

Certified Urban Forester (#013), California Urban Forests Council, 2004 Qualified Tree Risk Assessor, International Society of Arboriculture, 2011

#### AREAS OF EXPERTISE

Ms. Carlberg is experienced in the following areas of tree management and preservation:

- · Tree health and risk assessment
- Master Planning
- Historic landscape assessments, preservation plans, reports
- Tree inventories and reports to satisfy jurisdictional requirements
- Expert Testimony
- · Post-fire assessment, valuation, and mitigation for trees and native plant communities
- Value assessments for native and non-native trees
- · Pest and disease identification
- · Guidelines for oak preservation
- Selection of appropriate tree species
- Planting, pruning, and maintenance specifications
- Tree and landscape resource mapping GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation

#### PREVIOUS CONSULTING EXPERIENCE

Ms. Carlberg has overseen residential and commercial construction projects to prevent damage to protected and specimen trees. She has thirty-five years of experience in arboriculture and horticulture and has performed tree health evaluation, value and risk assessment, and expert testimony for private clients, government agencies, cities, school districts, and colleges. Representative clients include:

The Huntington Library and Botanical Gardens The Los Angeles Zoo and Botanical Gardens The Rose Bowl and Brookside Golf Course, Pasadena

Walt Disney Concert Hall and Gardens
The Art Center College of Design, Pasadena

Pepperdine University Loyola Marymount University

The Claremont Colleges (Pomona, Scripps, CMC, Harvey Mudd, Claremont Graduate University, Pitzer, Claremont University Center)

Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)

Getty Trust – Eames House Historic Resources Group Mia Lehrer + Associates The City of Claremont
The City of Beverly Hills
The City of Pasadena
The City of Los Angeles
The City of Santa Monica
Scotta Monica Malibu Linifi

Santa Monica/Malibu Unified School District

San Diego Gas & Electric

Los Angeles Department of Water and Power Rancho Santa Ana Botanic Garden, Claremont Latham & Watkins, LLP (attorneys at law)

Architectural Resources Group AHBE Landscape Architects

Moule and Polyzoides, Architects and Urbanists

#### **AFFILIATIONS**

Ms. Carlberg serves with the following national, state, and community professional organizations:

- California Urban Forests Council, Board Member, 1995-2006
- Street Tree Seminar, Past President, 2000-present
- American Society of Consulting Arborists Academy, Faculty Member, 2003-2005; 2014
- American Society of Consulting Arborists, Board of Directors, 2013-2015
- Member, Los Angeles Oak Woodland Habitat Conservation Strategic Alliance, 2010-present





### CHRISTINE CUBA CARLBERG ASSOCIATES

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Education B.A., Environmental Analysis & Design, Cum Laude, University of California, Irvine, 1993

Graduate, International Society of Arboriculture Certification Study Program, April 1998

Graduate, Consulting Academy, American Society of Consulting Arborists, February 2008

Experience Senior Arborist/Associate, Carlberg Associates, 2011 - Present

Director of Environmental Services & Senior Arborist, Land Design Consultants, Pasadena, 1994 – 2011

Park Specialist/Naturalist, City of Monrovia, 1988-1996

<u>Certificates</u> Certified Arborist, WE-1982A, International Society of Arboriculture, 1998

Registered Consulting Arborist, #502, American Society of Consulting Arborists, 2011

Qualified Tree Risk Assessor, International Society of Arboriculture, 2013

#### **AREAS OF EXPERTISE**

Ms. Cuba is experienced in the following areas of tree management and preservation:

- Tree health & risk assessments
- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Pest and disease identification
- Tree and landscape resource mapping GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Preparation of native habitat and woodland management plans
- Performance of long-term mitigation compliance monitoring & reporting
- Expert testimony

#### PREVIOUS CONSULTING EXPERIENCE

Ms. Cuba has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. She has over 23 of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena San Diego Gas & Electric

City of Monrovia Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)

City of Santa Clarita

City of Glendora

Los Angeles County Fire Department

California Institute of Technology

Mia Lehrer + Associates

Pulte/Centex Homes

The New Home Company

City of South Gate

City of Sierra Madre

Belzberg Architects

Occidental College

Rose Bowl Stadium

Newhall Land and Farming Las Encinas Hospital/Aurora Health Services

KOVAC Design Studio The Claremont Colleges (Pomona College, Claremont University Consortium,

EPT Design Claremont Graduate University)

Pamela Burton & Company Gensler Architects

Chandler School Mesivta of Greater Los Angeles

#### **AFFILIATIONS**

Ms. Cuba serves with the following national and regional professional organizations:

- Member, American Society of Consulting Arborists
- Member, International Society of Arboriculture, Western Chapter
- Member, Los Angeles Oak Woodland Habitat Conservation Strategic Alliance
- Past President (2015), Street Tree Seminar, Inc.





#### **SCOTT MCALLASTER**

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Education B.A., Environmental Studies, University of California, Santa Barbara, 2000

<u>Experience</u> Project Planner & Senior Arborist, Land Design Consultants, Inc.

Pasadena, 1999 - 2014

<u>Certificates</u> Certified Arborist, WE-7011A, International Society of Arboriculture, 2004

Qualified Tree Risk Assessor, International Society of Arboriculture, 2015

#### **AREAS OF EXPERTISE**

Mr. McAllaster is experienced in the following areas of tree management and preservation:

• Tree health & risk assessments

- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Construction monitoring and reporting
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Tree and landscape resource mapping GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Performance of long-term mitigation compliance monitoring & reporting

#### PREVIOUS CONSULTING EXPERIENCE

Mr. McAllaster has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. He has over 17 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena City of Santa Clarita City of Glendora

Los Angeles County Fire Department Los Angeles County Sanitation Districts

Newhall County Water District Pulte/Centex Homes

Newhall Land and Farming E & S Ring, Inc. Hollywood Forever Cemetery Archdiocese of Los Angeles St. John's Hospital, Santa Monica

**Kovac Architects** 

Tim Barber, Ltd., Architects

Ojai Valley Community Hospital

The Kibo Group

El Monte Garden Senior Center

IMT Capital, LLC

San Diego Gas & Electric Corky McMillin Companies City of South Gate

City of Arcadia
D2 Development
Burrtec, Inc.

The Claremont Colleges
The New Home Company
William Carey University
Claremont Golf Course
Universal Hilton
Gensler Architects

Marmol Radziner, Architects

NAC Architecture

Aurora/Signature Health Services Monte Vista Grove Homes Highpointe Communities Claremont University Center

#### **AFFILIATIONS**

Mr. McAllaster serves with the following national and regional professional organizations:

- Member, International Society of Arboriculture, Western Chapter
- Member, Street Tree Seminar, Inc.





#### **EXHIBIT E – DEFINITION OF HEALTH AND STRUCTURE GRADES**

Health and structure ratings of the trees are based on the archetype tree of the same species through a subjective evaluation of its physiological health, aesthetic quality, and structural integrity.

Overall physiological condition (health) and structural condition were rated A-F:

#### Health

- A) Outstanding Exceptional trees of good growth form and vigor for their age class; exhibiting very good to excellent health as evidenced by normal to exceptional shoot growth during current season, good bud development and leaf color, lack of leaf, twig or branch dieback throughout the crown, and the absence of decay, bleeding, or cankers. Common leaf and/or twig pests may be noted at very minor levels.
- B) Above average Good to very good trees that exhibit minor necrotic or physiological symptoms of stress and/or disease; shoot growth is less than reasonably expected, leaf color is less than optimal in some areas, the crown may be thinning, minor levels of leaf, twig, and branch dieback may be present, and minor areas of decay, bleeding, or cankers may be manifesting. Minor amounts of epicormic growth may be present. Minor amounts of fire damage or mechanical damage may be present. Still healthy, but with moderately diminished vigor and vitality. No significant decline noted.
- C) Average Average, moderately good trees whose growth habit and physiological or fire-induced symptoms indicate an equal chance to either decline or continue with good health into the near future. Most of these trees exhibit moderate to significant small deadwood in outer crown areas, decreased shoot growth and diminished leaf color and mass. Some stem and branch dieback are usually present and epicormic growth may be moderate to extensive. Cavities, pockets of decay, relatively significant fire damage, bark exfoliation, or cracks may be present. Moderate to significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it is expected to negatively impact the lifespan of the tree. Tree may be in early decline.
- D) Below Average/Poor trees whose growth habit and physiological or fire-induced symptoms indicate significant, irreversible decline. Most of these trees exhibit significant dieback of wood in the crown, possibly accompanied by significant epicormic sprouting. Shoot growth and leaf color and mass is either significantly diminished or nonexistent throughout the crown. Cavities, pockets of decay, significant fire damage, bark exfoliation, and/or cracks may be present. Significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it has negatively impacted the lifespan of the tree. Tree appears to be in irreversible decline.
- F) Dead or in spiral of decline this tree exhibits very little to no signs of life.

#### **STRUCTURE**

A) Outstanding – Trees with outstanding structure for their species exhibit trunk and branch arrangement and orientation that result in a sturdy form or architecture that resists failure under normal circumstances. The spacing, orientation, and size of the branches relative to the trunk are quintessential for the species and free from defects. No outward sign of decay or pathological disease is present. Some trees exhibit naturally inherent branching defects, like multiple, narrow





points of attachment from one point on the trunk, which would preclude them from achieving an "A" grade.

- B) Above average Trees with good to very good structure for their species. They exhibit trunk and branch arrangement and orientation that result in a relatively sturdy form or architecture that resists failure under normal circumstances, but may have some mechanical damage, over-pruning, or other minor structural defects. The spacing, orientation, and size of the branches relative to the trunk are still in the normal range for the species, but they exhibit a minor degree of defects. Minor, sub-critical levels of decay or pathological disease may be present, but the degree of damage is not yet structurally significant. Trees that exhibit naturally inherent branching defects, like multiple, narrow points of attachment from one point on the trunk, would generally fall in to this category. A small percentage of the canopy may be shaded or crowded, but not in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree.
- C) Average Trees with moderately good structure for their species, but with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a less than sturdy form or architecture, which reduces their resistance to failure under normal circumstances. Moderate levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of some of the branches relative to the trunk are not in the normal range for the species. Moderate to significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A moderate to significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be moderately elevated.
- D) Well Below Average/Poor Trees poor structure for their species and with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a significantly less than sturdy form or architecture, significantly reducing their resistance to failure under normal circumstances. Significant levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of many of the branches relative to the trunk are not in the normal range for the species. Significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be advanced.
- F) Severely Compromised trees with very poor structure and numerous or severe defects due to growing conditions, historical or recent pruning, mechanical damage, history of limb or trunk failures, advanced decay, disease, or severe fire damage. Risk of full or partial failure in the near future appears to be severe.





#### **EXHIBIT F - GLOSSARY OF ARBORICULTURAL & DENDROLOGICAL TERMS**

**Abiotic:** Non-living agents including environmental, physiological, & other nonbiological factors (i.e., aeration or water deficit, mechanical injury, or gas line leak).

Arboriculture: Management of individual trees or groups of trees primarily for their amenity value.

**Basal wound:** A cut or puncture at the base of the trunk of a tree, particularly bad in younger (developing) specimens. Often these wounds are caused by mowers and other gardening equipment and can be prevented by protective staking and the creation of dirt (no turf) surrounding areas - adjacent to the trunk.

Bleeding (from wood): Flow of sap, typically from pruning wounds.

Branch collar: The swelling at the base of a branch, to be left intact in any pruning.

Callus / wound wood: Lignified, partially differentiated tissue which develops from the callus associated with wounds.

Cambium / cambial: Meristematic tissue that gives rise to phloem & xylem.

Canker: An area of dead or malformed bark caused by a pathogen.

**Canopy:** A term used for the crown or spread of a tree's branches to emphasize its size and enclosing character. Parts of the tree above the trunk, including scaffold limbs, lateral branches, twigs, and leaves.

The canopy spread is often measured in feet.

*Cavity:* A void in a tree trunk, branch or root that may or may not be open to the exterior, generally created by decay. Over many years the wound may become entirely grown over (occluded) while the decay progresses within.

Co-dominant stems: Branches and stems that are nearly equal in size and relative importance

**Compartmentalization:** A form of defense in woody plants, in which barriers resistant to invasion by pathogens or wood decay fungi are laid down while the wood is living (sapwood), and which continue to act passively once the wood is incorporated into heartwood.

**Conifer:** A botanical definition embracing trees with cones (ie. seeds not formed within ovaries), mostly with needle-like or scale-like leaves and mostly evergreen. Sometimes conifers are called 'softwoods'.

*Crotch*: Where two branches of a tree intersect. A narrow crotch arise at an acute (narrow) angle, as when both branches are close to the vertical. The union is relatively weak if there is included bark.

Crown: The branches, twigs and foliage of a tree, considered collectively.

**Crown thinning, crown reduction and crown raising:** Crown thinning removes branches from the crown without reducing the extent of the crown. Crown reduction decreases the extent of the crown without decreasing its density. Crown raising increases the headroom to the base of the canopy by removing lower branches.

Crown cleaning: The removal of dead, dying, damaged or diseased wood from the crown of a tree.

**Deadwood:** In the growth and development of a tree, branches compete with each other and weaker branches are eventually suppressed and die. The deadwood is then liable to fall (sometimes called 'natural pruning'). Deadwood develops naturally, largely in the inner and lower crown, of all trees that are mature and unmanaged.

**Decay:** The progressive degradation of woody tissues caused by specialized fungi & bacteria through decomposition of cellulose & lignin. The pathogen typically enters through wounds in the roots (root rots), main stem or branches (butt and stem rots) and can then extend internally, over a timescale of years or decades, longitudinally or horizontally.

**Deciduous:** Leaves are lost in winter, as opposed to evergreen.

**Diameter at breast height (dbh):** The diameter of a tree measured at height 4.5 feet above natural grade. Typically used as a representation of tree size.





**Dieback:** Death of shoots or roots starting at the extremities.

Dripline: The outermost edge of the tree's canopy. When depicted on a map, the dripline will appear as an irregular shape that follows the contour of the tree's branches as seen from overhead.

Epicormic shoots: Shoots arising from the base of a tree, its trunk or main framework branches, from buds dormant more than one season. May be stimulated by pruning (which increases the light reaching the lower part of the tree), or indicative of damage or decline in the upper crown.

Evergreen: Foliated throughout the year (although there is a gradual turnover of leaves).

Flush cut; A pruning cut that removes the branch collar and/or part of the branch ridge, slowing the occlusion of the wound or damaging its compartmentalization.

Framework: Typically, the main branches (sometimes also called scaffold branches), each of which supports a significant portion of the crown. They largely determine the shape of the tree's crown depending on their height of origin, orientation etc. There is no precise distinction between framework branches and other lesser branches.

Gall: Abnormal growth of leaves, buds, stems etc. in reaction to the presence of an intrusive parasite, often an insect or mite.

Girdle/girdling: Damage that kills the bark all the way round the stem; such as caused by wires or ties that were never removed when the tree was young. That which circles & constricts the stem or roots causing death of phloem &/or cambial tissue.

Habit (growth habit): Giving a tree its characteristic form, for example owing to the stoutness and orientation (fastigiated, ascending, spreading, pendulous, weeping etc.) of a tree's branches.

Hanger: Dead branch fallen from the crown but caught by, and resting on, branches lower down, which be liable to fall.

*Heart rot:* Decay in the center of the tree (heartwood).

Included bark: Areas of bark on adjacent parts of a tree, typically on the inner faces of a narrow fork, which becomes grown over to occupy part of the internal joint. The bark-to-bark contact is weaker than the more usual woody union.

Lateral branch / limb: The next order of branch that rises from the scaffold limbs.

**Leader:** The topmost vertical shoot of a tree, present if the tree has strong apical dominance, characteristic of young trees and conifers. Trees with a rounded crown have no leader.

Mulch: a material (such as decaying leaves, bark, or compost) spread around or over a plant to enrich or insulate the soil.

Parasite: An organism that exploits another, e.g., for food, to the prejudice of the host. Parasites may kill their hosts, be pathogenic or have little significant effect.

Pathogen: A kind of parasite that causes disease.

Phloem: A transport tissue characterized by sieve tubes and companion cells, found the vascular bundles of higher plants. Functions in the transport of dissolved organic substances by translocation.

Photosynthesis: The chemical process by which chlorophyll-containing plants use light to convert carbon dioxide and water into carbohydrates, releasing oxygen as a by-product.

**Pruning:** The cutting off or cutting back of shoots or branches from a tree, whether to direct growth (formative pruning), make safe, to remove an obstructing or diseased part, to increase longevity (veteran trees), to maintain productivity (fruit trees) etc.

Root crown /collar / Root flare: The outwardly curving base of a tree where it joins the roots, often distinguishable as individual root buttresses.





**Root crown inspection:** Extensive examination of the junction of root & stem, including the area immediately below, aimed at determining stability, presence of disease, decay, etc.

**Root plate:** The area needed by a tree's root system to keep the tree stable; broadly, that part of the root system displaced when a tree is uprooted.

**Root zone**: The area of ground around the base of a tree that supports root growth; often extends far beyond the dripline of a tree.

Scaffold branch / limb: The first order of limbs or branches that arise from the trunk of a tree.

**Soil:** A mixture of mineral particles, often of various sizes due to weathering, roots and other living things, soil organic matter and the associated voids (pores) filled with air and/or water.

**Soil aeration**: The movement of gases in soil, primarily by diffusion through the soil pores. For example, oxygen diffuses from the atmosphere to the vicinity of the plant root while carbon dioxide diffuses in the opposite direction. The rate of diffusion is related to the proportion of the soil volume that contains air

**Soil compaction**: An increase in bulk density due to the pressure exerted by animals, vehicles, (locally) by root growth *etc.* Pore space is reduced, which may also restrict soil aeration, water infiltration and drainage.

**Soil structure:** The aggregation of soil particles into clumps (peds) of various shapes and the associated spaces between them, affecting many properties of soil including its porosity to air and water, and its fertility.

**Soil texture:** The size of the mineral particles in the soil, classified (from fine to coarse) as clay, silt, sand, gravel or stones, or some mixture of these to give a characteristic particle size distribution. Sandy soils give a light texture, clayey soils give a heavy texture.

**Stub:** That part of a pruned branch protruding beyond the branch collar. It is not good practice to leave stubs since they impede occlusion and are prone to decay.

Suckers: Shoots arising from the roots of a tree, which can arise surprisingly far from the parent.

Target: A target is the subject of injury or damage within range of a tree hazard

**Topping:** A kind of pruning in which the branches of a tree are all decapitated to reduce the tree to a specific height. An indiscriminate form of pruning not regarded as good practice, to which some trees, such most conifers, are intolerant.

**Training:** To change the shape of a tree by means other than (formative) pruning, typically by tying young branches into a particular position.

Transpiration: Loss of water vapor from the surface of leaves & other aboveground parts of the plant.

*Vigor / vigorous*: Overall health; the capacity to grow & resist physiological stress.





#### **EXHIBIT G - LIST OF ACRONYMS**

ANTH - Anthracnose disease

BT - brown trunk - commonly used to measure palm tree trunk heights instead of diameters; it excludes the palm head, or canopy

CANK - canker - an area of dead tissue; can be caused by sunburn or disease

**CLPD** – common leaf pests and diseases (usually subcritical and non-lethal to tree)

**COD** – codominant stems or trunks – similar diameter trunks or stems arising from the same point of origin – can be a defect depending on the angle of attachment

Compass directions - N=north, E=east, S=south, W=west

**DBH** – Diameter at breast height (4 ft. 6 in. from grade) – a standard forestry term / protocol used for measuring tree trunk diameter

DSH - Diameter Standard Height - same as DBH but politically correct without the reference to breasts

**DN** – drippy nut (acorn) disease (common and non-lethal bacterial infection of acorns)

**DW** - dead wood

EG - epicormic growth - usually stress-induced growth that originates from previously dormant buds located on trunks or branches

GR - girdling root - can cause structural instability

HOB - history of breakage - usually refers to branches, not twiggy growth

HR - heart rot - decay of the heartwood

**H2O** – water or irrigation

IB - included bark - can cause structurally weak attachments

LCR-live crown ratio-a ratio of canopy foliage to bare trunk-informs structural grade, as low LCR can increase likelihood of failures

Lerp psyllid / Tipu psyllid - sap sucking insects

Lg - large

MBA - multiple branch attachments - can be a structural defect

Mech. Dam or MD - mechanical damage

MPE – multiple pruning events – can lead to reduced structural integrity based on secondary growth characteristics

P/D - pest/disease

**PP** – poor pruning – usually refers to stub cuts, flush cuts, excessive thinning, topping, etc.

**Prune/DPR-QA** - prune out dead/infested/diseased portion(s) & consult a licensed Department of Pesticide Regulation Qualified Applicator for potential chemical pest/disease treatments

RRD - root rot disease

**SB** – sycamore borer – a clear-winged moth that lays eggs on the bark of trees (mostly sycamore and oak species) – larvae burrow and feed in bark layer, usually non-damaging to tree

SS – stump sprouts – epicormic growth that arises from cut trunks – can originate from the remaining trunk tissue or the root crown

T - trunk

TG – Twig girdler – a stem girdling insect (this condition may also be noted under the umbrella of 'CLPD'

**Topping cuts** – refers to the substandard practice of arbitrarily pruning with no regard to lateral branch points; can include excessive and disfiguring pruning

WW - wound wood - callus tissue growing over a wound

Xylella = suspected bacterial infection with Xylella fastidiosa





#### **EXHIBIT H – TREE INVENTORY FIELD DATA**

THE FOLLOWING SHEETS ARE 11" X 17"





Street Tree / Off Site (ST, OS)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm- like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove)	Reason for Removal	Replacement Ratio
	1	fern pine	Afrocarpus falcatus	14			35	6	20	0	0	В	B-			Р	tree has been removed	Removed	Demolition Permit	
	2	fern pine	Afrocarpus falcatus	14.5			35	3	18	13	5	A-	B-			Р	tree has been removed	Removed	Demolition Permit	
	3	queen palm	Syagrus romanzoffiana		18' BT		28	10	10	10	10	A-	А			Р	tree has been removed	Removed	Demolition Permit	
	4	queen palm	Syagrus romanzoffiana		18' BT		28	12	12	12	12	A-	А			Р	tree has been removed	Removed	Demolition Permit	
	5	fern pine	Afrocarpus falcatus	8.5			30	1	4	4	4	A-	B-			Р	tree has been removed	Removed	Demolition Permit	
	6	silver dollar gum	Eucalyptus polyanthemos	20 sprouts under 1"		Х	8	6	6	4	4	В	В			Р	tree removed by neighbor, now only SS	Remove	Development	
	7	silver dollar gum	Eucalyptus polyanthemos	20 sprouts under 1"		Х	8	6	6	4	4	В	В			Р	tree removed by neighbor, now only SS	Remove	Development	
	8	silver dollar gum	Eucalyptus polyanthemos	15 sprouts under 1"		Х	8	6	6	3	3	В	В			Р	tree removed by neighbor, now only SS	Remove	Development	
	9	silver dollar gum	Eucalyptus polyanthemos	15 sprouts under 1"		Х	8	7	7	7	7	В	В			Р	tree removed by neighbor, now only SS	Remove	Development	
	10	lemon-scented gum	Corymbia citriodora	N/A												Р	tree has been removed  – no stump sprouts existing – neighbor removed	Removed	Development	
	11	silver dollar gum	Eucalyptus polyanthemos	12 sprouts under 1"		х	7	5	4	2	2	В	В			Р	tree removed by neighbor, now only SS	Remove	Development	
	12	silver dollar gum	Eucalyptus polyanthemos	15 sprouts under 1"		х	10	5	5	2	2	В	В			Р	tree removed by neighbor, now only SS	Remove	Development	



Street Tree / Off Site (ST, OS)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm- like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove)	Reason for Removal	Replacement Ratio
	13	silver dollar gum	Eucalyptus polyanthemos	10 sprouts under 1"		Х	8	9	11	4	4	В	В			Р	tree removed, now only SS	Removed	Demolition Permit	
	14	lemon-scented gum	Corymbia citriodora	1		х	14	5	2	2	0	В	В			Р	tree removed, now only SS	Removed	Demolition Permit	
	15	silk oak	Grevillea robusta	13.9			40	10	10	15	13	A-	С			Р	tree behind temporary fencing	Remove	Demolition Permit	
	16	Indian laurel fig	Ficus microcarpa	15.6			45	5	13	15	6	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Remove	Development	
	17	Indian laurel fig	Ficus microcarpa	14.4			45	4	13	7	3	А	A			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	18	Indian laurel fig	Ficus microcarpa	17.9			45	2	10	25	21	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	19	Indian laurel fig	Ficus microcarpa	12.3			45	2	10	4	10	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	20	Indian laurel fig	Ficus microcarpa	11.3			45	4	15	3	3	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	21	Indian laurel fig	Ficus microcarpa	15.3			45	6	7	10	25	A	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	22	Indian laurel fig	Ficus microcarpa	9.5			40	3	15	4	0	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	23	Indian laurel fig	Ficus microcarpa	10.6			40	5	5	7	5	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	24	Indian laurel fig	Ficus microcarpa	10.5			40	4	4	6	6	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		



Street Tree / Off Site (ST, OS)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm- like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove)	Reason for Removal	Replacement Ratio
	25	Indian laurel fig	Ficus microcarpa	10.3			40	3	4	4	15	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve		
	26	Indian laurel fig	Ficus microcarpa	N/A												Р	tree has been removed	Removed	Demolition Permit	
	27	Indian laurel fig	Ficus microcarpa	N/A												Р	tree has been removed	Removed	Demolition Permit	
	28	Indian laurel fig	Ficus microcarpa	13.8, 4.8			40	7	3	7	15	А	А			Р	~2-3 feet from PL in planter; raised but otherwise not heavily pruned	Preserve	Demolition Permit	
	29	holly oak	Quercus ilex	4.1, 6.4			20	12	4	0	8	А	В			Р	~10 feet from neighboring bldg., downslope from trash enclosure; codominant stems	Preserve		
	30	silk oak	Grevillea robusta	18.6			40	8	15	20	10	А	В			Р	codominant stems; first in row of trees in the NW corner of the property	Remove	Development	
	31	silk oak	Grevillea robusta	16.4			40	15	10	14	9	Α-	B-			Р	codominant stems; history of breakage; minor deadwood	Remove	Development	
	32	silk oak	Grevillea robusta	10			30	12	10	10	0	В	B-			Р	history of breakage; unbalanced crown	Remove	Development	
	33	silk oak	Grevillea robusta	14.2			40	16	8	14	12	В	В			Р	codominant stems	Preserve		
	34	silk oak	Grevillea robusta	12.9			40	13	10	15	8	A	В			Р	history of breakage; codominant stems	Remove	Development	
	35	silk oak	Grevillea robusta	17.3			35	10	10	11	10	A	B+			Р	codominant stems at top	Remove	Development	
	36	silk oak	Grevillea robusta	13.7			35	14	11	15	15	А	В			Р	history of breakage; codominant stems	Remove	Development	

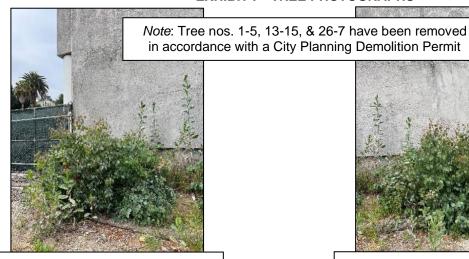


Street Tree / Off Site (ST, OS)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm- like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove)	Reason for Removal	Replacement Ratio
OS	37	silk oak	Grevillea robusta	11.1			35	4	1	15	8	A-	В			Р	multiple branch attachments; codominants; low live crown ratio	Preserve		
OS	38	silk oak	Grevillea robusta	21.2			40	18	15	15	15	Α	B+			Р	history of breakage; pruned; stub cuts on lower trunk	Preserve		
os	39	silk oak	Grevillea robusta	16.9			40	14	9	12	13	А	В			Р	codominants with included bark; history of breakage	Preserve		
OS	40	silk oak	Grevillea robusta	12.8			35	15	11	16	10	Α	В			Р		Preserve		
OS	41	silk oak	Grevillea robusta	21.8			40	9	11	13	10	А	A-			Р	small twig breakage	Preserve		
OS	42	silk oak	Grevillea robusta	10.3			30	15	4	5	14	В	В			Р		Preserve		
OS	43	silk oak	Grevillea robusta	21.7			40	7	5	25	14	А	С			Р	large codominant branch break; multiple branch attachments	Preserve		
OS	44	silk oak	Grevillea robusta	15			40	15	10	12	15	A-	В			Р	shaded-out	Preserve		
OS	45	silk oak	Grevillea robusta	19.5			35	10	4	12	12	А	В			Р	shaded-out	Preserve		
OS	46	silk oak	Grevillea robusta	33.1			40	30	20	18	22	А	С			P	large codominant scaffold; history of breakage; last in row of trees in NE corner of property	Preserve		
	47	Indian laurel fig	Ficus microcarpa	10, 7, 5			30	12	14	12	12	A	В			Р	trump growing against fence on the property, multiple additional SS at base along fenceline	Remove	Development	
	48	Chinese elm	Ulmus parvifolia	1.3		Х	12	6	7	7	7	Α	A-			N	SS volunteer along fenceline on the property, additional trunks under one inch	Remove	Development	

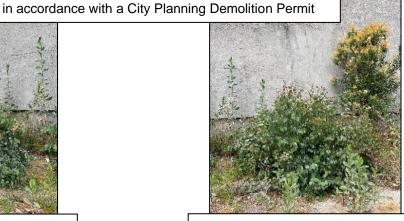


Street Tree / Off Site (ST, OS)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm- like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove)	Reason for Removal	Replacement Ratio
	49	glossy privet	Ligustrum lucidum	1.4		x	14	5	5	3	3	А	A-			Р	adjacent to existing structure on E side	Remove	Development	
	50	glossy privet	Ligustrum lucidum	1		х	14	5	5	3	3	Α	A-			Р	adjacent to existing structure on E side	Preserve		
	51	glossy privet	Ligustrum lucidum	1, 1		x	10	4	4	3	3	A	A-			Р	adjacent to existing structure on E side	Remove	Development	
	52	glossy privet	Ligustrum lucidum	1.2		х	12	5	5	3	3	А	A-			Р	adjacent to existing structure on E side	Preserve		
	53	glossy privet	Ligustrum lucidum	1.2		х	10	4	4	3	3	А	A-			Р	adjacent to existing structure on E side	Remove	Development	
	54	Southern California black walnut	Juglans californica	1		х	8	7	6	4	4	А	A-			N	adjacent to existing structure on E side	Remove	Development	
	55	coast live oak	Quercus agrifolia	3.6		х	14	10	5	5	9	А	B+			N	shaded out, on slope	Preserve		
	56	Indian laurel fig	Ficus microcarpa	10.6, 4.6			25	10	10	8	9	А	В			Р	in between temporary fencing and PL	Remove	Development	
	57	shamel ash	Fraxinus uhdei	3.9		Х	20	4	10	7	7	A-	B-			N	on fenceline	Remove	Development	
	58	shamel ash	Fraxinus uhdei	2.9		х	20	4	12	6	4	A-	B-			N	on fenceline	Remove	Development	
	59	silk oak	Grevillea robusta	3.4		Х	22	8	7	7	8	A	В			N	volunteer on fenceline	Preserve		

#### **EXHIBIT I - TREE PHOTOGRAPHS**



Tree 6 – Eucalyptus polyanthemos facing southwest



Tree 7 – Eucalyptus polyanthemos facing west



Tree 8 – Eucalyptus polyanthemos facing west



Tree 9 – Eucalyptus polyanthemos facing west



Facing southwest, showing the sprouts from the trees that were removed by the building's owner (nos. 6-12)





Tree 11 – Eucalyptus polyanthemos facing west



Tree 13 – Eucalyptus polyanthemos facing west



Tree 12 – Eucalyptus polyanthemos facing west



Tree 14 – Corymbia citriodora facing south



Tree 15 – *Grevillea robusta* facing northeast



Tree 28 – Ficus microcarpa facing north



Trees 16-25 (right to left) – Ficus microcarpa facing north



Trees 29-36 (right to left) – *Grevillea* robusta facing northeast





Trees OS37-OS46 (right to left) – *Grevillea robusta* facing northeast



Tree 48 - Ulmus parvifolia facing east



Tree 47 – Ficus microcarpa facing north



Tree 49 – *Ligustrum lucidum* facing





Tree 50 – *Ligustrum lucidum* facing east



Tree 52 – *Ligustrum lucidum* facing east



Tree 51 – *Ligustrum lucidum* facing east



Tree 53 – *Ligustrum lucidum* facing east



Tree 54 – Juglans californica facing east



Tree 56 – *Ficus microcarpa* facing northeast



Tree 55 – Quercus agrifolia facing northeast



Tree 57-58 (left to right) – Fraxinus uhdei facing north





Tree 59 – *Grevillea robusta* facing northwest



Facing north/northwest, showing tree nos. 47 (foreground) and 16-25 in the background. The grade will be raised where it was lowered to provide additional planting area and soil volume for the existing trees.



#### **EXHIBIT J - TREE LEAF PHOTOGRAPHS**



Chinese elm (Ulmus parvifolia)





### coast live oak (Quercus agrifolia)





glossy privet (Ligustrum lucidum)





### holly oak (Quercus ilex)





Indian laurel fig (Ficus microcarpa 'Nitida')

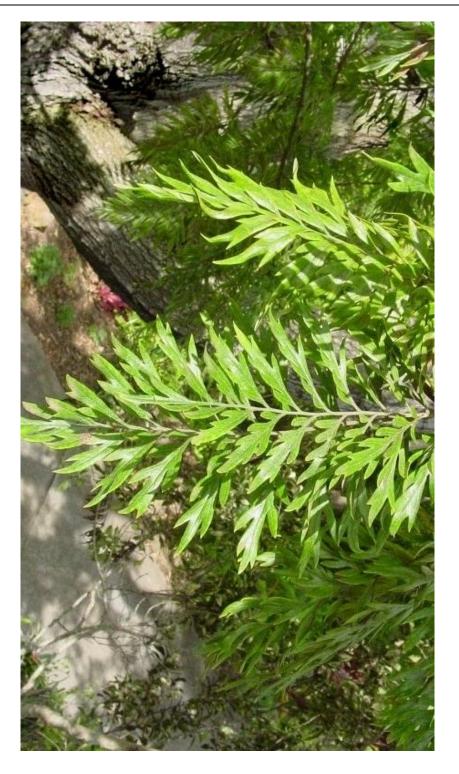




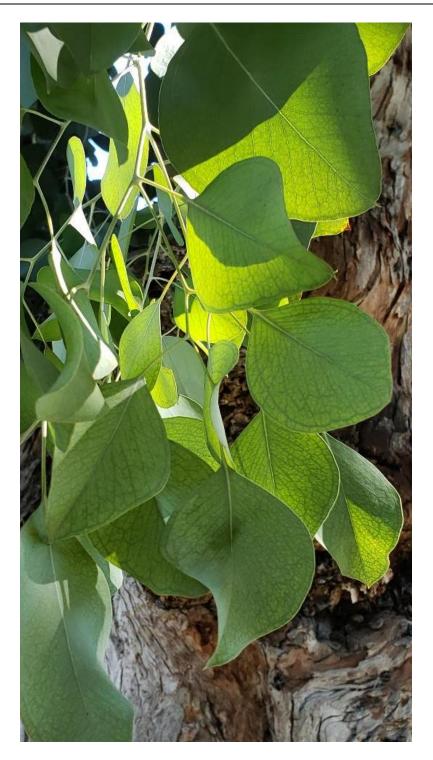
lemon-scented gum (Corymbia citriodora)



shamel ash (Fraxinus uhdei)



silk oak (Grevillea robusta)



silver dollar gum (Eucalyptus polyanthemos)





Southern California black walnut (Juglans californica)





## **EXHIBIT K - BIBLIOGRAPHY OF GENERAL REFERENCES USED TO PREPARE THE DOCUMENT**

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# **APPLICATIONS**



# TREE DISCLOSURE STATEMENT

Los Angeles City Planning | CP-4067 [06.02.2022]

Los Angeles Municipal Code (LAMC) Section 46.00 requires disclosure and protection of certain trees located on private and public property, and that they be shown on submitted and approved site plans. Any discretionary application that includes changes to the building footprint, including demolition or grading permit applications, shall provide a Tree Disclosure Statement completed and signed by the Property Owner.

If there are any protected trees or protected shrubs on the project site and/or any trees within the adjacent public right-of-way that may be impacted or removed as a result of the project, a Tree Report will be required, and the field visit must be conducted by a qualified Tree Expert.

Property A	ddress: _	4260 N. Arch Drive, Los Angeles, CA 91604
Date Of Fie	eld Visit:	June 29, 2023
Does the pr	roperty coi	ntain any of the following protected trees or shrubs?
□ <b>Y</b>	es (Mark	any that apply below)
	or any of Souther Western Californ Mexicar	cluding Valley Oak (Quercus lobota) and California Live Oak (Quercus agrifolia) other tree of the oak genus indigenous to California, but excluding the Scrub Oak in California Black Walnut (Juglans californica) in Sycamore (Platanus racemosa) ia Bay (Umbellularia californica) in Elderberry (Sambucus mexicana) Heteromeles arbutifolia)
☑ N	lo Note	e: There is one undersize coast live oak and one undersize southern California black walnut
Does the pr	operty co	ntain any street trees in the adjacent public right-of-way?
□ <b>Y</b>	es 🖪	2 No
	hes or mo	ur within the Mt. Washington/Glassell Park Specific Plan Area and contain any ore diameter at 4.5 feet above average natural grade at base of tree and/or is neight?
□ <b>Y</b>	es 🖸	2 No



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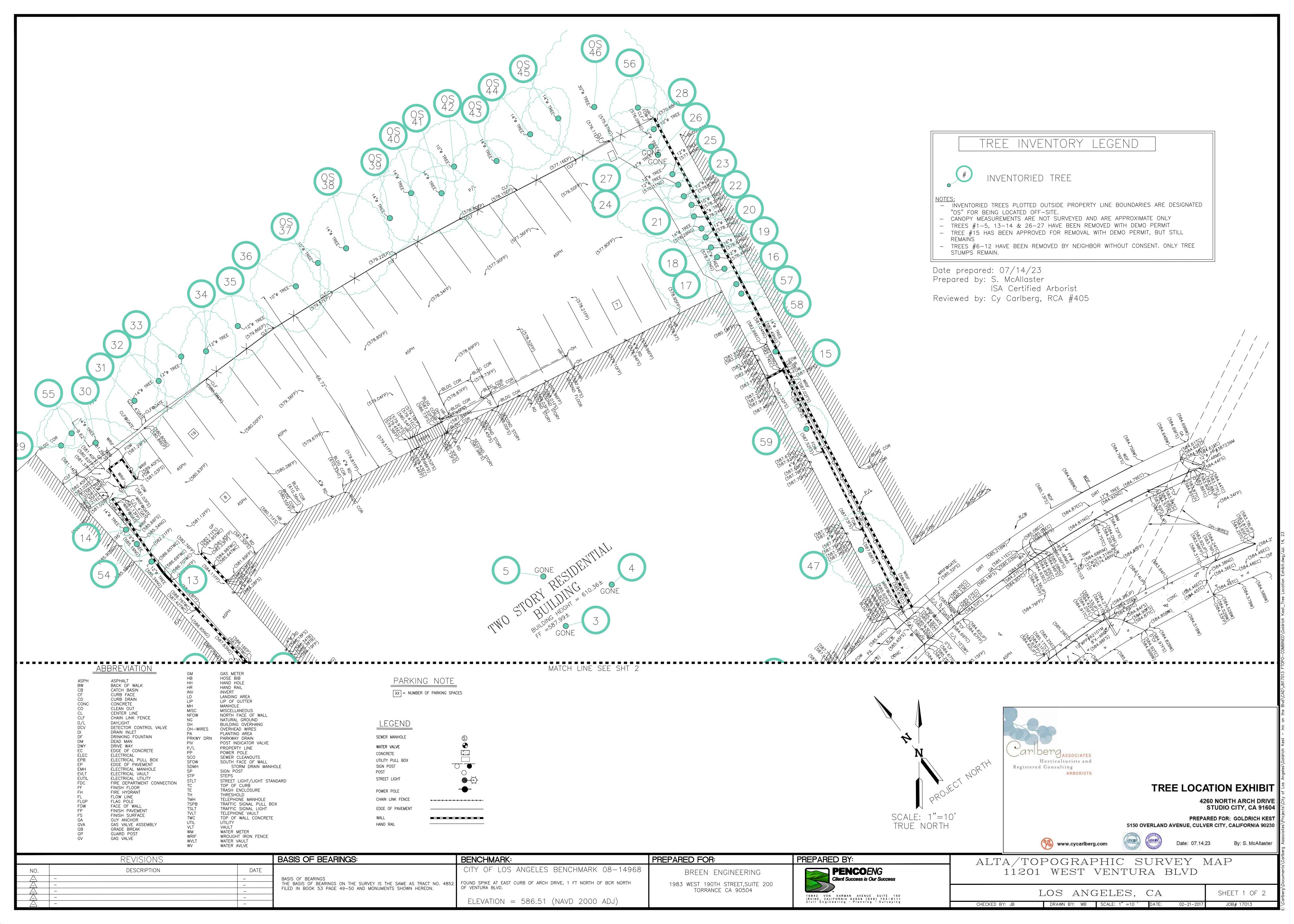


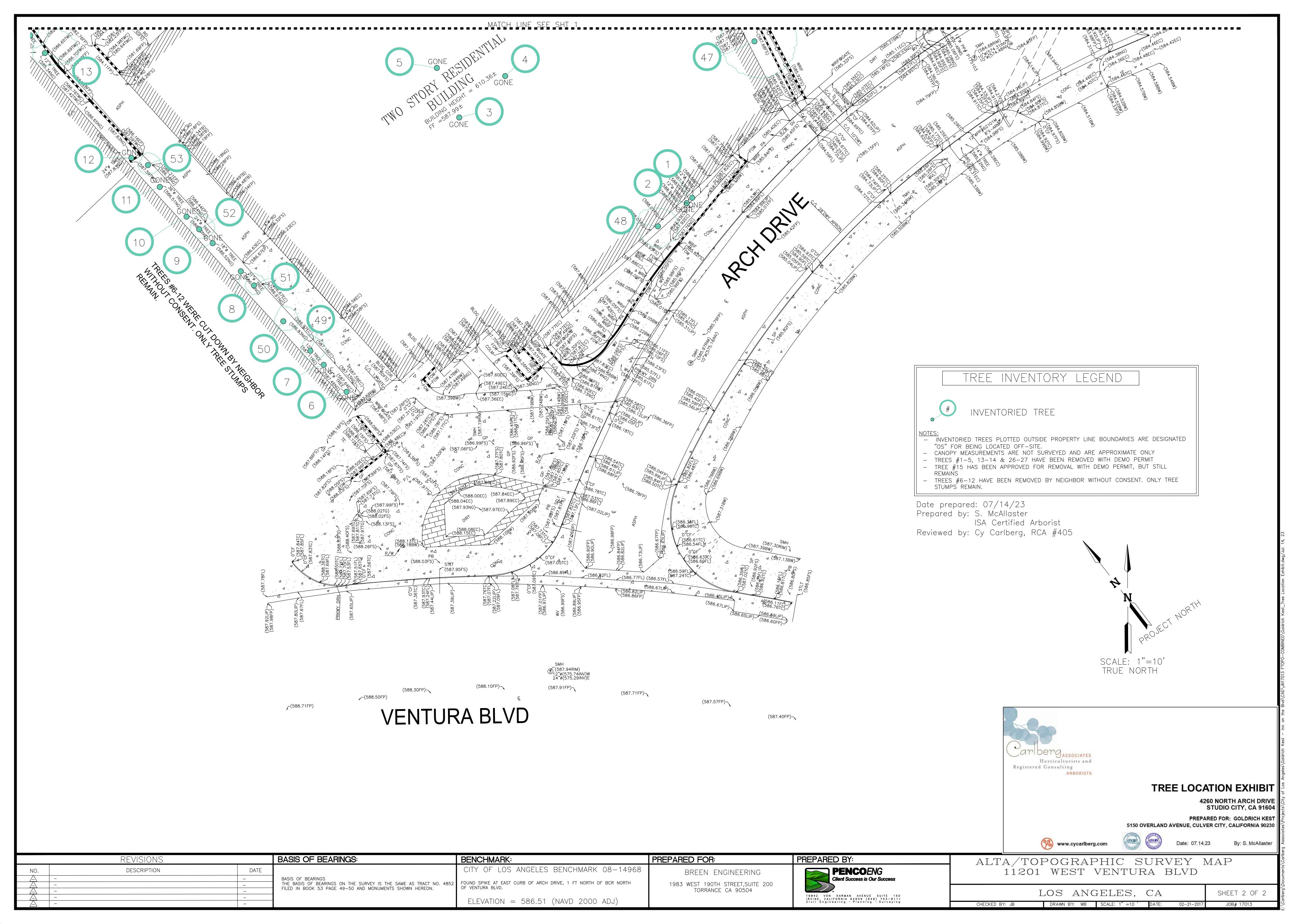
Does the project occur within the Coastal Zone and contain any of the following trees?
☐ Yes (Mark any that apply below)
<ul><li>□ Blue Gum Eucalyptus (Eucalyptus globulus)</li><li>□ Red River Gum Eucalyptus (Eucalyptus camaldulensis)</li><li>□ Other Eucalyptus species</li></ul>
☑ No
Tree Expert Credentials (if applicable)
Name of Tree Expert: Cy Carlberg, ISA Certified Arborist and ASCA Registered Consulting Arborist
Mark which of the following qualifications apply:
<ul> <li>Certified arborist with the International Society of Arboriculture who holds a license as an agricultural pest control advisor</li> </ul>
☐ Certified arborist with the International Society of Arboriculture who is a licensed landscape architect
Registered consulting arborist with the American Society of Consulting Arborists
ISA Certified Arborist # 0575A; Registered Consulting Arborist #405  Certification/License No.:
Owner's Declaration
I acknowledge and understand that knowingly or negligently providing false or misleading information
in response to this disclosure requirement constitutes a violation of the Los Angeles Municipal Code Section 46.00, which can lead to criminal and/or civil legal action. I certify that the information provided on this form relating to the project site and any of the above biological resources is accurate to the best of my knowledge.
Name of the Owner (Print)
Owner Signature Date

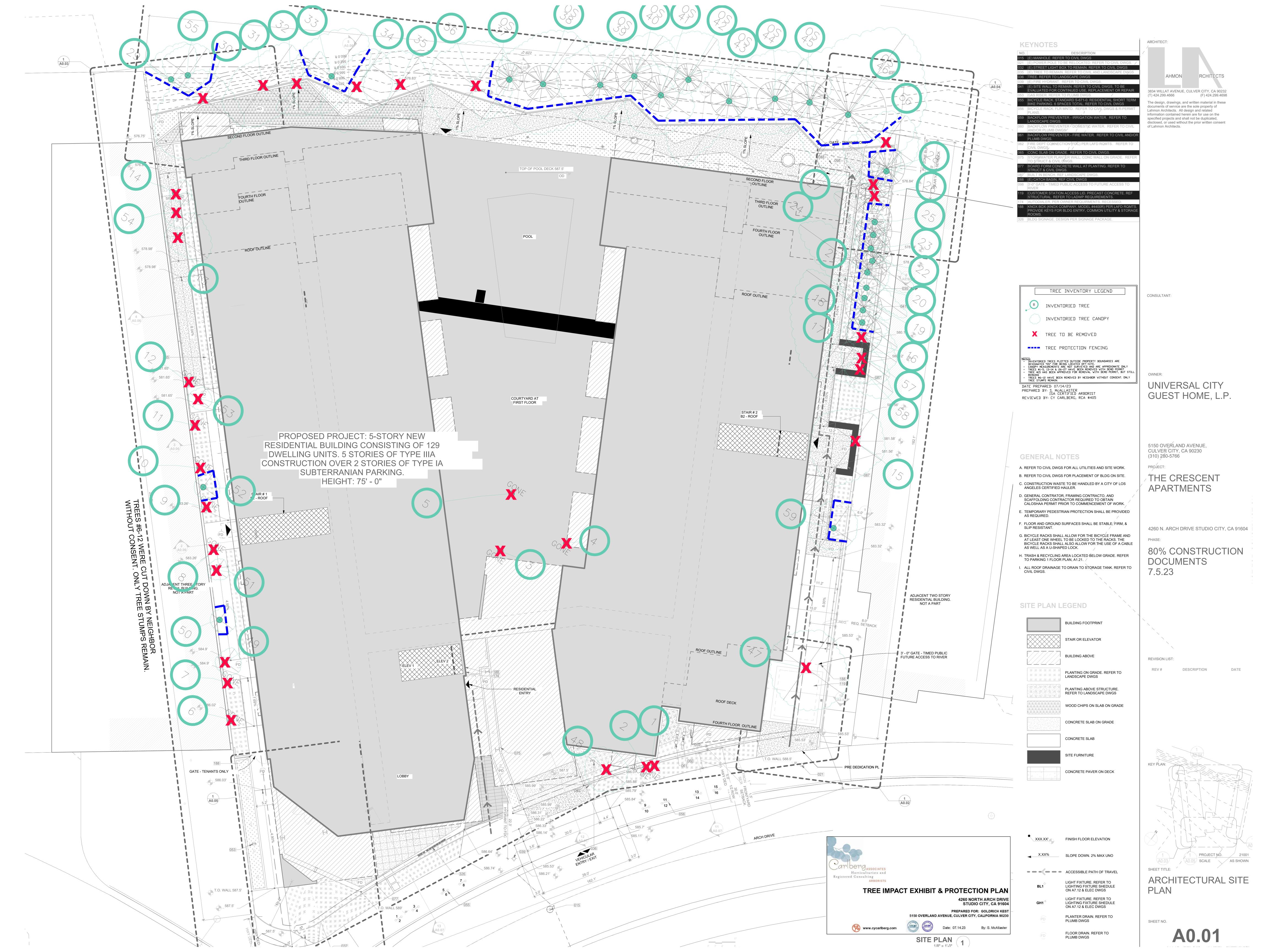


Page 2 of 2

Los Angeles City Planning | CP-4067 [06.02.2022]







# Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA Exhibit C3 to the Staff Report

# **CITY OF LOS ANGELES**

INTER-DEPARTMENTAL CORRESPONDENCE

4260 Arch Drive/11201 Ventura Boulevard LADOT Case Nos. VEN22-110828 & VEN20-109071 LADOT Project ID Nos. 53606 & 49258

Date: June 23, 2022

To: Susan Jimenez, Administrative Clerk

Department of City Planning

From: Vicente Cordero, Transportation Engineer

Department of Transportation

Subject: TRANSPORTATION IMPACT ASSESSMENT FOR THE PROPOSED MULTI-FAMILY

RESIDENTIAL PROJECT AT 4260 ARCH DRIVE/11201 VENTURA BOULEVARD (CPC-

2021-10345-DB-SPP-SPR-VHCA/ENV-2021-10346-EAF)

The Department of Transportation (LADOT) has reviewed the transportation assessment prepared by Overland Traffic Consultants, Inc., dated April 2022, for the proposed multi-family residential development located at 4260 Arch Drive/11201 Ventura Boulevard in the Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass Community Planning Area of the City of Los Angeles. LADOT previously issued revised traffic assessment reports for a mixed-use project for this site dated January 6, 2020, and February 14, 2020. The previously approved mixed-use project consisted of 106 apartment units and 1,201 square feet of commercial space. No significant traffic impacts were identified in the prior reviews of this Project site. The purpose of this new traffic analysis is to evaluate the Project change to 129 apartment units with no commercial use. On July 30, 2019, pursuant to Senate Bill (SB) 743 and the recent changes to Section 15064.3 of the State's California Environmental Quality Act (CEQA) Guidelines, the City of Los Angeles adopted vehicle miles traveled (VMT) as the criteria by which to determine transportation impacts under CEQA. Based on the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), the proposed project would not result in a significant transportation impact on VMT as described below.

## **DISCUSSION AND FINDINGS**

## A. Project Description

The Project proposes to construct a 4-story building with 112 market-rate apartment units and 17 affordable housing units. The existing 76-room assisted living facility, which has been vacant since 2018, would be demolished and replaced as part of the Project design. The Project would provide a total of 146 automobile parking spaces and 116 bicycle parking spaces. Access to the Project would be provided via one new full-access driveway on Arch Drive. The Project is anticipated to be completed in the Year 2025.

## B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020,

to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline. The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at any freeway off-ramp will not exceed 25 peak hour trips. Therefore, a freeway ramp analysis is not required. Furthermore, the Project would not result in a significant safety impact and no corrective measures at any freeway off-ramps would be required.

# C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool Version 1.3, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition as well as applying trip generation adjustments when applicable. This trip generation adjustment is based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project does exceed the net 250 daily vehicle trips threshold. A copy of the VMT Calculator summary report is provided in **Attachment A**. Additionally, the analysis included further discussion of the CEQA transportation impact thresholds:

# 1. Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies

The transportation assessment evaluated the proposed project for conformance with the adopted City's transportation plans and policies for all travel modes. According to the analysis, the Project does not obstruct or conflict with the City's development policies and standards for the transportation system. Therefore, no Project or cumulative significant transportation impact was identified for this threshold.

# 2. Threshold T-2.1: Causing Substantial Vehicle Miles Traveled

Using the VMT Calculator, the assessment determined that the project would generate a 627 net increase in DVT and a 4,921 net increase in daily VMT, therefore further analysis was required. The analysis concluded that the project would not result in a significant VMT impact as discussed below under Section D, CEQA Transportation Analysis.

# 3. Threshold T-3: Substantially Increasing Hazards Due To a Geometric Design Feature or Incompatible Use

The project does not involve any design features that are unusual for the area or any incompatible use.

# D. CEQA Transportation Analysis

The new LADOT Transportation Assessment Guidelines (TAG) provide instructions on preparing transportation assessments for land use proposals and define the significant impact thresholds. The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita, and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven Area Planning Commission (APC) areas in the City. For the South Valley APC area, in which the project is located, the following threshold has been established:

Daily Household VMT per Capita: 9.4

Daily Work VMT per Employee: 11.6

As cited in the VMT analysis report prepared by Overland Traffic Consultants, Inc., the VMT generated by the project with proposed mitigation results in 8.6 Household VMT per Capita, Work VMT per Employee is not applicable due to the nature of the Project. These results are acceptable for the South Valley APC; therefore, it is concluded that the implementation of the proposed project will **not** result in a significant VMT impact.

# E. Access and Circulation

During the preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land-use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed.

In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed development will not likely result in adverse circulation conditions at several locations. The access and circulation analysis included a delay study of the following intersections using the Highway Capacity Manual (HCM) methodology, which calculates the amount of delay per vehicle, based on the intersection traffic volumes, lane configurations, and signal timing:

- Ventura Boulevard and Vineland Avenue
- Ventura Boulevard and Campo de Cahuenga/ Riverton Avenue
- Ventura Boulevard and Tujunga Avenue
- Ventura Boulevard and Lankershim Boulevard

LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the tables for Delay and Level of Service analysis that summarizes these potential deficiencies is provided as **Attachment B** to this report.

# **PROJECT REQUIREMENTS**

# A. CEQA - Related Requirements

The following Transportation Demand Management (TDM) strategies are proposed as part of the project in the VMT evaluation:

 Bike Parking - This strategy involves implementation of short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations under existing LAMC regulations applicable to the Project (LAMC Section 12.21.A.16). The Project is providing 116 bicycle parking spaces on-site (105 long-term spaces and 11 short-term spaces).

Reduce Parking Supply - This strategy changes the on-site parking supply to provide less than
the amount of vehicle parking required by direct application of the Los Angeles Municipal Code
(LAMC) without consideration of parking reduction mechanisms permitted in the code.
Permitted reductions in parking supply could utilize parking reduction mechanisms such as
TOC, Density Bonus, Bike Parking ordinance, or locating in an Enterprise Zone or Specific Plan
area.

# B. Non - CEQA-Related Requirements and Considerations

As required per the adopted TAG and pursuant to the City's Site Plan Review Authority (L.A.M.C. 16.05 and relevant code sections), the analysis included a review of current deficiencies and potential future deficiencies that may result from this project. There are no corrective measures required that would result from the construction of this Project.

# C. <u>Project Impact Assessment (PIA) Fee</u>

Pursuant to Section 11 of the Specific Plan, the applicant shall pay or guarantee to pay an Application for Consideration Fee in addition to a PIA Fee to LADOT before the issuance of any building permit. The Application for Consideration Fee is \$400.00 for this project. The gross PIA Fee for this Project is calculated below and can be paid in either a single payment or through a deferred payment plan. The existing use credit is based upon a legally-permitted use previously in existence for a minimum of one year between November 9, 1985, and the date of this letter. The PIA Fee shall be indexed annually; therefore, the PIA Fee may change depending on the actual date when payment is made.

Land Use	Category	Community	Floor Area (sq.ft.)	PIA Fee Rate (\$ per sq.ft.)	Total PIA Fee (Floor Area x PIA Fee Rate)
			<b>Proposed Pro</b>	ject	
Apartment	Α	Studio City	113,351	\$1.52	\$172,293.52
			Existing Us	е	
Apartment A Studio City  Assisted Living A Studio City  Net PIA Fee (proposed - existing)			41,697	\$1.52	\$63,379.44
Net PIA Fee	proposed	- existing)			\$108,914.08

## D. Parking Requirements

The traffic study indicated that the Project would provide a total of 146 automobile parking spaces, 11 short-term bicycle parking spaces, and 105 long-term bicycle parking spaces in one two-level subterranean on-site parking facility. The applicant should check with the Department of Building and Safety regarding the number of Code-required parking spaces needed for this Project.

# E. Highway Dedication and Street Widening Requirement

**Ventura Boulevard** is designated a Boulevard II, which requires a 40-foot half-width roadway within a 55-foot half- width right-of-way. The north side of Ventura Boulevard currently consists of a 50-foot half-width right-of-way with a 40-foot half roadway and a 10-foot sidewalk. The applicant shall

dedicate 5 feet of land along the entire proposed Project frontage on Ventura Boulevard to bring the right-of-way up to the standard required by the Mobility Plan. **Arch Drive** is a designated Local Street that would require an 18-foot half-width roadway within a 30-foot half-width right-of-way. The applicant should check with the Bureau of Engineering's Land Development Group who will determine if there are any other applicable highway dedication, street widening, and/or sidewalk requirements for this Project.

# F. Project Access and Circulation

The proposed Project will utilize one new full-access existing driveway on Arch Drive. A copy of the project's conceptual site plan is provided in **Attachment C**. The ultimate design of the driveways, passenger loading zone, and internal circulation will meet the standards of the building code and will be subject to review by LADOT and the Department of Building and Safety. The review of this study does not constitute approval for any new proposed driveway. Review and approval of the driveways should be coordinated with LADOT's Citywide Planning Coordination Section (6262 Van Nuys Boulevard, 3<sup>rd</sup> Floor, Room 320, (818-374-4699). To minimize and prevent last-minute building design changes, the applicant should contact LADOT for driveway width, passenger loading zone, and internal circulation requirements prior to the commencement of building or parking layout design. The applicant should check with City Planning regarding the project's vehicular access and design.

# G. High Injury Network

The City of Los Angeles Vision Zero Identified a strategic plan to reduce traffic deaths to zero by focusing on engineering, enforcement, education, and evaluation. The LADOT identified a High Injury Network (HIN) of city streets. The HIN identifies streets with a high number of traffic-related severe injuries and deaths across all modes of travel with emphasis on those involving pedestrians and cyclists. Ventura Boulevard is included in the High Injury Network. Preventative measures by the Project include providing Project access from Arch Drive, a local street, to improve the safety of pedestrians and passing motorists along Ventura Boulevard. The project access or project-related changes to the public right-of-way will not affect relative proximity to the High Injury Network.

# H. Worksite Traffic Control Plan

LADOT recommends that a construction worksite traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval before the start of any construction work. Refer to <a href="http://ladot.lacity.org/what-we-do/plan-review">http://ladot.lacity.org/what-we-do/plan-review</a> to determine which section to coordinate the review of the worksite traffic control plan. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs, and access to abutting properties. LADOT also recommends that all construction-related truck traffic be restricted to off-peak hours.

# I. TDM Ordinance Requirements

The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods
- Rely on a broader range of strategies that can be updated to keep pace with technology.

• Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance. The updated ordinance is expected to be completed before the anticipated construction of this project.

# J. <u>Development Review Fees</u>

Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

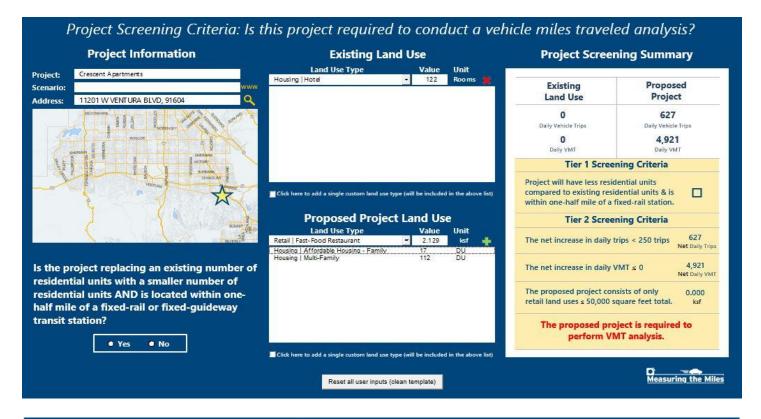
If you have any questions, please contact Brandon Wilson of my staff at <a href="mailto:brandon.wilson@lacity.org">brandon.wilson@lacity.org</a>.

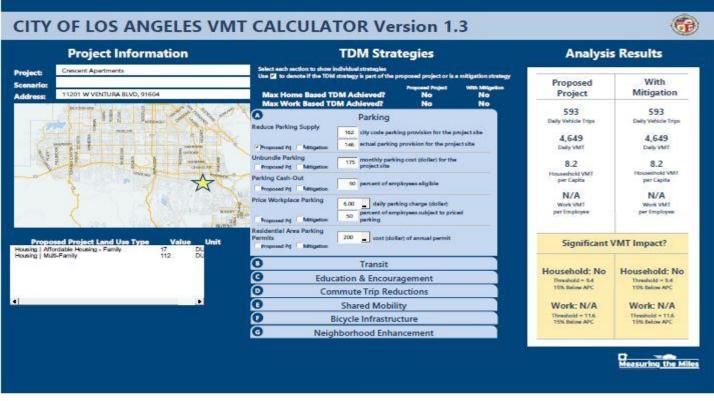
### Attachments

J:\Projects\VEN22-113326 -4260 Arch Dr-11201 Ventura Bl

c: Mashael Majid, Council District 4
Renata Ooms, LADCP
Steve Rostam, LADOT East Valley District
Ali Nahass, BOE Valley District
Quyen Phan, BOE Land Development Group
Jerry Overland, Overland Traffic Consultants, Inc.

# Attachment A City of Los Angeles VMT Calculator Results



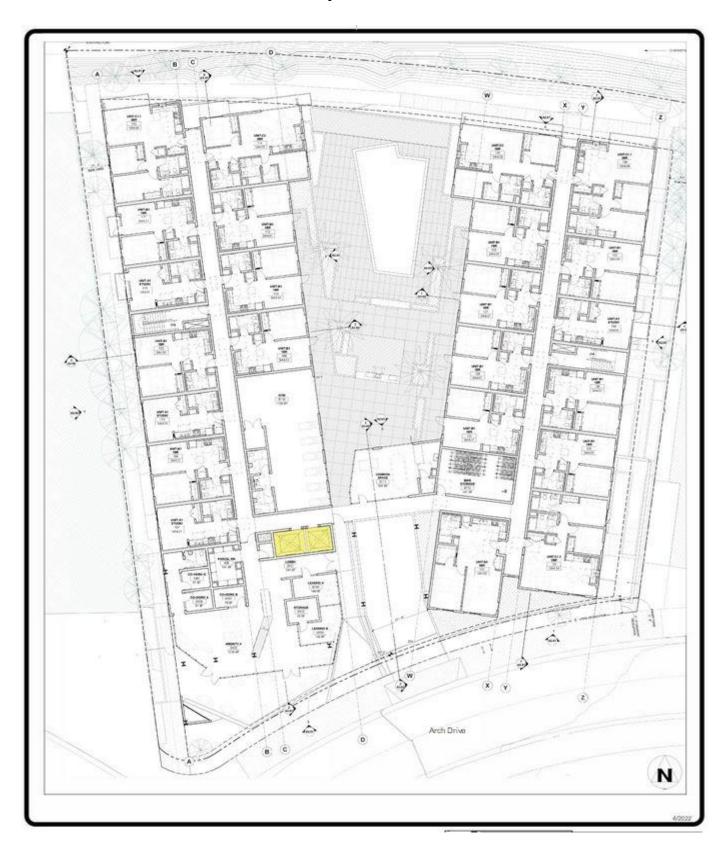


# Attachment B Summary of Delay and Levels of Service

		Peak	Existi (202	( T	Existir Proje	100	Future ( Witho Proje	out	Future (2025) With Project		
No.	Intersection	Hour	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	
1	Ventura Boulevard	AM	68.9	Е	70.7	Е	84.3	F	89.0	F	
	& Vineland Avenue	PM	45.5	D	46,6	D	64.4	E	66.0	E	
2	Ventura Boulevard	AM	54.2	D	55.3	E	54.5	D	53.4	D	
200	& Campo De Cahuenga / Riverton Avenue	PM	23.6	C	23.5	C	26.9	C	26.2	C	
3	Ventura Boulevard	AM	39.8	D	38.7	D	47.0	D	47.1	D	
	& Lankershim Boulevard	PM	23.0	C	23.0	C	25.6	C	25.3	C	
4	Ventura Boulevard	AM	18.2	В	18.4	В	22.5	C	23.1	С	
	& Tujunga Avenue	PM	19.3	В	19.3	В	21.0	C	20.8	C	

s = seconds

# **Attachment C Project Site Plan**



# Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA Exhibit C4 to the Staff Report



# AZ Office

4960 S. Gilbert Road, Ste 1-461 Chandler, AZ 85249 p. (602) 774-1950

# CA Office

1197 Los Angeles Avenue, Ste C-256 Simi Valley, CA 93065 p. (805) 426-4477

October 11, 2022

www.mdacoustics.com

Mr. Craig Fajnor EcoTierra Consulting 633 W 5<sup>th</sup> Street, 26<sup>th</sup> Floor Los Angeles, CA 90071

Subject: 4260 Arch Drive Multi-Family Residential – Cat32 Exemption Noise Impact Assessment –

Los Angeles, CA

Dear Mr. Fajnor:

MD Acoustics, LLC (MD) has completed a noise impact assessment for the proposed Multi-Family Residential Development project located at 4260 Arch Drive in the City of Los Angeles, CA. The project has filed for a Categorical 32 Exemption (Cat32) in which an "Infill" Categorical Exemption (CEQA Guideline Section 15332), exempts infill development within urbanized areas if it meets certain criteria. The class consists of environmentally benign infill projects that are consistent with the local General Plan and Zoning requirements. This class is not intended for projects that would result in any significant traffic, noise, air quality, or water quality impacts. It may apply to residential, commercial, industrial, and/or mixed-use projects.

This noise assessment intends to demonstrate the project's compliance with applicable noise regulations and lack of significant noise impacts. A list of definitions and terminology is located in Appendix A.

## 1.0 Project Description and Assessment Overview

The Project Site is approximately 44,572 square feet. The Project includes construction of a new multifamily residential 5-story building containing 129 residential dwelling units. The Project would include a total of 145 parking stalls in a subterranean parking garage. The project includes on-site amenities such as a 1st floor pool deck and courtyard. The proposed project site plan is in Exhibit B.

Land uses and the closest existing sensitive receptors surrounding the site include single-family residential uses to the northwest and south, multi-family residential uses to the east, and commercial uses to the west, northeast, and southeast. The project is not within two miles of a public airport or public use airport. The proposed project location is in Exhibit A.

## 2.0 Local Acoustical Requirements and CEQA Guidelines

The City of Los Angeles has outlined the following within the Los Angeles Municipal Code as it relates to noise regulation:

Per Section 111.03, the minimum ambient level for all residential zones is 50 dBA from 7AM to 10PM and 40 dBA from 10PM to 7AM.

Per Section 112.02, air conditioning, refrigeration, and heating equipment cannot cause a noise level to exceed the ambient noise level on the premises of another occupied property by more than 5 dB.

Per Section 112.05(A), construction machinery must not exceed 75 dBA at 50 feet.

Per Section 41.40, construction must occur between the hours of 7 AM and 9 PM on Monday through Friday and 8 AM to 6 PM on Saturday. Construction may not occur on Sundays or national holidays.

According to CEQA guidelines, the project would have a potential impact if it resulted in:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

# 3.0 Study Method and Procedure

# 3.1 Ambient Noise Measurements

MD performed two (2) 15-minute measurements on 10/10/22 between 1 PM and 2 PM as shown in Appendix B. NM1 was placed near the south corner of the project site and NM2 was placed near the east corner of the site. The main source of ambient noise throughout the project site and surrounding areas came from traffic on Ventura Boulevard. The noise level was 61 to 65 dBA Leq as shown in Table 1. Further notes and pictures are provided in Appendix B.

Table 1: Short-Term Measurement Summary, dBA

Location	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
NM1	1:09 PM	1:24 PM	64.5	71.2	48.3	69.5	67.8	65.8	63.7	56
NM2	1:25 PM	1:40 PM	61.0	73.1	48.7	68.4	64.9	61	58.9	54.1

# 3.2 FHWA Traffic Noise Model

The traffic noise analysis utilizes the Federal Highway Administration (FHWA) Traffic Noise Model, together with several key construction parameters. Key input speed, site conditions, average daily traffic (ADT), and vehicle mix data. The modeling does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels.

The traffic noise model indicated that the noise level at the eastern corner of the site is 64 dBA Leq during the peak hour of the day, 62 dBA Leq during daytime hours, 59 dBA Leq during evening hours, and 54 dBA Leq during nighttime hours. The CNEL level is calculated to be 63 dBA. See Appendix C.

### 3.3 FHWA Construction Noise Model

The construction noise analysis utilizes the FHWA Roadway Construction Noise Model methodology, together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, % usage factor, and baseline parameters for the project site. The project was analyzed based on the different construction phases. The FHWA has compiled data regarding the noise-generated characteristics of typical construction activities and is presented in Table 2.

Table 2: RCNM Measured Noise Emission Reference Levels<sup>1</sup>

Туре	Typical Noise Level at 50 Feet (dBA)
Concrete Saw	90
Dozer	82
Grader	85
Tractor	84
Roller	80
Crane	81
Man Lift	75
Concrete Mixer Truck	79
Air Compressor	78
Notes:  ¹ Referenced Noise Levels from the FHWA RCNM.	

## 3.3 Construction Vibration Model

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is likely perceptible but below any risk of architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (25/D_{rec})^n$$

Where:  $PPV_{ref}$  = reference PPV at 25ft.

 $D_{rec}$  = distance from equipment to receiver in ft.

n = 1.1 (the value related to the attenuation rate through ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual provide general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

# 4.0 Traffic Noise Level Projections

Traffic noise along Ventura Boulevard will be the main source of noise impacting the project site and the surrounding area. The structure has subterranean parking and has no above ground parking. The project projects 593 daily trips. Per the Project traffic study (Overland Traffic Consultants, Inc. 2022), Ventura Boulevard has 26,300 trips by the project site.

It takes a change of 3 dB or more to hear an audible difference which would occur with a doubling of traffic. The project is anticipated to not increase the existing noise level due to an increase in traffic, and therefore the impact is less than significant.

# 5.0 Project Operational Noise Level Projections

On-site operational noise includes a transformer and HVAC. All HVAC equipment is located on the rooftop and will be blocked by a 5' parapet wall. Equipment will be at least 57 feet away from adjacent residences. The maximum sound power level from a single unit is 75 dBA. At 57 feet away, the sound pressure level is estimated to be 42 dBA. For all 34 units near the residential property operating simultaneously, the sound level is 58 dBA. This is a simplification assuming all units are 57 feet away from the receiver when in reality most will be over 57 feet away. The parapet will provide a 15 dB reduction. The maximum sound level at the nearby residential receivers will be 43 dBA and will therefore not increase the overall nighttime ambient level of 54 dBA Leq. See Appendix D.

Per ANSI and NEPA requirements for transformer noise, transformers must be no louder than 65 dBA at 6 feet. Transformers should be placed at least 20 feet from the adjacent residential receptors or should be shielded to stay below the nighttime ambient level.

Operational noise complies with Section 122.02 of the Los Angeles Municipal Code. The impact is, therefore, less than significant.

# 6.0 Construction Noise Level Projections

The degree of construction noise may vary for different areas of the project site and also vary depending on the construction activities. Noise levels associated with the construction will vary with the different phases of construction. Table 3 presents the construction noise levels at sensitive receptors with the implementation of 15 dB mufflers on all heavy equipment. See Appendix E for calculations.

Table 3: Projected Construction Noise Levels (dBA, Lmax)<sup>1</sup>

Location	Phase	<b>Construction Noise Level</b>	<b>Exceeds Significant Threshold?</b>
	Grade	70	No
Adjacent Desidential Drenerties	Build	69	No
Adjacent Residential Properties	Pave	69	No
	Arch Coat	63	No

Assuming the implementation of 15 dB mufflers on all heavy equipment, the regulatory noise level limit of 75 dBA is never exceeded during each phase of construction at 50 feet from the source. The impact is, therefore, less than significant.

# 7.0 Construction Vibration Level Projections

Bulldozers will get as close as 19 ft to the nearest residential buildings surrounding the project site. The vibration will be up to 0.120 in/sec PPV during construction. This is perceptible but below the threshold of damage of 0.2 in/sec PPV for the adjacent buildings. The impact is, therefore, less than significant. See Appendix E for calculations.

## 8.0 Conclusions

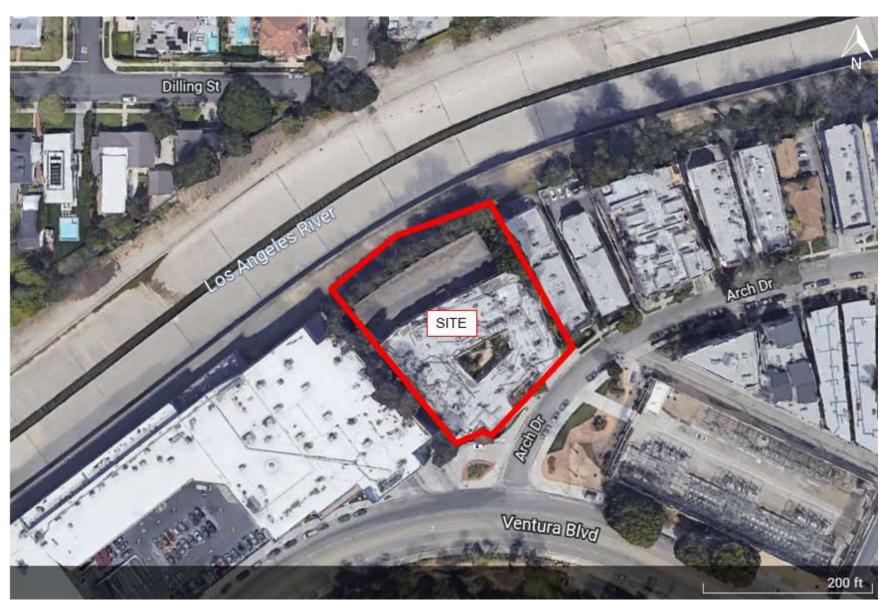
The Project will be compliant with the City's noise ordinance and CEQA guidelines with the implementation of typical construction noise best practices. In addition, the project will not generate a noise impact during operation. The project is not within 2 miles of a private or public airport. MD is pleased to provide this noise assessment for the proposed project. If you have any questions regarding this analysis, please call our office at (805) 426-4477.

Sincerely, MD Acoustics, LLC

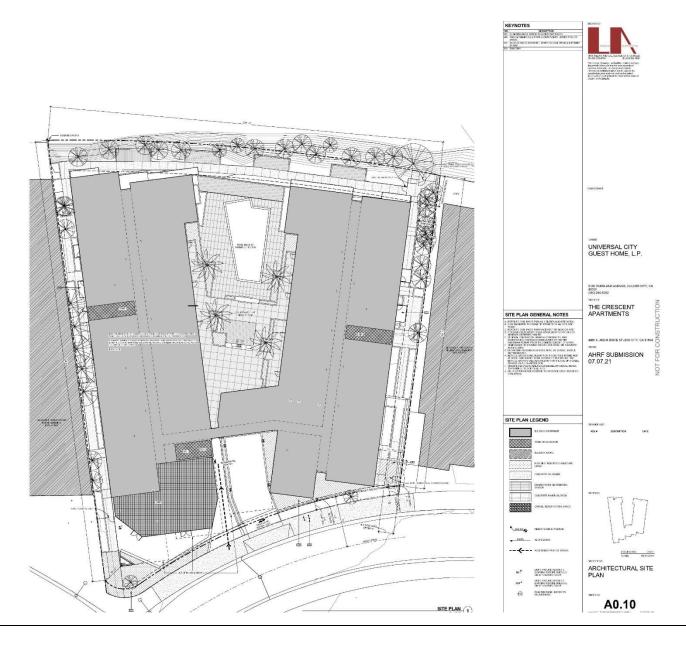
Rachel Edelman Acoustical Consultant Claire Pincock, INCE-USA Acoustical Consultant

Our Pand

# **Exhibit A Location Map**



# **Exhibit B Site Plan**



Appendix A

Glossary of Acoustical Terms

# **Glossary of Terms**

<u>A-Weighted Sound Level:</u> The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

<u>Ambient Noise Level</u>: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

<u>Community Noise Equivalent Level (CNEL):</u> The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after the addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

<u>Decibel (dB)</u>: A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

**dB(A)**: A-weighted sound level (see definition above).

**Equivalent Sound Level (LEQ):** The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

<u>Habitable Room:</u> Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

<u>L(n):</u> The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly L50, L90, L99, etc.

**Noise:** Any unwanted sound or sound which is undesirable because it interferes with speech and hearing or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

**Noise Criteria (NC) Method:** This metric plots octave band sound levels against a family of reference curves, with the number rating equal to the highest tangent line value as demonstrated in Figure 1.

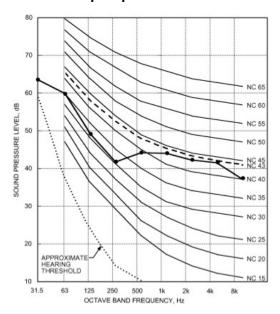
# Percent Noise Levels: See L(n).

**Room Criterion (RC) Method:** When sound quality in the space is important, the RC metric provides a diagnostic tool to quantify both the speech interference level and spectral imbalance.

**Sound Level (Noise Level):** The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

<u>Sound Level Meter:</u> An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

FIGURE 1: Sample NC Curves and Sample Spectrum Levels



**Sound Transmission Class (STC):** To quantify STC, a Transmission Loss (TL) measurement is performed in a laboratory over a range of 16 third-octave bands between 125 - 4,000 Hertz (Hz). The average human voice creates sound within the 125 - 4,000 Hz  $1/3^{rd}$  octave bands.

STC is a single-number rating given to a particular material or assembly. The STC rating measures the ability of a material or an assembly to resist airborne sound transfer over the specified frequencies (see ASTM International Classification E413 and E90). In general, a higher STC rating corresponds with a greater reduction of noise transmitting through a partition.

STC is highly dependent on the construction of the partition. The STC of a partition can be increased by: adding mass, increasing or adding air space, and adding absorptive materials within the assembly. The STC rating does not assess low-frequency sound transfer (e.g. sounds less than 125 Hz). Special consideration must be given to spaces where the noise transfer concern has lower frequencies than speech, such as mechanical equipment and or/or music. The STC rating is a lab test that does not take into consideration weak points, penetrations, or flanking paths.

Even with a high STC rating, any penetration, air-gap, or "flanking path can seriously degrade the isolation quality of a wall. Flanking paths are the means for sound to transfer from one space to another other than through the wall. Sound can flank over, under, or around a wall. Sound can also travel through common ductwork, plumbing, or corridors. Noise will travel between spaces at the weakest points. Typically, there is no reason to spend money or effort to improve the walls until all weak points are controlled first.

<u>Outdoor Living Area:</u> Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

# **Percent Noise Levels:** See L(n).

**Sound Level (Noise Level):** The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

**<u>Sound Level Meter:</u>** An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

<u>Single Event Noise Exposure Level (SENEL):</u> The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Appendix B

Field Sheet

# 15-Minute Continuous Noise Measurement Datasheet

Sunny, scattered clouds 76F winds 0-3mph from S SE and swirling. No people passed by the meters during testing, several trucks drove by and a couple of plug-in vehicle owners were charging their cars about 80' Site Observations: from NM2. 4260 Arch Drive Multi-Family - Cat32 4260 N Arch Drive, Studio City, 0332-2022-013 10/10/2022 Site Address/Location: Project: #/Name: Project Name: Date:

Field Tech/Engineer:

Sound Meter: XL2, NTI SN: A2A-08562-E0

Settings: A-weighted, slow, 1-sec, 15-minute interval

Site Id: NM1, NM2





# 15-Minute Continuous Noise Measurement Datasheet - Cont.

4260 Arch Drive Multi-Family - Cat32 Project Name:

Site Address/Location: 4260 N Arch Drive, Studio City,

NM1, NM2 Site Id:

Figure 1: NM1

Figure 2: NM2





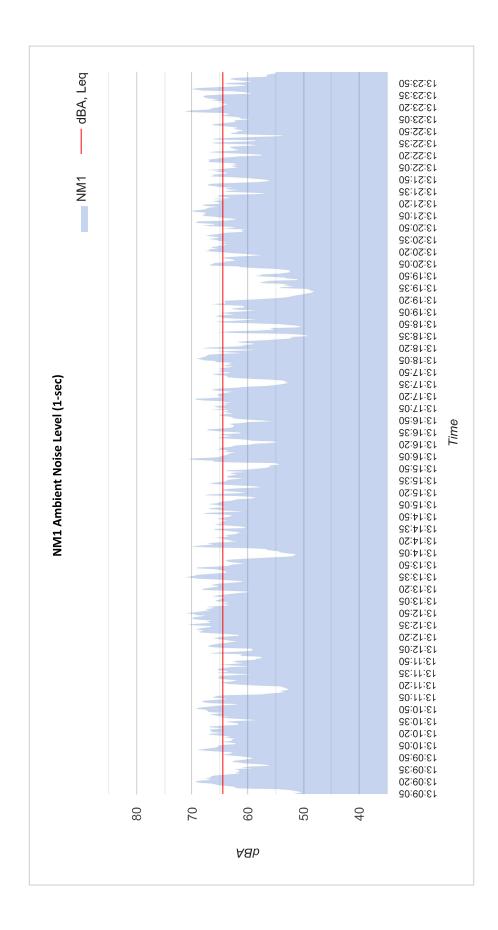
Table 1: Baseline Noise Measurement Summary

T30	56	54.1
L50	63.7	58.9
L25	65.8	61
81	67.8	64.9
<b>L2</b>	69.5	68.4
Lmin	48.3	48.7
Lmax	71.2	73.1
Leq	64.5	61
Stop	1:24 PM	1:40 PM
Start	1:09 PM	1:25 PM
Location	NM1	NM2



# 15-Minute Continuous Noise Measurement Datasheet - Cont.

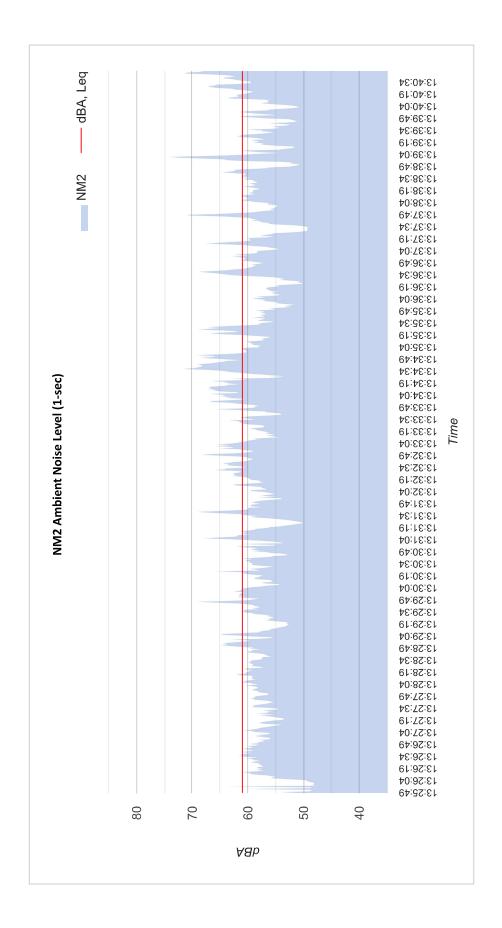
Project Name:	4260 Arch Drive Multi-Family - Cat32	Site Topo:	Buildings 1-2 stories tall site	Noise Source(s) w/ Distance:
Site Address/Location:	4260 N Arch Drive, Studio City,	Meteorological Cond.:	76F Winds 1-3mph	Road Noise
Site Id:	NM1	Ground Type:	buildings and asphalt	





# 15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name:	4260 Arch Drive Multi-Family - Cat32	Site Topo:	Buildings 1-2 stories tall site	Noise Source(s) w/ Distance:
Site Address/Location:	4260 N Arch Drive, Studio City,	Meteorological Cond.:	76F Winds 3-1mph	Road Noise
Site Id:	NM2	Ground Type:	buildings and asphalt	





**Appendix C**Traffic

# **EXISTING ADT'S BY LEG**

	FACTO	R= 10		Use 1	∪, 1∠, ( I	וווווו	I LA								NODT	00117	E40=	14/565
	Intersection	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WD	TOTAL	NORTH LEG	SOUTH LEG	EAST LEG	WEST LEG
#1	Intersection		154						1472						17,300	7,500	29,700	26,300
#1		53	154	46	080	3/9	212	218	1472	52	00	620	78					
														-	-	-	-	-
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#### FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: 4260 Arch Drive JOB #: 0332-21-13
ROADWAY: Ventura Blvd DATE: 11-Oct-22
LOCATION: East PL ENGINEER: C Pincock

#### **NOISE INPUT DATA**

	RUADWAY CUNDITIONS	RECEIVER INPUT DATA
ADT =	26,300	RECEIVER DISTANCE = 204
SPEED =	35	DIST C/L TO WALL = 80
PK HR % =	10	RECEIVER HEIGHT = 5.0
NEAR LANE/FAR LANE D	DIS 45	WALL DISTANCE FROM RECEIVER 124
ROAD ELEVATION =	0.0	PAD ELEVATION = 0.5
GRADE =	1.0 %	ROADWAY VIEW: LF ANGLE= -90
PK HR VOL =	2,630	RT ANGLE= 90
		DF ANGLE: 180

#### SITE CONDITIONS WALL INFORMATION

HEAVY TRUCKS = 10 BARRIER = 0 (0 = WALL, 1 = BERM)

#### VEHICLE MIX DATA MISC. VEHICLE INFO

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCK	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	202.79	
MEDIUM TRUCKS	4.0	202.76	
HEAVY TRUCKS	8.0	202.77	0.00

#### **NOISE OUTPUT DATA**

#### NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	<b>EVEN LEQ</b>	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.3	60.4	58.6	52.6	61.2	61.8
MEDIUM TRUCKS	54.8	53.3	46.9	45.4	53.8	54.1
HEAVY TRUCKS	56.0	54.6	45.6	46.8	55.2	55.3
NOISE LEVELS (dBA)	63.8	62.0	59.1	54.2	62.8	63.2

#### NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	<b>EVEN LEQ</b>	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.3	60.4	58.6	52.6	61.2	61.8
MEDIUM TRUCKS	54.8	53.3	46.9	45.4	53.8	54.1
HEAVY TRUCKS	56.0	54.6	45.6	46.8	55.2	55.3
NOISE LEVELS (dBA)	63.8	62.0	59.1	54.2	62.8	63.2

NOISE CONTOUR (FT)											
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA							
CNEL	43	136	431	1362							
LDN	39	122	386	1220							

Appendix D

Noise Calculations Input/Output

Example of possible/similar system to be used

#### APPLICATION & ACCESSORIES

Refer to Price Manual for specific model numbers.

Standard Application Limits*							
Maximum Lineset Equivalent I	Length	80 Ft					
Outdoor Ambient Temperature	Limits						
Cooling Operation	Maximum DB	125°F					
Cooling Operation	Minimum DB	55°F					
Heating Operation	Maximum DB	75°F					
Heating Operation	Minimum DB	-10°F					

For applications such as Low Ambient, reduced linesets, and/or long linesets, see the accessories listed below.

**Non-Standard Lineset Applications** - For installations with reduced diameter or long linesets, refer to the current version of the Piping Application Guide P/N 247077, available in the Application Bulletins section on <a href="https://www.upgnet.com">www.upgnet.com</a>.

Standard Low Ambient Control Kit S1-2LA06700424: Allows the use of air conditioning at low outdoor ambient temperatures down to +20°F (-7°C). For use with all R-410A single stage AC & HP models.

Advanced Low Ambient Control Kit S1-2LA04701024: Contains the necessary components and controls to allow cooling operation down to -20°F (-29°C). For use with all R-410A single stage AC & HP models.

**High Ambient Condenser Fan Motor S1-FHM\*\*\*\*HT:** Class F 70°C motor to allow cooling operation up to 160°F air entering the condenser. For use with all R-410A single stage AC & HP models containing R-410A refrigerant only.

Outdoor Communicating Board Kit (S1-33102952310): Electronic control upgrade for standard AC & HP units to provide compatibility with the Residential Touch Screen Communicating Control.

Start Assist Kit S1-2SA067\*\*\*\*\*: Provides increased compressor starting torque for areas with low supply voltage. Required for units with recip compressors when applied with indoor TXV, and for all units when applied with long linesets or low ambient kits. May be factory installed on select AC & HP units (see Physical & Electrical Table). See Price Pages or Source1 SmartSearch for the correct kit for each application.

Compressor Crankcase Heater Kit (S1-025-\*\*\*\*\*-\*\*\*): A wrap-around electrical resistance heater that warms the compressor sump, reducing the chance of liquid slugging on startup. Required on all long lineset and low ambient applications. See Price Pages or Source1 SmartSearch for the correct part for each application.

Indoor Blower-Off Delay Kit \$1-2FD06700224: Provides a 1-minute blower-off delay at the end of the cooling cycle. May be required for retrofits with non-Johnson Controls Unitary Products indoor units. This feature is factory-provided on all JCUP indoor products.

**Low Temperature Cutoff S1-2LT067224:** Locks the compressor out at temperatures below -6°F, allowing the system thermostat to cycle on supplemental heat.

Support Feet S1-HPRKIT-\*\*: Kit of 5 support feet to raise unit above snow or landscaping. Available in heights of 3", 6" or 12".

**Anchor Bracket Kit S1-1HK0401:** Firmly anchors unit to pad or support structure. When properly installed, approved for ground-mounted or roof-mounted applications.

Indoor TXV Kit S1-1TVM\*\*\*: Thermal expansion valves precisely meter refrigerant for optimum performance over a wide range of conditions. See System Charge Table, Price Pages, or Source1 Smart Search for TXV part number for each AC & HP model

**Wall Mount Kit (S1-ACB-\*\*):** Includes two brackets to allow outdoor unit to be securely mounted to a vertical wall. Mounting hardware is field sourced according to the specific application.

Winter Cover Kit S1-CCVRE\*\*\*: Custom fit winter cover protects AC condensing unit from debris during the off-season. Must be removed prior to unit operation. See Price Pages or Source1 SmartSearch for the correct cover for each application.

**Cold Weather Charging Tent S1-CHGTENT01:** Provides warm environment to accurately service AC & HP systems in ambient conditions 55°F (13°C) or colder.

**Touch-up Paint S1-5130153\*\*\*\*:** Color matched aerosol paint for touching up unit chassis and panels. See Price Pages or Source1 SmartSearch for the correct color for each application.

Compressor Sound Blanket S1-010-07xxx-000: A field installed dense foam cover that provides 2dBA sound level reduction. See Price Pages or Source1 SmartSearch for the correct blanket for each application.

**Thermostat:** Compatible thermostat controls are available through accessory sourcing. For optimum performance, these outdoor units are fully compatible with our YorkColemanLuxaireresidential touch screen thermostat with proprietary (patent-pending) hexagon interface. For more information, see the thermostat section of the Product Equipment Catalog.

#### **SOUND POWER RATINGS - COOLING**

Cooling		Octave Band Sound Power Level (db re. 1-pW)								
Model Number	63	125	250	500	1000	2000	4000	8000	dBA	SQI
YHE18B21S	69.3	72.8	66.8	69.1	66.7	63.6	59.3	59.7	72	19.1
YHE24B21S	70.0	70.1	67.6	70.0	67.3	63.5	60.7	56.8	72	19.1
YHE30B21S	68.0	70.6	68.3	70.0	68.9	65.5	64.7	61.1	74	19.0
YHE35B21S	67.9	72.6	68.3	70.5	68.0	63.6	59.7	56.5	72	19.2
YHE36B21H	68.4	70.2	68.8	68.9	69.0	65.0	63.3	60.2	73	19.1
YHE42B21H	56.0	71.2	68.1	70.0	65.9	65.5	58.8	54.9	75	19.0
YHE48B21S	58.0	70.7	64.1	68.3	66.1	61.7	57.9	56.0	75	19.0
YHE60B21S	69.1	71.6	68.9	71.3	70.2	65.5	61.5	58.4	74	19.0

Rated in accordance with ARI Standard 270.

#### **SOUND POWER RATINGS - HEATING**

Heating	Octave Band Sound Power Level (db re. 1-pW)									
Model Number	63	125	250	500	1000	2000	4000	8000	dBA	SQI
YHE18B21S	69.9	73.1	68.0	69.3	66.1	63.6	59.2	58.0	72	19.0
YHE24B21S	69.7	69.7	66.7	71.2	66.9	63.2	60.3	56.5	72	19.0
YHE30B21S	70.3	74.6	70.5	71.9	68.9	66.0	60.4	58.7	74	19.2
YHE35B21S	64.3	73.7	67.7	73.6	68.0	63.4	60.2	61.1	73	19.1
YHE36B21H	69.3	70.0	70.8	71.3	70.8	67.1	62.5	61.3	<mark>75</mark>	19.0
YHE42B21H	58.0	75.1	72.2	67.1	62.4	60.7	55.3	52.3	75	19.0
YHE48B21S	61.2	69.6	65.8	68.1	65.5	60.3	55.2	52.4	74	19.0
YHE60B21S	72.6	73.4	70.8	71.9	69.0	67.2	65.4	65.5	75	19.1

Rated in accordance with ARI Standard 270.

#### **MECHANICAL SPECIFICATIONS**

#### MANUFACTURE AND CERTIFICATIONS

- Units shall be manufactured in an ISO 9001 certified facility.
- Units shall be certified by CSA to UL 1995 / CSA 22.2 and performance certified to ANSI/AHRI Standard 210/240.
- Units shall be sound tested according to ANSI/AHRI Standard 270.
- Certified matched system ratings will be available for download from the AHRI online directory at <a href="https://www.ahridirectory.org">www.ahridirectory.org</a>.
- Unit packaging shall be marked, "Assembled in the USA"

#### UNIT APPLICATION

- Units shall be approved for cooling operation between 55°F and 125°F without modification.
- Units shall be approved for heating operation between -20°F and 75°F without modification.
- Units shall be approved for linesets up to 80 feet equivalent length without modification.
- Units shall be approved for installation within 6 inches of a flat vertical wall without modification, according to the instructions in the technical literature.
- Units shall be certified to the 5th Edition (2014) of the Florida Building Code for a combined allowable lateral and uplift wind force of 200 psf and 100 psf, respectively, for both ground-mounted and rooftop-mounted applications up to 200 feet above grade with approved mounting kit
- Units shall be designed to 76dBA or less to minimize sound pollution.

#### **UNIT ACCESS**

- Units shall have a removable fan guard that can be removed independently of the top for interior access through the top of the unit without damaging the coil.
- Units shall have two removable stamped steel coil guards for exterior coil access.
- Units shall have a separate compartment for electrical controls that can be accessed without disturbing the unit airflow.
- Units shall have a blockoff panel that can be removed to provide interior unit access through the side of the unit.
- Units shall have a removable blockoff panel and a swing away removable electrical panel that provides sufficient interior unit access for removing the compressor through the side of the unit.

#### **UNIT CONSTRUCTION**

Units shall be shipped completely wired, piped and assembled. Wiring pigtails shall be provided for field control wiring connections. Service valves shall be provided for field refrigerant line connections.

- Units shall be factory leak checked, run tested, and shipped with a holding charge of R-410A refrigerant.
- Unit cabinet components shall be G90 equivalent steel finished with powder-coat paint rated at a minimum of 500 hours under ASTM B117 testing.
- Unit base pan shall be stamped G90 equivalent steel finished with powder-coat paint rated at a minimum of 500 hours under ASTM B117 testing.
- Units shall have a single corner post opposite the electrical control box and two independently removable steel coil guard panels to optimize cabinet strength and serviceability.
- Units shall have L-shaped stamped sheet metal coil guards with punched and extruded slots for maximum panel durability and stiffness.
- Units shall have a factory installed filter-drier for faster installation and improved system reliability.
- Unit base valves shall be mounted diagonally on the unit base pan with service ports that provide sufficient clearance for low-loss hose fittings.
- Units shall be constructed with a high pressure switch for system protection.
- Units shall be constructed with all badging and labels applied at the factory.

#### **UNIT COMPONENTS**

- Compressor shall be hermetic with internal electrical overload protection and internal overpressure protection.
- Compressor shall be mounted on rubber vibration isolators that do not require the removal of transportation clips or brackets.
- Units shall be constructed with internally sprung reciprocating compressors for low vibration. (Applies to select models).
- Condenser fan shall be direct drive with vertical air discharge for low sound levels.
- Condenser fan motor shall be totally enclosed with permanently lubricated ball bearings motors approved for vertical shaft applications.
- Condenser coil shall be air cooled and constructed of enhanced aluminum fins mechanically bonded to internally enhanced Ø 7mm copper tubing.

#### **UNIT WARRANTIES**

- Unit manufacturer shall provide a 10-Year compressor warranty without a requirement for unit registration.
- Unit manufacturer shall provide a 5-Year parts warranty without a requirement for unit registration.

# Appendix E

**Construction Noise and Vibration Calculations** 

Receptor - Residences to the East

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA <sup>1</sup>	Edge of Site to Receptor, feet	Center of Site to Receptor, feet	Item Usage Percent <sup>1</sup>	Ground Factor <sup>2</sup>	Usage Factor	Receptor Item Lmax, dBA	Recptor. Item Leg, dBA
GRADE			, ,		. 0. 000			,	1/
Grader	1	70	50	100	40	0	0.40	70.0	60.0
Dozer	1	67	50	100	40	0	0.40	67.0	57.0
Tractor	2	69	50	100	40	0	0.40	69.0	59.0
								70.0	64.9
BUILD									
Crane	1	66	50	100	16	0	0.16	66.0	52.0
Man lift	1	60	50	100	20	0	0.20	60.0	47.0
Generator	1	66	50	100	50	0	0.50	66.0	57.0
Tractor	1	69	50	100	40	0	0.40	69.0	59.0
Welder/Torch	3	59	50	100	40	0	0.40	59.0	49.0
								69.0	62.4
PAVE									
Paver	1	62	50	100	50	0	0.50	62.0	53.0
Tractor	1	69	50	100	40	0	0.40	69.0	59.0
Roller	1	65	50	100	20	0	0.20	65.0	52.0
Concrete Mixer Truck	1	64	50	100	40	0	0.40	64.0	54.0
								69.0	60.6
ARCH COAT									
Compressor (air)	1	63	50	100	40	0	0.40	63.0	53.0
								63.0	53.0

<sup>&</sup>lt;sup>1</sup>FHWA Construction Noise Handbook: Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

#### **VIBRATION LEVEL IMPACT**

Project: 4260 Arch Drive Date: 10/11/22

Source: Large Bulldozer Scenario: Unmitigated

Location: Adjacent residences
Address: 4260 Arch Drive
PPV = PPVref(25/D)^n (in/sec)

#### **DATA INPUT**

Equipment = Type	2	Large Bulldozer INPUT SECTION IN BLUE
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.
D =	19.00	Distance from Equipment to Receiver (ft)
n =	1.10	Vibration attenuation rate through the ground
Note: Based on I	reference equations from Vibration	on Guidance Manual, California Department of Transportation, 2006, pgs 38-43.

#### DATA OUT RESULTS

PPV =	0.120	IN/SEC	OUTPUT IN RED	
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# Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA Exhibit C.5 to the Staff Report



#### AZ Office

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www.mdacoustics.com

October 11, 2022

Mr. Craig Fajnor EcoTierra Consulting 633 W 5<sup>th</sup> Street, 26<sup>th</sup> Floor Los Angeles, CA 90071

#### Subject:

4260 Arch Drive Multi-Family Project – Cat32 Exemption – Focused Air Quality, Greenhouse Gas, and Energy Impact Evaluation, City of Los Angeles, CA

Dear Mr. Heller:

MD Acoustics, LLC (MD) has completed a focused Air Quality, Greenhouse Gas, and Energy Impact Evaluation for the proposed 4260 Arch Drive Multi-Family Project located in the City of Los Angeles, CA. The purpose of this focused study is to evaluate the air quality, greenhouse gas, and energy construction and operational emissions generated by the proposed project and to compare the project emissions to South Coast Air Quality Management District's (SCAQMD) thresholds of significance as it relates to residential and commercial uses and consistency to the City's General Plan. A list of definitions and terminology is located in Appendix A.

#### 1.0 Project Description

The Project Site is approximately one acre and is currently vacant and was previously occupied by an assisted living building, which has since been demolished. The Project includes construction of a new multifamily residential building containing 129 residential dwelling units. The proposed building would include five stories. The Project would include a total of 145 residential vehicular parking spaces on two subterranean levels of the building. The proposed project site plan is in Appendix B.

Land uses and the closest existing sensitive receptors surrounding the site include multi-family residential uses 10 feet to the northeast, commercial uses 10 feet to the southwest, a water and power distribution station across Arch Drive to the east, and the Los Angeles River to the northwest.

#### 2.0 AQ/GHG Thresholds of Significance

#### 2.1 AQ Significance Thresholds

Project emissions were compared to both regional and localized SCAQMD's thresholds of significance for construction and operational emissions<sup>1,2</sup>.

#### 2.2 GHG Significance Thresholds

The project emissions were compared to the SCAQMD's 3,000 MTCO₂e draft threshold for all land uses<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> https://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

<sup>&</sup>lt;sup>2</sup> https://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds

³ https://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds/page/2

#### 3.0 Evaluation Procedure/Methodology

MD utilized the latest version of CalEEMod (2020.4.0) to calculate both the construction and operational emissions from the project site<sup>4</sup>. Project construction is modeled to commence no earlier than June 2023 and be completed by July 2025. Construction assumes grading, building construction, paving, and architectural coating. CalEEmod defaults were utilized. Assumptions and output calculations for winter, summer and annual are provided in Appendix C.

#### 4.0 Local Ambient Conditions

The project site is located in South Coast Air Basin (SCAB) in the Central Los Angeles Source Receptor Area (SRA) 1<sup>5</sup>. The nearest air monitoring station to the project site is the Los Angeles – North Main Street Monitoring Station. Historical air quality data for the vicinity can be found both at CARB and SCAQMD's websites<sup>6,7</sup>. Temperature and historical precipitation data can be found at the WRCC<sup>8</sup>.

#### 5.0 Findings

The following outlines the emissions for the project:

#### 5.1 Regional Construction Emissions

The construction emissions for the project would not exceed the SCAQMD's daily emission thresholds at the regional level as indicated in Table 1, and therefore the impact would be considered less than significant.

<Table 1, next page>

<sup>4</sup> https://www.caleemod.com/

<sup>&</sup>lt;sup>5</sup> https://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf?sfvrsn=6

<sup>&</sup>lt;sup>6</sup> https://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year

<sup>7</sup> https://www.arb.ca.gov/adam/

<sup>&</sup>lt;sup>8</sup> https://www.wrcc.dri.edu/summary/Climsmsca.html

Table 1: Regional Significance – Construction Emissions (lbs/day)

		5.11		<u> </u>	//	
		Poli	lutant Emissic	ns (pounds	(day)	
Activity	VOC	NOx	СО	SO <sub>2</sub>	PM10	PM2.5
Grading						
On-Site <sup>2</sup>	1.33	14.47	8.70	0.02	3.58	1.92
Off-Site <sup>3</sup>	0.98	54.36	11.86	0.25	8.15	2.59
Total	2.32	68.82	20.56	0.27	11.73	4.51
<b>Building Construction</b>						
On-Site <sup>2</sup>	1.52	11.71	12.61	0.02	0.51	0.50
Off-Site <sup>3</sup>	0.50	1.38	4.19	0.01	1.15	0.32
Total	2.02	13.09	16.80	0.04	1.67	0.81
Paving						
On-Site <sup>2</sup>	0.57	5.33	8.80	0.01	0.25	0.23
Off-Site <sup>3</sup>	0.04	0.03	0.36	0.00	0.11	0.03
Total	0.62	5.35	9.16	0.01	0.35	0.26
Architectural Coating						
On-Site <sup>2</sup>	33.39	1.15	1.81	0.00	0.05	0.05
Off-Site <sup>3</sup>	0.08	0.05	0.67	0.00	0.20	0.05
Total	33.47	1.19	2.48	0.00	0.25	0.10
Total of overlapping phases⁴	34.09	6.54	11.63	0.02	0.60	0.36
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds	No	No	No	No	No	No

#### Notes:

#### 5.2 Localized Construction Emissions

Utilizing the construction equipment list and associated acreages per 8-hour day provided in the SCAQMD "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b), the maximum number of acres disturbed in a day would be 2.0 acres during grading (as shown in Table 2 below); however, as the project is approximately one acre, the project emissions have been compared to the 1-acre per day localized significance threshold.

Table 2: Maximum Number of Acres Disturbed Per Day<sup>1</sup>

Activity	Equipment	Number	Acres/8hr-day	Total Acres
	Graders	1	0.5	0.5
Grading	Rubber Tired Dozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	2	0.5	1.0
Total Per Phase				2.0

#### Notes:

None of the analyzed criteria pollutants would exceed the LST emission thresholds at the nearest sensitive receptors as shown in Table 3. Therefore, the impact would be less than significant from construction.

<sup>&</sup>lt;sup>1</sup> Source: CalEEMod Version 2020.4.0

<sup>&</sup>lt;sup>2</sup> On-site emissions from equipment operated on-site that is not operated on public roads.

<sup>&</sup>lt;sup>3</sup> Off-site emissions from equipment operated on public roads.

<sup>&</sup>lt;sup>4</sup> Architectural coatings and paving phases may overlap.

<sup>1.</sup> Source: CalEEMod output and South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2

Table 3: Localized Significance – Construction Emissions (lbs/day)

	On-Sit	te Pollutant En	nissions (pound	ds/day)¹
Phase	NOx	СО	PM10	PM2.5
Grading	14.47	8.70	3.58	1.92
Building Construction	11.71	12.61	0.51	0.50
Paving	5.33	8.80	0.25	0.23
Architectural Coating	1.15	1.81	0.05	0.05
Total for overlapping construction phases	18.18	23.22	0.81	0.78
SCAQMD Threshold <sup>2</sup>	74	680	5	3
Exceeds Threshold?	No	No	No	No

#### Notes:

# 5.3 Regional Operational Emissions

The operating emissions were based on year 2025, which is the anticipated opening year for the project. The CalEEMod default project trips and vehicle miles traveled (VMTs) were used.

The summer and winter emissions created by the proposed project's long-term operations were calculated and the highest emissions from either summer or winter are summarized in Table 4. The data in Table 3 shows that the operational emissions for the project would not exceed the SCAQMD's regional significance thresholds.

Table 4: Regional Significance – Operational Emissions (lbs/day)

	Pollutant Emissions (pounds/day) <sup>1</sup>					
Activity	voc	NOx	СО	SO2	PM10	PM2.5
Area Sources <sup>2</sup>	3.12	1.30	11.15	0.01	0.15	0.15
Energy Usage <sup>3</sup>	0.04	0.38	0.16	0.00	0.03	0.03
Mobile Sources <sup>4</sup>	1.92	2.92	15.61	0.04	3.24	0.89
Total Emissions	5.08	4.60	26.92	0.05	3.43	1.07
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

#### Notes:

#### 5.4 Localized Operational Emissions

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The proposed

<sup>&</sup>lt;sup>1</sup> Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for one-acre (see Table 2), to be conservative, in Central Los Angeles Source Receptor Area (SRA 1).

<sup>&</sup>lt;sup>2</sup> The nearest sensitive receptors are the multi-family residential uses located approximately 10 feet (~3 meters) to the northeast of the project site; therefore, the 25-meter threshold was utilized.

<sup>&</sup>lt;sup>1</sup> Source: CalEEMod Version 2020.4.0

<sup>&</sup>lt;sup>2</sup> Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

<sup>&</sup>lt;sup>3</sup> Energy usage consists of emissions from on-site natural gas usage.

<sup>&</sup>lt;sup>4</sup> Mobile sources consist of emissions from vehicles and road dust.

project is a residential project and does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted.

#### 5.5 **GHG** Emissions

Table 5 outlines the construction and operational GHG emissions for the project. The project's emissions are below (996.70 MTCO<sub>2</sub>e) the SCAQMD's draft screening threshold of 3,000 MTCO<sub>2</sub>e for all land uses and; therefore, the impact is less than significant.

**Table 5: Opening Year Project-Related Greenhouse Gas Emissions** 

		Greenhouse Gas Emissions (Metric Tons/Year) <sup>1</sup>				
Category	Bio-CO2	NonBio-CO <sub>2</sub>	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO₂e
Area Sources <sup>2</sup>	0.00	57.45	57.45	0.00	0.00	57.82
Energy Usage <sup>3</sup>	0.00	229.74	229.74	0.01	0.00	230.99
Mobile Sources <sup>4</sup>	0.00	568.31	568.31	0.03	0.03	578.57
Solid Waste <sup>6</sup>	12.05	0.00	12.05	0.71	0.00	29.84
Water <sup>7</sup>	2.67	11.35	14.02	0.27	0.01	22.85
Construction <sup>8</sup>	0.00	29.16	29.16	0.00	0.00	29.62
<b>Total Emissions</b>	14.71	896.02	910.73	1.04	0.04	949.69
						2 000

SCAQMD Draft Screening Inreshold	3,000
Fundada Thuashald?	Na

#### Exceeds Threshold?

#### Notes:

- <sup>1</sup> Source: CalEEMod Version 2020.4.0
- <sup>2</sup> Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.
- <sup>3</sup> Energy usage consist of GHG emissions from electricity and natural gas usage.
- <sup>4</sup> Mobile sources consist of GHG emissions from vehicles.
- <sup>5</sup> Solid waste includes the CO<sub>2</sub> and CH<sub>4</sub> emissions created from the solid waste placed in landfills.
- <sup>6</sup> Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
- <sup>7</sup> Construction GHG emissions based on a 30-year amortization rate.

#### 5.6 Consistency with Applicable Plans

#### Consistency with the City's General Plan

The project site is located in the City of Los Angeles. The project site has a current land use classification of "C2" Commercial Zone (C2-1VL-RIO) according to the Zone Information and Map Access Systen (ZIMAS). C2 zones allow for apartment housing per Section 12.14 of the Los Angeles Planning and Zoning Code. The proposed project is a multi-family residential building with 129 units. Therefore, the proposed project is consistent with the land use and zoning designations of the City's General Plan and Community Plan.

The project will be subject to the policies and ordinances pertaining to air quality and climate change in the City's General Plan. Although the project would generate greenhouse gas emissions, either directly or indirectly, these emissions are short-term and not considered to have a significant impact on the environment. Furthermore, project emissions have demonstrated that they will be below any significant thresholds as outlined by SCAQMD.

In addition, as shown below, the project's GHG impacts have been evaluated by assessing the project's consistency with applicable statewide, regional, and local GHG reduction plans and strategies.

Consistency with the City of Los Angeles' Sustainable City pLAn and Green New Deal

The proposed project could have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. The applicable plan for the proposed project is the L.A. Green New Deal Sustainable city pLAn 2019, which is an update to the City of Los Angeles' Sustainable City pLAn (Plan) adopted by the City in April 2015. The Green New Deal Sustainable City pLAn establishes visions for the City in thirteen topic areas including environmental justice, renewable energy, local water, clean and healthy buildings, housing and development, mobility and public transit, zero emission vehicles, industrial emissions and air quality monitoring, waste and resource recovery, food systems, urban ecosystems and resilience, prosperity and green jobs, and lead by example.

Project consistency with all of the applicable targets within the Green New Deal Sustainable City pLAn are assessed in Table 6. As shown in Table 6, the project is consistent with the applicable targets within the Green New Deal Sustainable City Plan.

Table 6: Project Consistency with the City of Los Angeles Green New Deal<sup>1</sup>

Targets	Consistency Analysis
Envi	ronment
Renewable Energy	
LADWP will supply 55% renewable energy by 2025; 80% by 2036; and 100% by 2045.	Not Applicable. This target calls for LADWP to utilize renewable energy in their supply. However, the proposed project is to follow the California Green Building Standards Code (proposed Part 11, Title 24) adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development which includes energy efficiency (in excess of the California Energy Code requirements). The project will be required to include these mandatory standards.
Increase cumulative MW by 2025; 2035; and 2050 of: -Local solar to 900-1,500 MW; 1,500-1,800 MW; and 1,950 MW -Energy storage capacity to 1,654-1,750 MW; 3,000 MW; and 4,000 MW -Demand response (DR) programs to 234 MW (2025) and 600 MW (2035)	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.

Local Water	
Source 70% of L.A.'s water locally and capture 150,000 acre ft/yr of stormwater by 2035.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
Recycle 100% of all wastewater for beneficial reuse by 2035.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
Reduce potable water use per capita by 22.5% by 2025; and 25% by 2035; and maintain or reduce 2035 per capita water use through 2050.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.
Clean and Healthy Buildings	
All new buildings will be net zero carbon by 2030; and 100% of buildings will be net zero carbon by 2050.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
Reduce building energy use per sq.ft. for all building types 22% by 2025; 34% by 2035; and 44% by 2050.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.

Mobility and Public Transit	
Increase the percentage of all trips made by walking, biking, micro-mobility / matched rides or transit to at least 35% by 2025; 50% by 2035; and maintain at least 50% by 2050	Consistent. The proposed project is an infill development in close proximity to existing transit and development. The project is a residential use and is surrounded by other commercial development and residential uses.
Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050.	Consistent. The proposed project is an infill development in close proximity to existing transit and development. The project is a residential use and is surrounded by other commercial development and residential uses.
Zero Emission Vehicles	
Increase the percentage of electric and zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050.	Consistent. The City's Building Code requires the proposed building to provide conduit for on-site electric vehicle charging stalls, which the project is to provide in the proposed parking garage.
Waste and Resource Recovery	
Increase landfill diversion rate to 90% by 2025; 95% by 2035; and 100% by 2050.	Consistent. The proposed project is required to have recycling programs that reduce waste to landfills by a minimum of 75 percent (per AB 341).
Eliminate organic waste going to landfill by 2028.	Consistent. The proposed project is required to have recycling programs that reduce waste to landfills by a minimum of 75 percent (per AB 341).
Increase proportion of waste products and recyclables productively reused and/or repurposed within L.A. County to at least 25% by 2025; and 50% by 2035.	Consistent. The proposed project is required to have recycling programs that reduce waste to landfills by a minimum of 75 percent (per AB 341).

Additional relevant plans and polices that govern climate change include: Executive Orders S-305 and B-30-15;
AB 32 Scoping Plan;
SCAG's Regional Transportation Plan/Sustainable Communities Strategy;
City of Los Angeles Climate LA Implementation Plan; and
City of Los Angeles Building Ordinance

Consistency with Executive Orders S-03-05 and B-30-15

Executive Orders S-3-05 and B-30-15 are orders from the State's Executive Branch for the purpose of reducing GHG emissions. These strategies call for developing more efficient land-use patterns to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. The project includes elements of smart land use as it is an infill development well-served by transportation infrastructure and near public transit.

Although the project's emissions level in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal and it is reasonable to expect the project's emissions profile to decline as the regulatory initiatives identified by ARB in the First Update are implemented, and other technological innovations occur. As such, given the reasonably anticipated decline in project emissions once fully constructed and operational, the project is consistent with the

Executive Order's horizon-year goal. Therefore, the project is consistent with Executive Orders S-3-05 and B-30-15.

#### Consistency with AB32 Scoping Plan

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. In May 2014, the CARB released its *First Update to the Climate Change Scoping Plan* (CARB 2014). This *Update* identifies the next steps for California's leadership on climate change. In November 2017, the CARB released the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets.

As the latest, 2017 Scoping Plan builds upon previous versions, project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in Table 7. As shown in Table 7, the project is consistent with the applicable strategies within the Scoping Plan.

Table 7: Project Consistency with CARB Scoping Plan Policies and Measures<sup>1</sup>

-,	-1- 8
2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the

	1
	strategy.
	Consistent. These are CARB enforced standards;
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty	vehicles that access the project that are required to
vehicle efficiency measures.	comply with the standards will comply with the
	strategy.
	Consistent. The California Green Building Standards
	Code (proposed Part 11, Title 24) was adopted as part
	of the California Building Standards Code in the CCR.
	Part 11 establishes voluntary standards, that are
Green Building Strategy – Expand the use of green building	mandatory in the 2019 edition of the Code, on
practices to reduce the carbon footprint of California's new and	planning and design for sustainable site development,
existing inventory of buildings.	energy efficiency (in excess of the California Energy
	Code requirements), water conservation, material
	conservation, and internal air contaminants. The
	project will be subject to these mandatory standards.
	Consistent. CARB identified five measures that reduce
High Global Warming Potential Gases – Adopt measures to	HFC emissions from vehicular and commercial
reduce high global warming potential gases.	refrigeration systems; vehicles that access the project
reader mon broom warming potential gases.	that are required to comply with the measures will
	comply with the strategy.
	Consistent. The state is currently developing a
	regulation to reduce methane emissions from
Recycling and Waste – Reduce methane emissions at landfills.	municipal solid waste landfills. The project will be
Increase waste diversion, composting, and commercial	required to comply with City programs, such as City's
recycling. Move toward zero-waste.	recycling and waste reduction program, which comply
	with the 75 percent reduction required by 2020 per Al
	341.
Water – Continue efficiency programs and use cleaner energy	
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.
	Consistent. The project will comply with all applicable
sources to move and treat water.	Consistent. The project will comply with all applicable
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards;
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. Consistent. These are CARB enforced standards;
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. Consistent. These are CARB enforced standards; vehicles that access the project that are required to
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.  Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. Consistent. These are CARB enforced standards; vehicles that access the project that are required to
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light- duty electric vehicles by 2030.  Implement Mobile Source Strategy: Innovative Clean Transit:	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.  Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light- duty electric vehicles by 2030.  Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light- duty electric vehicles by 2030.  Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.  Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.  Consistent. These are CARB enforced standards;
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions  Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.  Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.  Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.  Project Compliance with Recommended Action Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.  Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.  Consistent. These are CARB enforced standards; vehicles that access the project that are required to
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increasing to 10 percent in 2025 and remaining flat through	
2030.	
Implement SB 350 by 2030: Establish annual targets for	
statewide energy efficiency savings and demand reduction that	Consistent. The project will be compliant with the
will achieve a cumulative doubling of statewide energy	current Title 24 standards.
efficiency savings in electricity and natural gas end uses by 2030.	
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Notes:	
<sup>1</sup> Source: CARB Scoping Plan (2008 and 2017)	

## Consistency with SCAG's 2016-2040 RTP/SCS

At the regional level, the 2016-2040 RTP and Sustainable Communities Strategy represent the region's Climate Action Plan that defines strategies for reducing GHGs. In order to assess the project's potential to conflict with the RTP/SCS, this section analyzes the project's land use profile for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's Sustainable Communities Strategy, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

Table 8 demonstrates the project's consistency with the Actions and Strategies set forth in the 2016-2040 RTP/SCS. As shown in Table 8, the project would be consistent with the GHG reduction related actions and strategies contained in the 2016-2040 RTP/SCS.

Table 8: Project Consistency with SCAG 2016-2040 RTP/SCS<sup>1</sup>

	Responsible	
Actions and Strategies	Party(ies)	Consistency Analysis
Land Use Strategies		
Reflect the changing population and demands, including combating gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local Jurisdictions	Consistent. The proposed project is an infill development, which is replacing existing single family residential buildings with a proposed multifamily residential use; therefore, it will not displace existing housing.
Focus new growth around transit.	Local Jurisdictions	Consistent. The proposed project is an infill development that would be consistent with the 2016 RTP/SCS focus on growing near transit facilities.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG, Local Jurisdictions	Consistent. The proposed project is an infill development that would be consistent with the 2016 RTP/SCS focus on growing along the 2,980 miles of Livable Corridors in the region.
Provide more options for short trips through Neighborhood Mobility Areas and Complete Communities.	SCAG, Local Jurisdictions	Consistent. The proposed project would help further jobs/housing balance objectives. The proposed project is also consistent with the Complete Communities initiative that focuses on creation of mixed-use districts in growth areas.
Support local sustainability planning, including	Local	Not Applicable. This strategy calls on local

developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Jurisdictions	governments to adopt General Plan updates, zoning codes, and Climate Action Plans to further sustainable communities. The proposed project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farmlands, including developing conservation strategies.	SCAG, Local Jurisdictions	Consistent. The proposed project is an infill development that would help reduce demand for growth in urbanizing areas that threaten green fields and open spaces.
Transportation Strategies		
Preserve our existing transportation system.	SCAG, County Transportation Commissions, Local Jurisdictions	Not Applicable. This strategy calls on investing in the maintenance of our existing transportation system. The proposed project would not interfere with such policymaking.
Manage congestion through programs like the Congestion Management Program, Transportation Demand Management, and Transportation Systems Management strategies.	County Transportation Commissions, Local Jurisdictions	Consistent. The proposed project is an infill development that will minimize congestion impacts on the region because of its proximity to public transit and general density of population and jobs.
Promote safety and security in the transportation system.	SCAG, County Transportation Commissions, Local Jurisdictions	Not Applicable. This strategy aims to improve the safety of the transportation system and protect users from security threats. The proposed project would not interfere with such policymaking.
Complete our transit, passenger rail, active transportation, highways and arterials, regional express lanes goods movement, and airport ground transportation systems.	SCAG, County Transportation Commissions, Local Jurisdictions	Not Applicable. This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to address regional growth. The proposed project would not interfere with this larger goal of investing in the transportation system.
Technological Innovation and 21st Century Transporta	tion	
Promote zero-emissions vehicles.	SCAG, Local Jurisdictions	Consistent. While this action/strategy is not necessarily applicable on a project-specific basis, the City's Building Code requires the proposed building to provide conduit for on-site electric vehicle charging stalls, which the project is to provide in the proposed parking garage.
Promote neighborhood electric vehicles.	SCAG, Local Jurisdictions	Consistent. While this action/strategy is not necessarily applicable on a project-specific basis, the City's Building Code requires the proposed building to provide conduit for on-site electric vehicle charging stalls, which the project is to provide in the proposed parking garage.
Implement shared mobility programs.	SCAG, Local Jurisdictions	Not Applicable. This strategy is designed to integrate new technologies for last-mile and alternative transportation programs. The proposed project would not interfere with these emerging programs.

#### Notes:

<sup>&</sup>lt;sup>1</sup> Source: Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; April 2016.

Consistency with the City of Los Angeles ClimateLA Implementation Plan

The "ClimateLA" plan focuses on transportation, energy, water use, land use, waste, open space and greening, and economic factors to achieve emissions reductions. The project is required to comply with CALGreen and the City's Green Building Code, as well as solid waste diversion policies administered by CalRecycle, and is an infill location with immediate access to significant public transit, pedestrian, and bicycle facilities. Therefore, the project is consistent with the "ClimateLA" plan.

Consistency with the City of Los Angeles Green Building Ordinance

The Los Angeles Green Building Ordinance requires that all projects filed on or after January 1, 2014 comply with the current Los Angeles Green Building Code as amended to comply with the 2016 and 2019 CALGreen Codes. Mandatory measures under the Green Building Ordinance that would help reduce GHG emissions include short- and long-term bicycle parking measures; designated parking measure; and electric vehicle supply wiring. The project provides 11 short-term and 159 long-term bicycle parking spaces and 13 on-site electric automobile charging stations as well as 44 EV capable spaces in the parking garage as required per the City's Building Code. The Green Building Ordinance also includes measures that would increase energy efficiency on the project site, including installing Energy Star rated appliances and installation of water conserving fixtures, that the project is required to comply with. Therefore, the project is consistent with the Los Angeles Green Building Ordinance.

#### 5.7 Energy Analysis

Information from the CalEEMod 2020.4.0 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses above was utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

#### **Construction Energy Demand**

Construction Equipment Electricity Usage Estimates

Electrical service will be provided by the Los Angeles Department of Water and Power (LADWP). Based on the 2017 National Construction Estimator, Richard Pray (2017)<sup>9</sup>, the typical power cost per 1,000 square feet of building construction per month is estimated to be \$2.32. The project plans to develop the site with a 175,528.4 square foot building including 129 multi-family residential dwelling units over the course of approximately 24 months. Based on Table 9, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately \$9,773.42. As shown in Table 9, the total electricity usage from Project construction related activities is estimated to be approximately 177,699 kWh.<sup>10</sup>

 $<sup>^{\</sup>rm 9}$  Pray, Richard. 2017 National Construction Estimator. Carlsbad : Craftsman Book Company, 2017.

<sup>&</sup>lt;sup>10</sup> LADWP's Small Commercial & Multi-Family Service (A-1) is approximately \$0.06 per kWh of electricity Southern California Edison (SCE). Rates & Pricing Choices: General Service/Industrial Rates. https://library.sce.com/content/dam/sce-doclib/public/regulatory/historical/electric/2020/schedules/general-service-&-industrial-rates/ELECTRIC\_SCHEDULES\_GS-1\_2020.pdf

**Table 9: Project Construction Power Cost and Electricity Usage** 

Power Cost (per 1,000 square foot of building per month of construction)	Total Building Size (1,000 Square Foot) <sup>1</sup>	Construction Duration (months)	Total Project Construction Power Cost
\$2.32	176	24	\$9,773.42

Cost per kWh	Total Project Construction Electricity Usage (kWh)
\$0.06	177,699

<sup>\*</sup>Assumes the project will be under the A-1 Small Commercial & Multi-Family Service rate under LADWP. https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-financesandreports/a-fr-electricrates/a-fr-erstcommindrates?\_adf.ctrl-state=4uqberzct\_4&\_afrLoop=958662023680086

#### Construction Equipment Fuel Estimates

Using the CalEEMod data input, the project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal.<sup>11</sup> As presented in Table 10 below, project construction activities would consume an estimated 37,796 gallons of diesel fuel.

**Table 10: Construction Equipment Fuel Consumption Estimates** 

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	HP hrs/day	Total Fuel Consumption (gal diesel fuel) <sup>1</sup>
	9	Graders	1	8	187	0.41	613	298
Grading	9	Rubber Tired Dozers	1	8	247	0.4	790	385
9	9	Tractors/Loaders/Backhoes	2	7	97	0.37	502	244
	446	Cranes	1	6	231	0.29	402	9,690
Duildin a	446	Forklifts	1	6	89	0.2	107	2,575
Building Construction	446	Generator Sets	1	8	78	0.37	231	5,566
Construction	446	Tractors/Loaders/Backhoes	1	6	97	0.37	215	5,191
	446	Welders	3	8	46	0.45	497	11,977
	22	Cement and Mortar Mixers	4	6	9	0.56	121	144
	22	Pavers	1	7	130	0.42	382	455
Paving	22	Paving Equipment	1	8	132	0.36	380	452
	22	Rollers	1	7	80	0.38	213	253
	22	Tractors/Loaders/Backhoes	1	7	97	0.37	251	299
Architectural Coating	22	Air Compressors	1	6	78	0.48	225	267
CONSTRUCTION FUE	L DEMAND	(gallons of diesel fuel)			_		_	37,796

Notes:

<sup>1</sup>Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp. (Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017\_gl\_appendix\_d.pdf)

<sup>&</sup>lt;sup>11</sup> Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017 gl appendix d.pdf).

#### Construction Worker Fuel Estimates

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 793,478 VMT. Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analysis using information generated using CARB's EMFAC model (see Appendix C for details). Table 11 shows that an estimated 25,637 gallons of fuel would be consumed for construction worker trips.

**Table 11: Construction Worker Fuel Consumption Estimates** 

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)		
Grading	9	10	14.7	1,323	30.95	43		
Building Construction	446	119	14.7	780,188	30.95	25,208		
Paving	22	13	14.7	4,204	30.95	136		
Architectural Coating	22	24	14.7	7,762	30.95	251		
Total Construction Wo	Total Construction Worker Fuel Consumption							

Notes:

#### Construction Vendor/Hauling Fuel Estimates

Tables 12 and 13 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 151,358 VMT. For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles. Tables 12 and 13 show that an estimated 19,509 gallons of fuel would be consumed for vendor and hauling trips.

Table 12: Construction Vendor Fuel Consumption Estimates (MHD Trucks)<sup>1</sup>

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)		
Grading	9	0	6.9	0	9.22	0		
<b>Building Construction</b>	446	24	6.9	73,858	9.22	8,011		
Paving	22	0	6.9	0	9.22	0		
Architectural Coating	22	0	6.9	0	9.22	0		
Total Vendor Fuel Cons	Fotal Vendor Fuel Consumption							

Notes:

<sup>&</sup>lt;sup>1</sup>Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

<sup>&</sup>lt;sup>1</sup> Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

<sup>&</sup>lt;sup>12</sup> Vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 9.22 mpg for medium heavy-duty trucks and 6.74 mpg for heavy heavy-duty trucks (see Appendix C for details).

Table 13: Construction Hauling Fuel Consumption Estimates (HHD Trucks)<sup>1</sup>

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	9	430.6	20	77,500	6.74	11,499
<b>Building Construction</b>	446	0	20	0	6.74	0
Paving	22	0	20	0	6.74	0
Architectural Coating	22	0	20	0	6.74	0
Total Construction Hau	11,499					

Notes

#### Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately 24-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. In addition, the CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Furthermore, the project has been designed in compliance with California's Energy Efficiency Standards and 2019 CALGreen Standards.

Construction of the proposed residential development would require the typical use of energy resources. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

#### **Operational Energy Demand**

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

#### Transportation Fuel Consumption

The largest source of operational energy use would be vehicle operation of customers. The site is located in an urbanized area just in close proximity to downtown Los Angeles.

Using the defaults VMT estimates from CalEEMod, it is assumed that the average vehicle miles traveled was 6.69 miles for all vehicle categories. As the proposed project is a residential project, it was assumed that vehicles would operate 365 days per year. Table 8 shows the worst-case estimated annual fuel

<sup>&</sup>lt;sup>1</sup>Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2020.40 defaults.

consumption for all classes of vehicles from autos to heavy-heavy trucks.<sup>13</sup> Table 14 shows that an estimated 53,784 gallons of fuel would be consumed per year for the operation of the proposed project.

**Table 14: Estimated Vehicle Operations Fuel Consumption** 

					Average		Total Annual
		Number	Average		Fuel	Total	Fuel
		of	Trip	Daily	Economy	Gallons	Consumption
Vehicle Type	Vehicle Mix	Vehicles	(miles) <sup>1</sup>	VMT	(mpg)	per Day	(gallons)
Light Auto	Automobile	269	6.69	1,799	31.82	56.53	20,634
Light Truck	Automobile	29	6.69	194	27.16	7.14	2,604
Light Truck	Automobile	95	6.69	636	25.6	24.83	9,064
Medium Truck	Automobile	90	6.69	603	20.81	28.96	10,572
Light Heavy Truck	2-Axle Truck	19	6.69	128	13.81	9.27	3,385
Light Heavy Truck 10,000 lbs +	2-Axle Truck	5	6.69	32	14.18	2.26	826
Medium Heavy Truck	3-Axle Truck	6	6.69	39	9.58	4.12	1,503
Heavy Heavy Truck	4-Axle Truck	15	6.69	102	7.14	14.24	5,196
Total	1	3,532		147.35			
Total Annual Fuel Consumption	1	•	•	•	•	•	53,784

Notes:

Trip generation and VMT generated by the proposed project are consistent with other similar residential uses of similar scale and configuration. That is, the proposed project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Facility Energy Demands (Electricity and Natural Gas)

The annual natural gas and electricity demands were provided per the CalEEMod output and are provided in Table 15.

Table 15: Project Mitigated Annual Operational Energy Demand Summary<sup>1</sup>

Natural Gas Demand	kBTU/year		
Apartments High Rise	1,519,680		
Total	1,519,680		

Electricity Demand	kWh/year
Apartments High Rise	508,878
Enclosed Parking Structure	329,285
Total	838.163

Notes:

As shown in Table 15, the estimated electricity demand for the proposed project is approximately 838,163 kWh per year. In 2020, the residential sector of the County of Los Angeles consumed approximately 22,913 million kWh of electricity.<sup>14</sup> In addition, the estimated natural gas consumption for the proposed

<sup>&</sup>lt;sup>1</sup>Based on the size of the site and relative location, trips were assumed to be local rather than regional.

<sup>&</sup>lt;sup>1</sup>Taken from the CalEEMod 2020.4.0 annual output.

<sup>13</sup> Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2023). See Appendix A for EMFAC output.

<sup>&</sup>lt;sup>14</sup> California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx

project is approximately 1,519,680 kBTU per year. In 2020, the residential sector of the County of Los Angeles consumed approximately 1,238 million therms of gas.<sup>15</sup> Therefore, the increase in both electricity and natural gas demand from the proposed project is insignificant compared to the County's 2020 demand.

Renewable Energy and Energy Efficiency Plan Consistency

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

#### 6.0 Conclusions

Construction and operational project emissions were evaluated and compared to both regional and localized SCAQMD's thresholds of significance. In addition, project GHG emissions were evaluated and compared to SCAQMD's draft threshold of 3,000 MTCO2e per year for all land uses. Project emissions are anticipated to be below SCAQMD's thresholds of significance with no mitigation. Therefore, the impact is less than significant.

Furthermore, neither construction nor operation of the project would result in wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources. The proposed project does not include any unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities and is a residential project that is not proposing any additional features that would require a larger energy demand than other residential projects of similar scale and configuration. The energy demands of the project are anticipated to be accommodated within the context of available resources and energy delivery systems. The project would therefore not cause or result in the need for additional energy producing or transmission facilities. The project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. The Project has been designed in compliance with California's Energy Efficiency Standards and 2019 CALGreen Standards. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, impacts would be less than significant.

<sup>&</sup>lt;sup>15</sup> California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

MD is pleased to provide this focused Air Quality, Greenhouse Gas, and Energy Impact Evaluation. If you have any questions regarding this analysis, please don't hesitate to call us at (805) 426-4477.

Sincerely,

MD Acoustics, LLC

Tyler Klassen, EIT Air Quality Specialist **Appendix A**Glossary of Terms

AQMP Air Quality Management Plan

CAAQS California Ambient Air Quality Standards

CARB California Air Resources Board

CEQA California Environmental Quality Act

CFCs Chlorofluorocarbons

CH<sub>4</sub> Methane

CNG Compressed natural gas

CO Carbon monoxide CO<sub>2</sub> Carbon dioxide

CO<sub>2</sub>e Carbon dioxide equivalent DPM Diesel particulate matter

GHG Greenhouse gas HFCs Hydrofluorocarbons

LST Localized Significant Thresholds

MTCO<sub>2</sub>e Metric tons of carbon dioxide equivalent

MMTCO<sub>2</sub>e Million metric tons of carbon dioxide equivalent

NAAQS National Ambient Air Quality Standards

NOx Nitrogen Oxides NO<sub>2</sub> Nitrogen dioxide N<sub>2</sub>O Nitrous oxide

O<sub>3</sub> Ozone

PFCs Perfluorocarbons PM Particle matter

PM10 Particles that are less than 10 micrometers in diameter PM2.5 Particles that are less than 2.5 micrometers in diameter

PMI Point of maximum impact

PPM Parts per million PPB Parts per billion

RTIP Regional Transportation Improvement Plan

RTP Regional Transportation Plan

SCAB South Coast Air Basin

SCAQMD South Coast Air Quality Management District

SF<sub>6</sub> Sulfur hexafluoride

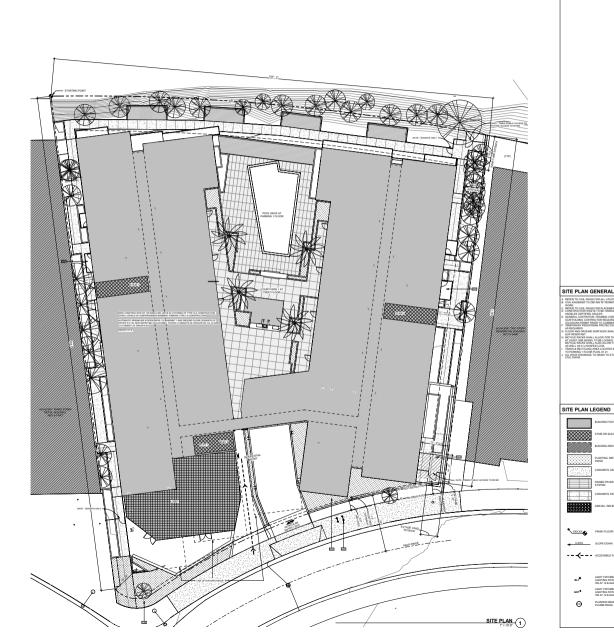
SIP State Implementation Plan

SOx Sulfur Oxides

SRA Source/Receptor Area
TAC Toxic air contaminants
VOC Volatile organic compounds

WRCC Western Regional Climate Center

**Appendix B**Site Plan



# UNIVERSAL CITY GUEST HOME, L.P. 5150 OVERLAND AVENUE, CULVER CITY, CA 90230 (310) 280-5082 THE CRESCENT APARTMENTS SITE PLAN GENERAL NOTES SITE PLAN GENERAL NOTES A REAT DICK BOOK DAY, A LIMITE SAN GOT SOME A REAT DICK BOOK DAY, A LIMITE SAN GOT SOME ONE. 4260 N. ARCH DRIVE STUDIO CITY, CA 91604 AHRF SUBMISSION 07.07.21 ARCHITECTURAL SITE PLAN

A0.10

KEYNOTES

**Appendix C**CalEEMod Outputs & EMFAC2017 Data

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4260 Arch Drive Multi-Family Project - Madera County, Summer

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

#### 4260 Arch Drive Multi-Family Project

Madera County, Summer

# 1.0 Project Characteristics

#### 1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	145.00	Space	0.00	62,721.00	0
Apartments High Rise	129.00	Dwelling Unit	1.03	114,004.40	369

Precipitation Freq (Days)

51

#### 1.2 Other Project Characteristics

Urban

Climate Zone	3			Operational Year	2023
Utility Company	Southern California	a Edison			
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

Wind Speed (m/s)

# 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5-story 129-unit multifamily building on 44,866.8 SF (1.03 acre) lot with 145 parking spaces on two subterranean levels.

2.9

Construction Phase -

Demolition - Per Google Earth estimate

Architectural Coating - SCAQMD Rule 1113

Woodstoves - No woodstoves or fireplaces

Area Coating - SCAQMD Rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of thier waste away from landfills by 2020.

Grading -

Vehicle Trips - Per transportation assessment from Overland Consultants, Inc., the project will generate 528 trips per day (4.093 trips per unit)

# 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	58,000.00	62,721.00
tblLandUse	LandUseSquareFeet	129,000.00	114,004.40
tblLandUse	LotAcreage	1.30	0.00
tblLandUse	LotAcreage	2.08	1.03
tblWoodstoves	NumberCatalytic	1.03	0.00
tblWoodstoves	NumberNoncatalytic	1.03	0.00

# 2.0 Emissions Summary

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## 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 2.1 Overall Construction (Maximum Daily Emission)

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023	73.3663	77.1571	23.0558	0.3300	17.1692	1.2413	18.4104	6.1065	1.1653	7.2718	0.0000	34,759.67 72	34,759.67 72	0.7174	5.1397	36,309.23 61
Maximum	73.3663	77.1571	23.0558	0.3300	17.1692	1.2413	18.4104	6.1065	1.1653	7.2718	0.0000	34,759.67 72	34,759.67 72	0.7174	5.1397	36,309.23 61

## **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/d	day							lb/d	lay		
2023	73.3663	77.1571	23.0558	0.3300	12.4289	1.2413	13.6702	3.9538	1.1653	5.1191	0.0000	34,759.67 72	34,759.67 72	0.7174	5.1397	36,309.23 61
Maximum	73.3663	77.1571	23.0558	0.3300	12.4289	1.2413	13.6702	3.9538	1.1653	5.1191	0.0000	34,759.67 72	34,759.67 72	0.7174	5.1397	36,309.23 61

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	27.61	0.00	25.75	35.25	0.00	29.60	0.00	0.00	0.00	0.00	0.00	0.00

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## 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day lb/											lb/c	'day			
Area	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8
Energy	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Mobile	2.3293	3.2296	19.1928	0.0410	3.5488	0.0392	3.5880	0.9487	0.0368	0.9855		4,218.683 4	4,218.683 4	0.2190	0.2235	4,290.750 7
Total	5.4962	4.9131	30.5167	0.0516	3.5488	0.2243	3.7732	0.9487	0.2220	1.1707	0.0000	6,230.174 3	6,230.174 3	0.2757	0.2600	6,314.543 6

## **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/d	day							lb/d	day		
Area	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8
Energy	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Mobile	2.3293	3.2296	19.1928	0.0410	3.5488	0.0392	3.5880	0.9487	0.0368	0.9855		4,218.683 4	4,218.683 4	0.2190	0.2235	4,290.750 7
Total	5.4962	4.9131	30.5167	0.0516	3.5488	0.2243	3.7732	0.9487	0.2220	1.1707	0.0000	6,230.174 3	6,230.174 3	0.2757	0.2600	6,314.543 6

## 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

	ROG	NOx	СО	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	1/1/2023	1/27/2023	5	20	
2	Grading	Grading	1/28/2023	2/2/2023	5	4	
3	Building Construction	Building Construction	2/3/2023	11/9/2023	5	200	
4	Paving	Paving	11/10/2023	11/23/2023	5	10	
5	Architectural Coating	Architectural Coating	11/24/2023	12/7/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 230,859; Residential Outdoor: 76,953; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,763 (Architectural Coating – sqft)

# **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Paving Equipment	1	8.00	132	0.36
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	273.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	119.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 3.2 Demolition - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					3.0186	0.0000	3.0186	0.4571	0.0000	0.4571			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.395 9	2,324.395 9	0.5893		2,339.127 8
Total	1.4725	14.3184	13.4577	0.0241	3.0186	0.6766	3.6953	0.4571	0.6328	1.0898		2,324.395 9	2,324.395 9	0.5893		2,339.127 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0299	1.6102	0.3605	7.9300e- 003	0.2394	0.0164	0.2557	0.0657	0.0157	0.0813		839.7855	839.7855	1.7900e- 003	0.1320	879.1681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0515	0.0271	0.4188	1.0200e- 003	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		104.1355	104.1355	3.0600e- 003	2.6800e- 003	105.0121
Total	0.0814	1.6373	0.7793	8.9500e- 003	0.3462	0.0170	0.3631	0.0940	0.0162	0.1102		943.9210	943.9210	4.8500e- 003	0.1347	984.1802

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 3.2 **Demolition - 2023**

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	1 1 1 1 1				1.1773	0.0000	1.1773	0.1783	0.0000	0.1783			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.395 9	2,324.395 9	0.5893	 	2,339.127 8
Total	1.4725	14.3184	13.4577	0.0241	1.1773	0.6766	1.8539	0.1783	0.6328	0.8110	0.0000	2,324.395 9	2,324.395 9	0.5893		2,339.127 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0299	1.6102	0.3605	7.9300e- 003	0.2394	0.0164	0.2557	0.0657	0.0157	0.0813		839.7855	839.7855	1.7900e- 003	0.1320	879.1681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0515	0.0271	0.4188	1.0200e- 003	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		104.1355	104.1355	3.0600e- 003	2.6800e- 003	105.0121
Total	0.0814	1.6373	0.7793	8.9500e- 003	0.3462	0.0170	0.3631	0.0940	0.0162	0.1102		943.9210	943.9210	4.8500e- 003	0.1347	984.1802

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

3.3 Grading - 2023

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					7.7709	0.0000	7.7709	3.5290	0.0000	3.5290			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454	       	2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.7709	0.6044	8.3752	3.5290	0.5560	4.0850		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	1.1641	62.6687	14.0298	0.3087	9.3161	0.6364	9.9525	2.5557	0.6089	3.1646		32,683.95 82	32,683.95 82	0.0697	5.1376	34,216.70 72
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0396	0.0208	0.3222	7.8000e- 004	0.0822	4.8000e- 004	0.0826	0.0218	4.4000e- 004	0.0222		80.1043	80.1043	2.3500e- 003	2.0700e- 003	80.7786
Total	1.2037	62.6895	14.3520	0.3094	9.3983	0.6369	10.0352	2.5775	0.6093	3.1868		32,764.06 25	32,764.06 25	0.0720	5.1397	34,297.48 58

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

3.3 Grading - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.0307	0.0000	3.0307	1.3763	0.0000	1.3763			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	3.0307	0.6044	3.6350	1.3763	0.5560	1.9323	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	1.1641	62.6687	14.0298	0.3087	9.3161	0.6364	9.9525	2.5557	0.6089	3.1646		32,683.95 82	32,683.95 82	0.0697	5.1376	34,216.70 72
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0396	0.0208	0.3222	7.8000e- 004	0.0822	4.8000e- 004	0.0826	0.0218	4.4000e- 004	0.0222		80.1043	80.1043	2.3500e- 003	2.0700e- 003	80.7786
Total	1.2037	62.6895	14.3520	0.3094	9.3983	0.6369	10.0352	2.5775	0.6093	3.1868		32,764.06 25	32,764.06 25	0.0720	5.1397	34,297.48 58

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 3.4 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.787 7	2,001.787 7	0.3399		2,010.285 8
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.787 7	2,001.787 7	0.3399		2,010.285 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0297	1.0146	0.3523	4.9000e- 003	0.1628	6.9100e- 003	0.1697	0.0469	6.6100e- 003	0.0535		517.1014	517.1014	1.8800e- 003	0.0755	539.6525
Worker	0.4715	0.2477	3.8340	9.3100e- 003	0.9776	5.7000e- 003	0.9833	0.2593	5.2400e- 003	0.2645		953.2406	953.2406	0.0280	0.0246	961.2648
Total	0.5012	1.2623	4.1863	0.0142	1.1403	0.0126	1.1529	0.3062	0.0119	0.3180		1,470.342 0	1,470.342 0	0.0299	0.1001	1,500.917 3

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 3.4 Building Construction - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.787 7	2,001.787 7	0.3399		2,010.285 8
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.787 7	2,001.787 7	0.3399		2,010.285 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0297	1.0146	0.3523	4.9000e- 003	0.1628	6.9100e- 003	0.1697	0.0469	6.6100e- 003	0.0535		517.1014	517.1014	1.8800e- 003	0.0755	539.6525
Worker	0.4715	0.2477	3.8340	9.3100e- 003	0.9776	5.7000e- 003	0.9833	0.2593	5.2400e- 003	0.2645		953.2406	953.2406	0.0280	0.0246	961.2648
Total	0.5012	1.2623	4.1863	0.0142	1.1403	0.0126	1.1529	0.3062	0.0119	0.3180		1,470.342 0	1,470.342 0	0.0299	0.1001	1,500.917 3

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

3.5 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.688 0	1,297.688 0	0.4114		1,307.972 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0515	0.0271	0.4188	1.0200e- 003	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		104.1355	104.1355	3.0600e- 003	2.6800e- 003	105.0121
Total	0.0515	0.0271	0.4188	1.0200e- 003	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		104.1355	104.1355	3.0600e- 003	2.6800e- 003	105.0121

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

3.5 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0515	0.0271	0.4188	1.0200e- 003	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		104.1355	104.1355	3.0600e- 003	2.6800e- 003	105.0121
Total	0.0515	0.0271	0.4188	1.0200e- 003	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		104.1355	104.1355	3.0600e- 003	2.6800e- 003	105.0121

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 3.6 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	73.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003	 	0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	73.2712	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0951	0.0500	0.7733	1.8800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		192.2502	192.2502	5.6500e- 003	4.9600e- 003	193.8685
Total	0.0951	0.0500	0.7733	1.8800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		192.2502	192.2502	5.6500e- 003	4.9600e- 003	193.8685

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 3.6 Architectural Coating - 2023 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	73.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	73.2712	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0951	0.0500	0.7733	1.8800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		192.2502	192.2502	5.6500e- 003	4.9600e- 003	193.8685
Total	0.0951	0.0500	0.7733	1.8800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		192.2502	192.2502	5.6500e- 003	4.9600e- 003	193.8685

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	2.3293	3.2296	19.1928	0.0410	3.5488	0.0392	3.5880	0.9487	0.0368	0.9855		4,218.683 4	4,218.683 4	0.2190	0.2235	4,290.750 7
Unmitigated	2.3293	3.2296	19.1928	0.0410	3.5488	0.0392	3.5880	0.9487	0.0368	0.9855		4,218.683 4	4,218.683 4	0.2190	0.2235	4,290.750 7

#### **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	574.05	584.37	463.11	1,601,931	1,601,931
Enclosed Parking Structure	0.00	0.00	0.00		
Total	574.05	584.37	463.11	1,601,931	1,601,931

#### **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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 High Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.491491	0.052949	0.173689	0.164683	0.034990	0.008766	0.010778	0.027771	0.000810	0.000210	0.026873	0.002020	0.004972
Enclosed Parking Structure	0.491491	0.052949	0.173689	0.164683	0.034990	0.008766	0.010778	0.027771	0.000810	0.000210	0.026873	0.002020	0.004972

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/c	lay		
NaturalGas Mitigated	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
NaturalGas Unmitigated	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s 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/c	lay		
Apartments High Rise	4163.52	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Enclosed 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		0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362

# **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day		
Apartments High Rise	4.16352	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Enclosed 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		0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362

# 6.0 Area Detail

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4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category												lb/d	day			
Mitigated	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8
Unmitigated	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8

#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	0.2002					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	2.4619				     	0.0000	0.0000		0.0000	0.0000		       	0.0000		     	0.0000
Hearth	0.1377	1.1769	0.5008	7.5100e- 003		0.0952	0.0952		0.0952	0.0952	0.0000	1,502.470 6	1,502.470 6	0.0288	0.0276	1,511.399 0
Landscaping	0.3221	0.1228	10.6598	5.6000e- 004		0.0590	0.0590		0.0590	0.0590		19.1950	19.1950	0.0185	       	19.6578
Total	3.1219	1.2998	11.1607	8.0700e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8

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#### 4260 Arch Drive Multi-Family Project - Madera County, Summer

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

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	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/d	lay			
Architectural Coating	0.2002		1 1 1			0.0000	0.0000	  -  -	0.0000	0.0000		i i	0.0000			0.0000
Products	2.4619		1 1 1 1	 	       	0.0000	0.0000	i i	0.0000	0.0000		i i	0.0000		       	0.0000
Hearth	0.1377	1.1769	0.5008	7.5100e- 003	       	0.0952	0.0952	i i	0.0952	0.0952	0.0000	1,502.470 6	1,502.470 6	0.0288	0.0276	1,511.399 0
Landscaping	0.3221	0.1228	10.6598	5.6000e- 004	       	0.0590	0.0590	i i	0.0590	0.0590		19.1950	19.1950	0.0185	       	19.6578
Total	3.1219	1.2998	11.1607	8.0700e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

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4260 Arch Drive Multi-Family Project - Madera County, Summer

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

#### 8.0 Waste Detail

#### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

# 9.0 Operational Offroad

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

# **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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4260 Arch Drive Multi-Family Project - Madera County, Winter

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

#### 4260 Arch Drive Multi-Family Project

Madera County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Urbanization

(lb/MWhr)

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	145.00	Space	0.00	62,721.00	0
Apartments High Rise	129.00	Dwelling Unit	1.03	114,004.40	369

Precipitation Freq (Days)

(lb/MWhr)

51

#### 1.2 Other Project Characteristics

Urban

Climate Zone	3			Operational Year	2023
Utility Company	Southern California Ediso	on			
CO2 Intensity	390.98	CH4 Intensity	0.033	N2O Intensity	0.004

2.9

Wind Speed (m/s)

(lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5-story 129-unit multifamily building on 44,866.8 SF (1.03 acre) lot with 145 parking spaces on two subterranean levels.

Construction Phase -

Demolition - Per Google Earth estimate

Architectural Coating - SCAQMD Rule 1113

Woodstoves - No woodstoves or fireplaces

Area Coating - SCAQMD Rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of thier waste away from landfills by 2020.

Grading -

Vehicle Trips - Per transportation assessment from Overland Consultants, Inc., the project will generate 528 trips per day (4.093 trips per unit)

#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	58,000.00	62,721.00
tblLandUse	LandUseSquareFeet	129,000.00	114,004.40
tblLandUse	LotAcreage	1.30	0.00
tblLandUse	LotAcreage	2.08	1.03
tblWoodstoves	NumberCatalytic	1.03	0.00
tblWoodstoves	NumberNoncatalytic	1.03	0.00

# 2.0 Emissions Summary

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 2.1 Overall Construction (Maximum Daily Emission)

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023	73.3558	81.5294	23.2680	0.3304	17.1692	1.2420	18.4112	6.1065	1.1661	7.2725	0.0000	34,795.82 65	34,795.82 65	0.7136	5.1470	36,347.48 45
Maximum	73.3558	81.5294	23.2680	0.3304	17.1692	1.2420	18.4112	6.1065	1.1661	7.2725	0.0000	34,795.82 65	34,795.82 65	0.7136	5.1470	36,347.48 45

#### **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/d	day							lb/c	lay		
2023	73.3558	81.5294	23.2680	0.3304	12.4289	1.2420	13.6709	3.9538	1.1661	5.1199	0.0000	34,795.82 65	34,795.82 65	0.7136	5.1470	36,347.48 45
Maximum	73.3558	81.5294	23.2680	0.3304	12.4289	1.2420	13.6709	3.9538	1.1661	5.1199	0.0000	34,795.82 65	34,795.82 65	0.7136	5.1470	36,347.48 45

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	27.61	0.00	25.75	35.25	0.00	29.60	0.00	0.00	0.00	0.00	0.00	0.00

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Area	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8
Energy	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Mobile	1.8774	3.6174	18.5067	0.0379	3.5488	0.0392	3.5881	0.9487	0.0369	0.9856		3,900.108 7	3,900.108 7	0.2455	0.2381	3,977.200 9
Total	5.0442	5.3009	29.8307	0.0484	3.5488	0.2244	3.7732	0.9487	0.2220	1.1707	0.0000	5,911.599 7	5,911.599 7	0.3022	0.2746	6,000.993 8

#### **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/d	day							lb/d	day		
Area	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8
Energy	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Mobile	1.8774	3.6174	18.5067	0.0379	3.5488	0.0392	3.5881	0.9487	0.0369	0.9856		3,900.108 7	3,900.108 7	0.2455	0.2381	3,977.200 9
Total	5.0442	5.3009	29.8307	0.0484	3.5488	0.2244	3.7732	0.9487	0.2220	1.1707	0.0000	5,911.599 7	5,911.599 7	0.3022	0.2746	6,000.993 8

#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

	ROG	NOx	СО	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	1/1/2023	1/27/2023	5	20	
2	Grading	Grading	1/28/2023	2/2/2023	5	4	
3	Building Construction	Building Construction	2/3/2023	11/9/2023	5	200	
4	Paving	Paving	11/10/2023	11/23/2023	5	10	
5	Architectural Coating	Architectural Coating	11/24/2023	12/7/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 230,859; Residential Outdoor: 76,953; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,763 (Architectural Coating – sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Paving Equipment	1	8.00	132	0.36
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	273.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	119.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 3.2 Demolition - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.0186	0.0000	3.0186	0.4571	0.0000	0.4571			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241	 	0.6766	0.6766		0.6328	0.6328		2,324.395 9	2,324.395 9	0.5893	       	2,339.127 8
Total	1.4725	14.3184	13.4577	0.0241	3.0186	0.6766	3.6953	0.4571	0.6328	1.0898		2,324.395 9	2,324.395 9	0.5893		2,339.127 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0277	1.7225	0.3671	7.9400e- 003	0.2394	0.0164	0.2557	0.0657	0.0157	0.0813		840.9347	840.9347	1.6800e- 003	0.1322	880.3692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0458	0.0322	0.3585	9.1000e- 004	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		92.9829	92.9829	3.3900e- 003	3.0200e- 003	93.9670
Total	0.0735	1.7547	0.7256	8.8500e- 003	0.3462	0.0170	0.3632	0.0940	0.0162	0.1102		933.9176	933.9176	5.0700e- 003	0.1352	974.3362

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 3.2 **Demolition - 2023**

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					1.1773	0.0000	1.1773	0.1783	0.0000	0.1783			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.395 9	2,324.395 9	0.5893	       	2,339.127 8
Total	1.4725	14.3184	13.4577	0.0241	1.1773	0.6766	1.8539	0.1783	0.6328	0.8110	0.0000	2,324.395 9	2,324.395 9	0.5893		2,339.127 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0277	1.7225	0.3671	7.9400e- 003	0.2394	0.0164	0.2557	0.0657	0.0157	0.0813		840.9347	840.9347	1.6800e- 003	0.1322	880.3692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0458	0.0322	0.3585	9.1000e- 004	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		92.9829	92.9829	3.3900e- 003	3.0200e- 003	93.9670
Total	0.0735	1.7547	0.7256	8.8500e- 003	0.3462	0.0170	0.3632	0.0940	0.0162	0.1102		933.9176	933.9176	5.0700e- 003	0.1352	974.3362

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

3.3 Grading - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					7.7709	0.0000	7.7709	3.5290	0.0000	3.5290		i i	0.0000		i ! !	0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206	 	0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454	 	2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.7709	0.6044	8.3752	3.5290	0.5560	4.0850		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	1.0776	67.0370	14.2885	0.3091	9.3161	0.6372	9.9533	2.5557	0.6096	3.1653		32,728.68 64	32,728.68 64	0.0656	5.1447	34,263.45 19
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0248	0.2757	7.0000e- 004	0.0822	4.8000e- 004	0.0826	0.0218	4.4000e- 004	0.0222		71.5253	71.5253	2.6100e- 003	2.3200e- 003	72.2823
Total	1.1128	67.0618	14.5643	0.3098	9.3983	0.6377	10.0359	2.5775	0.6101	3.1876		32,800.21 17	32,800.21 17	0.0682	5.1470	34,335.73 42

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

3.3 Grading - 2023

# Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	ii ii ii				3.0307	0.0000	3.0307	1.3763	0.0000	1.3763		i i	0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	3.0307	0.6044	3.6350	1.3763	0.5560	1.9323	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	1.0776	67.0370	14.2885	0.3091	9.3161	0.6372	9.9533	2.5557	0.6096	3.1653		32,728.68 64	32,728.68 64	0.0656	5.1447	34,263.45 19
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0248	0.2757	7.0000e- 004	0.0822	4.8000e- 004	0.0826	0.0218	4.4000e- 004	0.0222		71.5253	71.5253	2.6100e- 003	2.3200e- 003	72.2823
Total	1.1128	67.0618	14.5643	0.3098	9.3983	0.6377	10.0359	2.5775	0.6101	3.1876		32,800.21 17	32,800.21 17	0.0682	5.1470	34,335.73 42

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 3.4 Building Construction - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145	1 1 1	0.4968	0.4968		2,001.787 7	2,001.787 7	0.3399		2,010.285 8
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.787 7	2,001.787 7	0.3399		2,010.285 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0280	1.0857	0.3631	4.9100e- 003	0.1628	6.9300e- 003	0.1697	0.0469	6.6300e- 003	0.0535		518.1213	518.1213	1.8000e- 003	0.0758	540.7509
Worker	0.4193	0.2950	3.2812	8.3200e- 003	0.9776	5.7000e- 003	0.9833	0.2593	5.2400e- 003	0.2645		851.1514	851.1514	0.0311	0.0276	860.1593
Total	0.4473	1.3807	3.6443	0.0132	1.1403	0.0126	1.1529	0.3062	0.0119	0.3180		1,369.272 7	1,369.272 7	0.0329	0.1034	1,400.910 2

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 3.4 Building Construction - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.787 7	2,001.787 7	0.3399		2,010.285 8
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.787 7	2,001.787 7	0.3399		2,010.285 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0280	1.0857	0.3631	4.9100e- 003	0.1628	6.9300e- 003	0.1697	0.0469	6.6300e- 003	0.0535		518.1213	518.1213	1.8000e- 003	0.0758	540.7509
Worker	0.4193	0.2950	3.2812	8.3200e- 003	0.9776	5.7000e- 003	0.9833	0.2593	5.2400e- 003	0.2645		851.1514	851.1514	0.0311	0.0276	860.1593
Total	0.4473	1.3807	3.6443	0.0132	1.1403	0.0126	1.1529	0.3062	0.0119	0.3180		1,369.272 7	1,369.272 7	0.0329	0.1034	1,400.910 2

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

3.5 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.688 0	1,297.688 0	0.4114		1,307.972 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0458	0.0322	0.3585	9.1000e- 004	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		92.9829	92.9829	3.3900e- 003	3.0200e- 003	93.9670
Total	0.0458	0.0322	0.3585	9.1000e- 004	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		92.9829	92.9829	3.3900e- 003	3.0200e- 003	93.9670

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

3.5 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000	 	]			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0458	0.0322	0.3585	9.1000e- 004	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		92.9829	92.9829	3.3900e- 003	3.0200e- 003	93.9670
Total	0.0458	0.0322	0.3585	9.1000e- 004	0.1068	6.2000e- 004	0.1074	0.0283	5.7000e- 004	0.0289		92.9829	92.9829	3.3900e- 003	3.0200e- 003	93.9670

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 3.6 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	73.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	73.2712	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0846	0.0595	0.6618	1.6800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		171.6608	171.6608	6.2600e- 003	5.5700e- 003	173.4775
Total	0.0846	0.0595	0.6618	1.6800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		171.6608	171.6608	6.2600e- 003	5.5700e- 003	173.4775

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 3.6 Architectural Coating - 2023 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	73.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168	       	281.8690
Total	73.2712	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0846	0.0595	0.6618	1.6800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		171.6608	171.6608	6.2600e- 003	5.5700e- 003	173.4775
Total	0.0846	0.0595	0.6618	1.6800e- 003	0.1972	1.1500e- 003	0.1983	0.0523	1.0600e- 003	0.0534		171.6608	171.6608	6.2600e- 003	5.5700e- 003	173.4775

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#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	1.8774	3.6174	18.5067	0.0379	3.5488	0.0392	3.5881	0.9487	0.0369	0.9856		3,900.108 7	3,900.108 7	0.2455	0.2381	3,977.200 9
Unmitigated	1.8774	3.6174	18.5067	0.0379	3.5488	0.0392	3.5881	0.9487	0.0369	0.9856		3,900.108 7	3,900.108 7	0.2455	0.2381	3,977.200 9

#### **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	574.05	584.37	463.11	1,601,931	1,601,931
Enclosed Parking Structure	0.00	0.00	0.00		
Total	574.05	584.37	463.11	1,601,931	1,601,931

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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 High Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

#### 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.491491	0.052949	0.173689	0.164683	0.034990	0.008766	0.010778	0.027771	0.000810	0.000210	0.026873	0.002020	0.004972
Enclosed Parking Structure	0.491491	0.052949	0.173689	0.164683	0.034990	0.008766	0.010778	0.027771	0.000810	0.000210	0.026873	0.002020	0.004972

# 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	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
NaturalGas Unmitigated	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362

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# 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 5.2 Energy by Land Use - NaturalGas

# **Unmitigated**

	NaturalGa s 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/d	day							lb/d	lay		
Apartments High Rise	4163.52	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Enclosed 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		0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362

# **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Apartments High Rise	4.16352	0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362
Enclosed 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		0.0449	0.3837	0.1633	2.4500e- 003		0.0310	0.0310		0.0310	0.0310		489.8254	489.8254	9.3900e- 003	8.9800e- 003	492.7362

# 6.0 Area Detail

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# 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8
Unmitigated	3.1219	1.2998	11.1607	8.0800e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8

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

# 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/d	day							lb/c	lay		
Architectural Coating	0.2002					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4619					0.0000	0.0000		0.0000	0.0000		i	0.0000			0.0000
Hearth	0.1377	1.1769	0.5008	7.5100e- 003	 	0.0952	0.0952	 	0.0952	0.0952	0.0000	1,502.470 6	1,502.470 6	0.0288	0.0276	1,511.399 0
Landscaping	0.3221	0.1228	10.6598	5.6000e- 004		0.0590	0.0590	       	0.0590	0.0590		19.1950	19.1950	0.0185		19.6578
Total	3.1219	1.2998	11.1607	8.0700e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8

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# 4260 Arch Drive Multi-Family Project - Madera County, Winter

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

# 6.2 Area by SubCategory

## **Mitigated**

	ROG	NOx	СО	SO2	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	0.2002		1 1 1			0.0000	0.0000	  -  -	0.0000	0.0000		i i	0.0000			0.0000
Products	2.4619		1 1 1 1	     	       	0.0000	0.0000	i i	0.0000	0.0000		i i	0.0000		       	0.0000
Hearth	0.1377	1.1769	0.5008	7.5100e- 003	       	0.0952	0.0952	i i	0.0952	0.0952	0.0000	1,502.470 6	1,502.470 6	0.0288	0.0276	1,511.399 0
Landscaping	0.3221	0.1228	10.6598	5.6000e- 004	       	0.0590	0.0590	i i	0.0590	0.0590		19.1950	19.1950	0.0185	       	19.6578
Total	3.1219	1.2998	11.1607	8.0700e- 003		0.1541	0.1541		0.1541	0.1541	0.0000	1,521.665 6	1,521.665 6	0.0473	0.0276	1,531.056 8

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

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4260 Arch Drive Multi-Family Project - Madera County, Winter

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

#### 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

# 9.0 Operational Offroad

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

# **10.0 Stationary Equipment**

# **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

# **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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4260 Arch Drive Multi-Family Project - Madera County, Annual

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

## 4260 Arch Drive Multi-Family Project

Madera County, Annual

## 1.0 Project Characteristics

#### 1.1 Land Usage

**CO2 Intensity** 

(lb/MWhr)

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	145.00	Space	0.00	62,721.00	0
Apartments High Rise	129.00	Dwelling Unit	1.03	114,004.40	369

**N2O Intensity** 

(lb/MWhr)

0.004

#### 1.2 Other Project Characteristics

390.98

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	51
Climate Zone	3			Operational Year	2023
Utility Company	Southern California Ediso	on			

**CH4 Intensity** 

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5-story 129-unit multifamily building on 44,866.8 SF (1.03 acre) lot with 145 parking spaces on two subterranean levels.

0.033

Construction Phase -

Demolition - Per Google Earth estimate

Architectural Coating - SCAQMD Rule 1113

Woodstoves - No woodstoves or fireplaces

Area Coating - SCAQMD Rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of thier waste away from landfills by 2020.

Grading -

Vehicle Trips - Per transportation assessment from Overland Consultants, Inc., the project will generate 528 trips per day (4.093 trips per unit)

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	58,000.00	62,721.00
tblLandUse	LandUseSquareFeet	129,000.00	114,004.40
tblLandUse	LotAcreage	1.30	0.00
tblLandUse	LotAcreage	2.08	1.03
tblWoodstoves	NumberCatalytic	1.03	0.00
tblWoodstoves	NumberNoncatalytic	1.03	0.00

# 2.0 Emissions Summary

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## 4260 Arch Drive Multi-Family Project - Madera County, Annual

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

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
	0.5867	1.6622	1.8754	4.6400e- 003	0.1795	0.0640	0.2436	0.0478	0.0615	0.1092	0.0000	409.3743	409.3743	0.0423	0.0198	416.3324
Maximum	0.5867	1.6622	1.8754	4.6400e- 003	0.1795	0.0640	0.2436	0.0478	0.0615	0.1092	0.0000	409.3743	409.3743	0.0423	0.0198	416.3324

## **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					ton	s/yr							MT	/yr		
	0.5867	1.6622	1.8754	4.6400e- 003	0.1516	0.0640	0.2157	0.0407	0.0615	0.1021	0.0000	409.3740	409.3740	0.0423	0.0198	416.3321
Maximum	0.5867	1.6622	1.8754	4.6400e- 003	0.1516	0.0640	0.2157	0.0407	0.0615	0.1021	0.0000	409.3740	409.3740	0.0423	0.0198	416.3321

	ROG	NOx	СО	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	15.54	0.00	11.45	14.85	0.00	6.49	0.00	0.00	0.00	0.00	0.00	0.00

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## 4260 Arch Drive Multi-Family Project - Madera County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2023	3-31-2023	0.6565	0.6565
2	4-1-2023	6-30-2023	0.4874	0.4874
3	7-1-2023	9-30-2023	0.4928	0.4928
		Highest	0.6565	0.6565

# 2.2 Overall Operational

# **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Area	0.5205	0.0593	0.9799	3.6000e- 004		9.2100e- 003	9.2100e- 003		9.2100e- 003	9.2100e- 003	0.0000	57.4510	57.4510	2.5800e- 003	1.0200e- 003	57.8208
Energy	8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003		5.6600e- 003	5.6600e- 003	0.0000	229.7406	229.7406	0.0141	3.0100e- 003	230.9893
Mobile	0.3419	0.5989	3.1113	6.7500e- 003	0.6001	6.8300e- 003	0.6069	0.1608	6.4200e- 003	0.1672	0.0000	629.5753	629.5753	0.0363	0.0364	641.3175
Waste	1					0.0000	0.0000		0.0000	0.0000	12.0455	0.0000	12.0455	0.7119	0.0000	29.8422
Water	1					0.0000	0.0000		0.0000	0.0000	2.6665	11.3544	14.0209	0.2748	6.5800e- 003	22.8534
Total	0.8705	0.7282	4.1210	7.5600e- 003	0.6001	0.0217	0.6218	0.1608	0.0213	0.1821	14.7120	928.1213	942.8333	1.0396	0.0470	982.8232

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## 4260 Arch Drive Multi-Family Project - Madera County, Annual

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

# 2.2 Overall Operational

## **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	⁻/yr		
Area	0.5205	0.0593	0.9799	3.6000e- 004		9.2100e- 003	9.2100e- 003		9.2100e- 003	9.2100e- 003	0.0000	57.4510	57.4510	2.5800e- 003	1.0200e- 003	57.8208
	8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003		5.6600e- 003	5.6600e- 003	0.0000	229.7406	229.7406	0.0141	3.0100e- 003	230.9893
Mobile	0.3419	0.5989	3.1113	6.7500e- 003	0.6001	6.8300e- 003	0.6069	0.1608	6.4200e- 003	0.1672	0.0000	629.5753	629.5753	0.0363	0.0364	641.3175
Waste	F)			,		0.0000	0.0000		0.0000	0.0000	3.0114	0.0000	3.0114	0.1780	0.0000	7.4605
Water				,		0.0000	0.0000		0.0000	0.0000	2.6665	11.3544	14.0209	0.2748	6.5800e- 003	22.8534
Total	0.8705	0.7282	4.1210	7.5600e- 003	0.6001	0.0217	0.6218	0.1608	0.0213	0.1821	5.6779	928.1213	933.7992	0.5057	0.0470	960.4416

	ROG	NOx	СО	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	61.41	0.00	0.96	51.35	0.00	2.28

# 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	1/1/2023	1/27/2023	5	20	
2	Grading	Grading	1/28/2023	2/2/2023	5	4	
3	Building Construction	Building Construction	2/3/2023	11/9/2023	5	200	

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

4	Paving	Paving	11/10/2023	11/23/2023	5	10	
5	Architectural Coating	Architectural Coating	11/24/2023	12/7/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 230,859; Residential Outdoor: 76,953; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,763 (Architectural Coating – sqft)

#### **OffRoad Equipment**

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

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

# **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	273.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	119.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

# 3.2 **Demolition - 2023**

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							MT	/yr		
Fugitive Dust					0.0302	0.0000	0.0302	4.5700e- 003	0.0000	4.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e- 004		6.7700e- 003	6.7700e- 003	1 1 1 1	6.3300e- 003	6.3300e- 003	0.0000	21.0866	21.0866	5.3500e- 003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e- 004	0.0302	6.7700e- 003	0.0370	4.5700e- 003	6.3300e- 003	0.0109	0.0000	21.0866	21.0866	5.3500e- 003	0.0000	21.2202

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

# 3.2 **Demolition - 2023**

## **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.9000e- 004	0.0168	3.6300e- 003	8.0000e- 005	2.3300e- 003	1.6000e- 004	2.4900e- 003	6.4000e- 004	1.6000e- 004	8.0000e- 004	0.0000	7.6228	7.6228	2.0000e- 005	1.2000e- 003	7.9803
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	4.5000e- 004	2.9000e- 004	3.6300e- 003	1.0000e- 005	1.0400e- 003	1.0000e- 005	1.0400e- 003	2.8000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.8713	0.8713	3.0000e- 005	3.0000e- 005	0.8796
Total	7.4000e- 004	0.0171	7.2600e- 003	9.0000e- 005	3.3700e- 003	1.7000e- 004	3.5300e- 003	9.2000e- 004	1.7000e- 004	1.0800e- 003	0.0000	8.4940	8.4940	5.0000e- 005	1.2300e- 003	8.8599

# **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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0118	0.0000	0.0118	1.7800e- 003	0.0000	1.7800e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e- 004		6.7700e- 003	6.7700e- 003	 	6.3300e- 003	6.3300e- 003	0.0000	21.0865	21.0865	5.3500e- 003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e- 004	0.0118	6.7700e- 003	0.0185	1.7800e- 003	6.3300e- 003	8.1100e- 003	0.0000	21.0865	21.0865	5.3500e- 003	0.0000	21.2202

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

3.2 **Demolition - 2023** 

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	2.9000e- 004	0.0168	3.6300e- 003	8.0000e- 005	2.3300e- 003	1.6000e- 004	2.4900e- 003	6.4000e- 004	1.6000e- 004	8.0000e- 004	0.0000	7.6228	7.6228	2.0000e- 005	1.2000e- 003	7.9803
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	4.5000e- 004	2.9000e- 004	3.6300e- 003	1.0000e- 005	1.0400e- 003	1.0000e- 005	1.0400e- 003	2.8000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.8713	0.8713	3.0000e- 005	3.0000e- 005	0.8796
Total	7.4000e- 004	0.0171	7.2600e- 003	9.0000e- 005	3.3700e- 003	1.7000e- 004	3.5300e- 003	9.2000e- 004	1.7000e- 004	1.0800e- 003	0.0000	8.4940	8.4940	5.0000e- 005	1.2300e- 003	8.8599

# 3.3 Grading - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11		i i		0.0155	0.0000	0.0155	7.0600e- 003	0.0000	7.0600e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e- 003	0.0289	0.0174	4.0000e- 005		1.2100e- 003	1.2100e- 003		1.1100e- 003	1.1100e- 003	0.0000	3.6208	3.6208	1.1700e- 003	0.0000	3.6501
Total	2.6700e- 003	0.0289	0.0174	4.0000e- 005	0.0155	1.2100e- 003	0.0168	7.0600e- 003	1.1100e- 003	8.1700e- 003	0.0000	3.6208	3.6208	1.1700e- 003	0.0000	3.6501

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

3.3 Grading - 2023

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
I riadining	2.2600e- 003	0.1311	0.0283	6.2000e- 004	0.0181	1.2700e- 003	0.0194	4.9900e- 003	1.2200e- 003	6.2100e- 003	0.0000	59.3349	59.3349	1.2000e- 004	9.3300e- 003	62.1174
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
1	7.0000e- 005	4.0000e- 005	5.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1340	0.1340	0.0000	0.0000	0.1353
Total	2.3300e- 003	0.1311	0.0288	6.2000e- 004	0.0183	1.2700e- 003	0.0196	5.0300e- 003	1.2200e- 003	6.2500e- 003	0.0000	59.4689	59.4689	1.2000e- 004	9.3300e- 003	62.2527

# **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					ton	s/yr							MT	/yr		
Fugitive Dust					6.0600e- 003	0.0000	6.0600e- 003	2.7500e- 003	0.0000	2.7500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
I On Road	2.6700e- 003	0.0289	0.0174	4.0000e- 005		1.2100e- 003	1.2100e- 003		1.1100e- 003	1.1100e- 003	0.0000	3.6208	3.6208	1.1700e- 003	0.0000	3.6501
Total	2.6700e- 003	0.0289	0.0174	4.0000e- 005	6.0600e- 003	1.2100e- 003	7.2700e- 003	2.7500e- 003	1.1100e- 003	3.8600e- 003	0.0000	3.6208	3.6208	1.1700e- 003	0.0000	3.6501

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

3.3 Grading - 2023

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.2600e- 003	0.1311	0.0283	6.2000e- 004	0.0181	1.2700e- 003	0.0194	4.9900e- 003	1.2200e- 003	6.2100e- 003	0.0000	59.3349	59.3349	1.2000e- 004	9.3300e- 003	62.1174
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	7.0000e- 005	4.0000e- 005	5.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1340	0.1340	0.0000	0.0000	0.1353
Total	2.3300e- 003	0.1311	0.0288	6.2000e- 004	0.0183	1.2700e- 003	0.0196	5.0300e- 003	1.2200e- 003	6.2500e- 003	0.0000	59.4689	59.4689	1.2000e- 004	9.3300e- 003	62.2527

# 3.4 Building Construction - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1523	1.1710	1.2611	2.2100e- 003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5991	181.5991	0.0308	0.0000	182.3701
Total	0.1523	1.1710	1.2611	2.2100e- 003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5991	181.5991	0.0308	0.0000	182.3701

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

# 3.4 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	2.8700e- 003	0.1059	0.0357	4.9000e- 004	0.0159	6.9000e- 004	0.0166	4.5900e- 003	6.6000e- 004	5.2500e- 003	0.0000	46.9494	46.9494	1.7000e- 004	6.8600e- 003	48.9986
Worker	0.0408	0.0268	0.3323	8.6000e- 004	0.0948	5.7000e- 004	0.0954	0.0252	5.2000e- 004	0.0257	0.0000	79.7528	79.7528	2.6300e- 003	2.3500e- 003	80.5177
Total	0.0437	0.1327	0.3680	1.3500e- 003	0.1107	1.2600e- 003	0.1119	0.0298	1.1800e- 003	0.0310	0.0000	126.7022	126.7022	2.8000e- 003	9.2100e- 003	129.5163

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1523	1.1710	1.2611	2.2100e- 003		0.0515	0.0515	 	0.0497	0.0497	0.0000	181.5989	181.5989	0.0308	0.0000	182.3698
Total	0.1523	1.1710	1.2611	2.2100e- 003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5989	181.5989	0.0308	0.0000	182.3698

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

# 3.4 Building Construction - 2023

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	2.8700e- 003	0.1059	0.0357	4.9000e- 004	0.0159	6.9000e- 004	0.0166	4.5900e- 003	6.6000e- 004	5.2500e- 003	0.0000	46.9494	46.9494	1.7000e- 004	6.8600e- 003	48.9986
Worker	0.0408	0.0268	0.3323	8.6000e- 004	0.0948	5.7000e- 004	0.0954	0.0252	5.2000e- 004	0.0257	0.0000	79.7528	79.7528	2.6300e- 003	2.3500e- 003	80.5177
Total	0.0437	0.1327	0.3680	1.3500e- 003	0.1107	1.2600e- 003	0.1119	0.0298	1.1800e- 003	0.0310	0.0000	126.7022	126.7022	2.8000e- 003	9.2100e- 003	129.5163

# 3.5 Paving - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Oii Nodu	3.2200e- 003	0.0312	0.0440	7.0000e- 005	_	1.5400e- 003	1.5400e- 003		1.4200e- 003	1.4200e- 003	0.0000	5.8862	5.8862	1.8700e- 003	0.0000	5.9329
	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.2200e- 003	0.0312	0.0440	7.0000e- 005		1.5400e- 003	1.5400e- 003		1.4200e- 003	1.4200e- 003	0.0000	5.8862	5.8862	1.8700e- 003	0.0000	5.9329

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

3.5 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	2.2000e- 004	1.5000e- 004	1.8100e- 003	0.0000	5.2000e- 004	0.0000	5.2000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4356	0.4356	1.0000e- 005	1.0000e- 005	0.4398
Total	2.2000e- 004	1.5000e- 004	1.8100e- 003	0.0000	5.2000e- 004	0.0000	5.2000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4356	0.4356	1.0000e- 005	1.0000e- 005	0.4398

# **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					ton	s/yr							MT	/yr		
Off-Road	3.2200e- 003	0.0312	0.0440	7.0000e- 005		1.5400e- 003	1.5400e- 003		1.4200e- 003	1.4200e- 003	0.0000	5.8862	5.8862	1.8700e- 003	0.0000	5.9329
Paving	0.0000		       			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.2200e- 003	0.0312	0.0440	7.0000e- 005		1.5400e- 003	1.5400e- 003		1.4200e- 003	1.4200e- 003	0.0000	5.8862	5.8862	1.8700e- 003	0.0000	5.9329

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

3.5 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	2.2000e- 004	1.5000e- 004	1.8100e- 003	0.0000	5.2000e- 004	0.0000	5.2000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4356	0.4356	1.0000e- 005	1.0000e- 005	0.4398
Total	2.2000e- 004	1.5000e- 004	1.8100e- 003	0.0000	5.2000e- 004	0.0000	5.2000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4356	0.4356	1.0000e- 005	1.0000e- 005	0.4398

# 3.6 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.3654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e- 004	6.5100e- 003	9.0600e- 003	1.0000e- 005		3.5000e- 004	3.5000e- 004		3.5000e- 004	3.5000e- 004	0.0000	1.2766	1.2766	8.0000e- 005	0.0000	1.2785
Total	0.3664	6.5100e- 003	9.0600e- 003	1.0000e- 005		3.5000e- 004	3.5000e- 004		3.5000e- 004	3.5000e- 004	0.0000	1.2766	1.2766	8.0000e- 005	0.0000	1.2785

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

# 3.6 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.1000e- 004	2.7000e- 004	3.3500e- 003	1.0000e- 005	9.6000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8042	0.8042	3.0000e- 005	2.0000e- 005	0.8119
Total	4.1000e- 004	2.7000e- 004	3.3500e- 003	1.0000e- 005	9.6000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8042	0.8042	3.0000e- 005	2.0000e- 005	0.8119

# **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					ton	s/yr							MT	/yr		
Archit. Coating	0.3654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e- 004	6.5100e- 003	9.0600e- 003	1.0000e- 005		3.5000e- 004	3.5000e- 004		3.5000e- 004	3.5000e- 004	0.0000	1.2766	1.2766	8.0000e- 005	0.0000	1.2785
Total	0.3664	6.5100e- 003	9.0600e- 003	1.0000e- 005		3.5000e- 004	3.5000e- 004		3.5000e- 004	3.5000e- 004	0.0000	1.2766	1.2766	8.0000e- 005	0.0000	1.2785

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

# 3.6 Architectural Coating - 2023

**Mitigated Construction Off-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	4.1000e- 004	2.7000e- 004	3.3500e- 003	1.0000e- 005	9.6000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8042	0.8042	3.0000e- 005	2.0000e- 005	0.8119
Total	4.1000e- 004	2.7000e- 004	3.3500e- 003	1.0000e- 005	9.6000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8042	0.8042	3.0000e- 005	2.0000e- 005	0.8119

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.3419	0.5989	3.1113	6.7500e- 003	0.6001	6.8300e- 003	0.6069	0.1608	6.4200e- 003	0.1672	0.0000	629.5753	629.5753	0.0363	0.0364	641.3175
Unmitigated	0.3419	0.5989	3.1113	6.7500e- 003	0.6001	6.8300e- 003	0.6069	0.1608	6.4200e- 003	0.1672	0.0000	629.5753	629.5753	0.0363	0.0364	641.3175

# **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	574.05	584.37	463.11	1,601,931	1,601,931
Enclosed Parking Structure	0.00	0.00	0.00		
Total	574.05	584.37	463.11	1,601,931	1,601,931

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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 High Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	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 High Rise	0.491491	0.052949	0.173689	0.164683	0.034990	0.008766	0.010778	0.027771	0.000810	0.000210	0.026873	0.002020	0.004972
Enclosed Parking Structure	0.491491	0.052949	0.173689	0.164683	0.034990	0.008766	0.010778	0.027771	0.000810	0.000210	0.026873	0.002020	0.004972

# 5.0 Energy Detail

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

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	148.6445	148.6445	0.0126	1.5200e- 003	149.4113
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	148.6445	148.6445	0.0126	1.5200e- 003	149.4113
NaturalGas Mitigated	8.1900e- 003	0.0700	0.0298	4.5000e- 004	 	5.6600e- 003	5.6600e- 003	       	5.6600e- 003	5.6600e- 003	0.0000	81.0961	81.0961	1.5500e- 003	1.4900e- 003	81.5780
NaturalGas Unmitigated	8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003	 ! !	5.6600e- 003	5.6600e- 003	0.0000	81.0961	81.0961	1.5500e- 003	1.4900e- 003	81.5780

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

# 5.2 Energy by Land Use - NaturalGas

# **Unmitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Apartments High Rise	1.51968e +006	8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003		5.6600e- 003	5.6600e- 003	0.0000	81.0961	81.0961	1.5500e- 003	1.4900e- 003	81.5780
Enclosed 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		8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003		5.6600e- 003	5.6600e- 003	0.0000	81.0961	81.0961	1.5500e- 003	1.4900e- 003	81.5780

# **Mitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Apartments High Rise	1.51968e +006	8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003		5.6600e- 003	5.6600e- 003	0.0000	81.0961	81.0961	1.5500e- 003	1.4900e- 003	81.5780
Enclosed 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		8.1900e- 003	0.0700	0.0298	4.5000e- 004		5.6600e- 003	5.6600e- 003		5.6600e- 003	5.6600e- 003	0.0000	81.0961	81.0961	1.5500e- 003	1.4900e- 003	81.5780

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# 4260 Arch Drive Multi-Family Project - Madera County, Annual

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

# 5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments High Rise	508878	90.2472	7.6200e- 003	9.2000e- 004	90.7128
Enclosed Parking Structure	329285	58.3973	4.9300e- 003	6.0000e- 004	58.6985
Total		148.6445	0.0126	1.5200e- 003	149.4113

# **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments High Rise	508878	90.2472	7.6200e- 003	9.2000e- 004	90.7128
Enclosed Parking Structure	329285	58.3973	4.9300e- 003	6.0000e- 004	58.6985
Total		148.6445	0.0126	1.5200e- 003	149.4113

# 6.0 Area Detail

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# 4260 Arch Drive Multi-Family Project - Madera County, Annual

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

# **6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.5205	0.0593	0.9799	3.6000e- 004		9.2100e- 003	9.2100e- 003		9.2100e- 003	9.2100e- 003	0.0000	57.4510	57.4510	2.5800e- 003	1.0200e- 003	57.8208
Unmitigated	0.5205	0.0593	0.9799	3.6000e- 004		9.2100e- 003	9.2100e- 003		9.2100e- 003	9.2100e- 003	0.0000	57.4510	57.4510	2.5800e- 003	1.0200e- 003	57.8208

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

# 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					ton	s/yr							MT	/yr		
Coating	0.0365					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.4493					0.0000	0.0000	       	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.6500e- 003	0.0483	0.0205	3.1000e- 004		3.9000e- 003	3.9000e- 003		3.9000e- 003	3.9000e- 003	0.0000	55.8838	55.8838	1.0700e- 003	1.0200e- 003	56.2158
Landscaping	0.0290	0.0111	0.9594	5.0000e- 005		5.3100e- 003	5.3100e- 003		5.3100e- 003	5.3100e- 003	0.0000	1.5672	1.5672	1.5100e- 003	0.0000	1.6050
Total	0.5205	0.0593	0.9799	3.6000e- 004		9.2100e- 003	9.2100e- 003		9.2100e- 003	9.2100e- 003	0.0000	57.4510	57.4510	2.5800e- 003	1.0200e- 003	57.8208

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## 4260 Arch Drive Multi-Family Project - Madera County, Annual

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

# 6.2 Area by SubCategory

# **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
	0.0365					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4493					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.6500e- 003	0.0483	0.0205	3.1000e- 004		3.9000e- 003	3.9000e- 003	 	3.9000e- 003	3.9000e- 003	0.0000	55.8838	55.8838	1.0700e- 003	1.0200e- 003	56.2158
Landscaping	0.0290	0.0111	0.9594	5.0000e- 005		5.3100e- 003	5.3100e- 003	       	5.3100e- 003	5.3100e- 003	0.0000	1.5672	1.5672	1.5100e- 003	0.0000	1.6050
Total	0.5205	0.0593	0.9799	3.6000e- 004		9.2100e- 003	9.2100e- 003		9.2100e- 003	9.2100e- 003	0.0000	57.4510	57.4510	2.5800e- 003	1.0200e- 003	57.8208

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	-/yr	
ga.ca	14.0209	0.2748	6.5800e- 003	22.8534
Unmitigated	14.0209	0.2748	6.5800e- 003	22.8534

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Apartments High Rise	8.40487 / 5.29872	14.0209	0.2748	6.5800e- 003	22.8534
Enclosed Parking Structure	0/0	0.0000	0.0000	0.0000	0.0000
Total		14.0209	0.2748	6.5800e- 003	22.8534

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

## 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Apartments High Rise	8.40487 / 5.29872	14.0209	0.2748	6.5800e- 003	22.8534
Enclosed Parking Structure	0/0	0.0000	0.0000	0.0000	0.0000
Total		14.0209	0.2748	6.5800e- 003	22.8534

# 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

# Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	-/yr	
gatou	3.0114	0.1780	0.0000	7.4605
Unmitigated	12.0455	0.7119	0.0000	29.8422

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Apartments High Rise	59.34	12.0455	0.7119	0.0000	29.8422
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		12.0455	0.7119	0.0000	29.8422

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

## 8.2 Waste by Land Use

# **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Apartments High Rise	14.835	3.0114	0.1780	0.0000	7.4605
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		3.0114	0.1780	0.0000	7.4605

# 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
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# **User Defined Equipment**

Equipment Type	Number
Equipment Type	ramboi

# 11.0 Vegetation

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4260 Arch Drive Multi-Family Project - Madera County, Annual

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

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Air District Region: South Coast AQMD Calendar Year: 2023 Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region C	alendar Yı Vehicle (	Cat (Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coas	2023 HHDT	Aggregate	Aggregate	Gasoline	75.10442936	8265.097	1502.689	1.936286145	1936.286145	1913466.474	8265.097	13656273.03		7.14 HHD
South Coas	2023 HHDT	Aggregate	Aggregate	Diesel	109818.6753	13648008	1133618	1911.530188	1911530.188		13648008			
South Coas	2023 LDA	Aggregate	Aggregate	Gasoline	6635002.295	2.53E+08	31352477	7971.24403	7971244.03	8020635.698	2.53E+08	255180358.3		31.82 <b>LDA</b>
South Coas	2023 LDA	Aggregate	Aggregate	Diesel	62492.97958	2469816	297086.6	49.3916685	49391.6685		2469816			
South Coas	2023 LDA	Aggregate	Aggregate	Electricity	150700.3971	6237106	751566	0	0		6237106			
South Coas	2023 LDT1	Aggregate	Aggregate	Gasoline	758467.6481	27812996	3504563	1023.913006	1023913.006	1024279.466	27812996	27821405.09	;	27.16 <b>LDT1</b>
South Coas	2023 LDT1	Aggregate	Aggregate	Diesel	360.7799144	8408.618	1256.88	0.366459477	366.4594769		8408.618			
South Coas	2023 LDT1	Aggregate	Aggregate	Electricity	7122.93373	303507.5	35798.19	0	0		303507.5			
South Coas	2023 LDT2	Aggregate	Aggregate	Gasoline	2285150.139	85272416	10723315	3338.798312	3338798.312	3356536.438	85272416	85922778.34	;	25.60 <b>LDT2</b>
South Coas	2023 LDT2	Aggregate	Aggregate	Diesel	15594.68309	650362.8	76635.83	17.73812611	17738.12611		650362.8			
South Coas	2023 LDT2	Aggregate	Aggregate	Electricity	28809.63735	917592.8	145405.4	0	0		917592.8			
South Coas	2023 LHDT1	Aggregate	Aggregate	Gasoline	174910.3847	6216643	2605904	583.3851736	583385.1736	811563.1022	6216643	11211395.79		13.81 <b>LHDT1</b>
South Coas	2023 LHDT1	Aggregate	Aggregate	Diesel	125545.0822	4994753	1579199	228.1779285	228177.9285		4994753			
South Coas	2023 LHDT2	Aggregate	Aggregate	Gasoline	30102.75324	1034569	448486.2	111.5753864	111575.3864	209423.5025	1034569	2969599.008		14.18 <b>LHDT2</b>
South Coas	2023 LHDT2	Aggregate	Aggregate	Diesel	50003.13116	1935030	628976.5	97.84811618	97848.11618		1935030			
South Coas	2023 MCY	Aggregate	Aggregate	Gasoline	305044.5141	2104624	610089	57.849018	57849.018	57849.018	2104624	2104623.657		36.38 <b>MCY</b>
South Coas	2023 MDV	Aggregate	Aggregate	Gasoline	1589862.703	55684188	7354860	2693.883526	2693883.526	2744536.341	55684188	57109879.73	:	20.81 <b>MDV</b>
South Coas	2023 MDV	Aggregate	Aggregate	Diesel	36128.1019	1425691	176566.9	50.65281491	50652.81491		1425691			
South Coas	2023 MDV	Aggregate	Aggregate	Electricity	16376.67653	537591.7	83475.95	0	0		537591.7			
South Coas	2023 MH	Aggregate	Aggregate	Gasoline	34679.50542	330042.9	3469.338	63.26295123	63262.95123	74893.26955	330042.9	454344.9436		6.07 <b>MH</b>
South Coas	2023 MH	Aggregate	Aggregate	Diesel	13122.69387	124302	1312.269	11.63031832	11630.31832		124302			
South Coas	2023 MHDT	Aggregate	Aggregate	Gasoline	25624.3151	1363694	512691.3	265.2060557	265206.0557	989975.6425	1363694	9484317.768		9.58 <b>MHDT</b>
South Coas	2023 MHDT	Aggregate	Aggregate	Diesel	122124.488			724.7695868	724769.5868		8120623			
South Coas	2023 OBUS	Aggregate	Aggregate	Gasoline	5955.291639		119153.5	48.07750689		86265.88761		579743.8353		6.72 <b>OBUS</b>
South Coas	2023 OBUS	Aggregate	Aggregate	Diesel	4286.940093	333969.8	41558.29	38.18838072			333969.8			
South Coas	2023 SBUS	Aggregate	Aggregate	Gasoline	2783.643068	112189.6	11134.57	12.19474692	12194.74692	39638.85935	112189.6	323043.5203		8.15 <b>SBUS</b>
South Coas	2023 SBUS	Aggregate	Aggregate	Diesel	6671.825716		76991.94	27.44411242	27444.11242		210853.9			
South Coas	2023 UBUS	Aggregate	Aggregate	Gasoline	957.7686184	89782.63	3831.074	17.62416327	17624.16327	17863.66378	89782.63	91199.2533		5.11 <b>UBUS</b>
South Coas	2023 UBUS	Aggregate	Aggregate	Diesel	13.00046095			0.239500509			1416.622			
South Coas	2023 UBUS	Aggregate	Aggregate	Electricity	16.11693886	1320.163	64.46776	0			1320.163			

# Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA Exhibit D to the Staff Report

#### SCNC BOARD

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SECRETARY
Jeff Hartwick

#### **April 19, 2022**

#### Addressed to:

Councilmember Nithya Raman Los Angeles City Planner Renata Ooms Vince Bertoni

Kevin Keller Shana Bonstin Arthi Varma Lisa Webber Blake Lamb

David Olivos

CPC President Samantha Millman CPC Vice-President Caroline Choe CPC Commissioner Maria Cabildo CPC Commissioner Monique Lawshe CPC Commissioner Helen Leung

CPC Commissioner Karen Mack
CPC Commissioner Dana Perlman
CPC Commissioner Elizabeth Zamora

Cecilia Lamas
Andrea Conant
Geoff Thompson
Mashael Majid
Meg Healy
Emma Taylor
Walker King

#### Sent by Email:

contactcd4@lacity.org renata.ooms@lacity.org vince.bertoni@lacity.org kevin.keller@lacity.org shana.bonstin@lacity.org arthi.varma@lacity.org lisa.webber@lacity.org blake.lamb@lacity.org david.olivos@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org cpc@lacity.org andrea.conant@lacity.org geoff.thompson@lacity.org mashael.majid@lacity.org meg.healy@lacity.org emma.taylor@lacity.org

walker.king@lacity.org

#### RE: SCNC Special Board Agenda Item 2, 4260 N. Arch Drive Apartments

The Board of the Studio City Neighborhood Council (SCNC) **opposes** Los Angeles City Planning Case Number ENV-2021-10346-EAF (4260 N. Arch Drive Apartments) **unless**:

- 1. The total height of the building is not over the 45 feet allowed by the Ventura-Cahuenga Corridor Specific Plan, PLUS the 11 additional feet of height allowed by the State Density Bonus Law, for a total of 56 feet (not including the tallest parapet, including rooftop equipment such as stairwells, as required by the Specific Plan [Section E.1.a.1]).
- 2. The City's transitional height requirement abutting the OS Zone (per LAMC 12.21.1), which requires a stepped back building height limit of 25 feet for portions of the property between 0-49 feet from the north Property line, 33 feet between 50-99 feet from the north Property line and 61 feet between 100-199 feet from the north Property line are enforced.
- 3. Page 5 of Applicant's Attachment A must be corrected because Vineland and Ventura is not a qualifying TOC Affordable Housing Incentive Area for this property and therefore this statement is not true: 50% or more of the Property must be located within 1,500 feet of a Transit Stop/Major Employment Center (in this instance, located at the corner of Ventura Blvd. and Vineland Ave.). Therefore, the Project complies with the criteria necessary to be eligible for the FAR increase.
- 4. Dedications may be taken, but not acted upon. No roadway or sidewalk widening. Curblines and sidewalks align with adjacent curblines and sidewalks on either side of the Property.
- 5. The official address for the entire Property is 4260 N. Arch Drive, as promised by the Applicants. No Ventura Boulevard address.

The SCNC also wants to point out:

- 6. Although State Law authorizes the requested deviations from the Specific Plan, this is in no way a mandate.
- 7. Previous Letter of Determination (CPC-2017-3759-DB-SPR-SPP) from 2/27/2020, Page 1, states: "An On-Menu Incentive to increase allowable height from 45 feet to 64 feet to the top of the parapet (71 feet to top of the stairwell) as required pursuant to Section 7.E.a.1.i of the Ventura-Cahuenga Boulevard Corridor Specific Plan," is lower in height than current Case Number CPC-2021-10345-DB-SPP-SPR-HCA.
- 8. Previous Letter of Determination (CPC-2017-3759-DBB-SPR-SPP) from 2/27/2020, Page C-5, states: "The project shall not exceed 60 percent lot coverage per Specific Plan Section B-2," is lower than the 70% requested in the current Case Number CPC-2021-10345-DB-SPP-HCA.
- 9. This Application does not in any way address the cumulative effect of all the more than 10 projects on Ventura Boulevard in Studio City simultaneously in stages of development.

Sincerely,

Scott Mandell President,

Studio City Neighborhood Council



Renata Ooms <renata.ooms@lacity.org>

# Re: proposed building at 4260 North Arch Dr. and 11201 West Ventura Blvd.

Chester Hansen <chester.hansen613@gmail.com> To: "renata.ooms@lacity.org" <renata.ooms@lacity.org> Sun, Apr 16, 2023 at 9:23 PM

I am writing to offer my support for the proposed project. This area is in need of denser housing and it will be a welcome addition to have a path to the river from Arch Dr.

Chester Hansen 11150 Aqua Vista St Unit 66 Studio City, CA



#### SWRCC - [City of Los Angeles, The Crescent] - Project Status Inquiry

2 messages

#### Barrie Brown Martinez <barrie@mitchtsailaw.com>

Wed, Aug 31, 2022 at 5:30 PM

To: renata.ooms@lacity.org

Cc: Mitchell Tsai <mitch@mitchtsailaw.com>, Talia Nimmer <talia@mitchtsailaw.com>, Hind Baki <hind@mitchtsailaw.com>, Malou Reyes <malou@mitchtsailaw.com>, Maria Sarmiento <maria@mitchtsailaw.com>, "Mitchell M. Tsai Attorney at Law, P.C." <info@mitchtsailaw.com>, Rebekah Youngblood <rebekah@mitchtsailaw.com>, Steven Thong <steven@mitchtsailaw.com>

Good afternoon,

Our office would like to inquire about the status of the The Crescent Project (4260 North Arch Drive) (CPC-2021-10345-DB-SPP-SPR-VHCA) (ENV-2021-10346-EAF) located in the city of Los Angeles.

Are you able to confirm whether this project is still on hold, or if there are any other updates to the project that you can share with us at this time?

We would like to request that the following email addresses be included in the project's Noticing List:

mitch@mitchtsailaw.com talia@mitchtsailaw.com rebekah@mitchtsailaw.com hind@mitchtsailaw.com maria@mitchtsailaw.com steven@mitchtsailaw.com barrie@mitchtsilaw.com malou@mitchtsailaw.com info@mitchtsailaw.com

Also, please feel welcome to let me know if there is a different planner that we should contact regarding this project.

Thank you for your assistance in this matter,

--

#### B. Brown Martinez

Paralegal Mitchell M. Tsai, Attorney At Law 139 South Hudson Avenue Suite 200 Pasadena, CA 91101

Phone: (626) 314-3821 Fax: (626) 389-5414

Email: <u>barrie@mitchtsailaw.com</u>
Website: http://www.mitchtsailaw.com

\*\*\* Our Office Has Recently Moved. Please Note New Mailing Address \*\*\*\*

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#### Renata Ooms <renata.ooms@lacity.org>

To: Barrie Brown Martinez <barrie@mitchtsailaw.com>

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Hello,

This project is still on Hold. You will be added to interested parties.

Wed, Sep 14, 2022 at 10:55 AM



#### Renata Ooms

Pronouns: She, Hers, Her City Planner

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#### VIA E-MAIL

May 1, 2023

Renata Ooms City of Los Angeles 200 N. Spring Street, Suite 525 Los Angeles, CA 90012

Em: renata.ooms@lacity.org

RE: 4260 N. Arch Dr. Project [ENV-2021-10346-EAF]

Dear City of Los Angeles Planning Department,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**The Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments to the City of Los Angles ("**City**") regarding the 4260 N. Arch Dr. project ("**Project**").

SWMSRCC is a labor union representing 50,000 union carpenters in six states, including California, and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects. Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

SWMSRCC expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); Bakersfield Citizens for Local Control v. Bakersfield (2004) 124 Cal. App. 4th 1184, 1199-1203; see Galante Vineyards v. Monterey Water Dist. (1997) 60 Cal. App. 4th 1109, 1121.

SWMSRCC incorporates by reference all comments raising issues regarding the Project's environmental review submitted prior to approval of the Project. *Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

SWMSRCC also requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act

("CEQA"), Cal Public Resources Code ("PRC") § 21000 et seq, and the California Planning and Zoning Law ("Planning and Zoning Law"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

# I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce

can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.<sup>1</sup>

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas ("**GHG**") emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.<sup>2</sup>

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.<sup>3</sup>

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled ("VMT"). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents. Some municipalities have even tied local hire and

<sup>1</sup> California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <a href="https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf">https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf</a>.

<sup>&</sup>lt;sup>2</sup> South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, available at <a href="http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10">http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10</a>.

<sup>&</sup>lt;sup>3</sup> California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, available at <a href="https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf">https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf</a>

<sup>&</sup>lt;sup>4</sup> Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* <a href="http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf">http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf</a>.

other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

# II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* <a href="https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx">https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx</a>.

Southwest Mountain States Carpenters recommend that the City adopt additional requirements to mitigate public health risks from the Project's construction activities. SWMSRCC requests that the City require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Mountain States Carpenters' experience with safe construction site work practices, SWMSRCC recommends that the City require that while construction activities are being conducted at the Project Site:

# **Construction Site Design:**

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

# **Testing Procedures:**

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.

- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

# <u>Planning</u>

• Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches)

communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.<sup>6</sup>

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The City should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Mountain States Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.<sup>7</sup>

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

# III. THE CITY SHOULD PREPARE AN ENVIRONMENTAL IMPACT REPORT FOR THE PROJECT

CEQA is a California statute designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of

<sup>7</sup> For details concerning Southwest Carpenters's ICRA training program, *see* https://icrahealthcare.com/.

<sup>&</sup>lt;sup>6</sup> See also The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, available at <a href="https://www.cpwr.com/sites/default/files/NABTU\_CPWR\_Standards\_COVID-19.pdf">https://www.cpwr.com/sites/default/files/NABTU\_CPWR\_Standards\_COVID-19.pdf</a>; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at <a href="https://dpw.lacounty.gov/building-and-safety/docs/pw\_guidelines-construction-sites.pdf">https://dpw.lacounty.gov/building-and-safety/docs/pw\_guidelines-construction-sites.pdf</a>.

Regulations ("CEQA Guidelines") § 15002(a)(1).8 At its core, "[i]ts purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made." Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal. 3d 553, 564.

To achieve this purpose, CEQA mandates preparation of an Environmental Impact Report ("EIR") for projects so that the foreseeable impacts of pursuing the project can be understood and weighed. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80. The EIR requirement "is the heart of CEQA." CEQA Guidelines, § 15003(a).

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard, under which an agency must prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1602; *Friends of "B" St.* v. *City of Hayward* (1980) 106 Cal. 3d 988, 1002.

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." Public Resources Code ("PRC") § 21151; No Oil, Inc. v. City of Los Angeles (1974) 13 Cal. App. 3d 68, 75; Jensen v. City of Santa Rosa (2018) 23 Cal. App. 5th 877, 884. Under this test, if a proposed project is not exempt and may cause a significant effect on the environment, the lead agency must prepare an EIR. PRC §§ 21100(a), 21151; CEQA Guidelines § 15064(a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. Parker Shattuck Neighbors v. Berkeley City Council (2013) 222 Cal. App. 4th 768, 785. In such a situation, the agency must adopt a negative declaration. PRC § 21080(c)(1); CEQA Guidelines §§ 15063(b)(2), 15064(f)(3).

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<sup>&</sup>lt;sup>8</sup> The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." PRC § 21068; CEQA Guidelines § 15382. A project "may" have a significant effect on the environment if there is a "reasonable probability" that it will result in a significant impact. No Oil, Inc. v. City of Los Angeles, 13 Cal. 3d at 83 fn. 16; Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. CEQA Guidelines § 15063(b)(1). See County Sanitation Dist. No. 2 v. County of Kern (2005) 127 Cal. App. 4th 1544, 1580.

This standard sets a "low threshold" for preparation of an EIR. Consolidated Irrig. Dist. v. City of Selma (2012) 204 Cal. App. 4th 187, 207; Nelson v. County of Kern (2010) 190 Cal. App. 4th 252; Pocket Protectors v. City of Sacramento (2004) 124 Cal. App. 4th 903, 928; Bowman v. City of Berkeley (2004) 122 Cal. App. 4th 572, 580; Citizen Action to Serve All Students v. Thornley (1990) 222 Cal. App. 3d 748, 754; Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d 296, 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See Jensen v. City of Santa Rosa (2018) 23 Cal. App. 5th 877, 886; Clews Land & Livestock v. City of San Diego (2017) 19 Cal. App. 5th 161, 183; Stanislaus Audubon Soc'y, Inc. v. County of Stanislaus (1995) 33 Cal. App. 4th 144, 150; Brentwood Ass'n for No Drilling, Inc. v. City of Los Angeles (1982) 134 Cal. App. 3d 491; Friends of "B" St. v. City of Hayward (1980) 106 Cal. App. 3d 988; CEQA Guidelines § 15064(f)(1).

As there is a fair argument that the Project may cause significant environmental impacts, as explained below, the low threshold is met and the City should prepare an EIR for the Project.

# IV. THE CITY SHOULD DETERMINE THAT THE PROJECT DOES NOT QUALIFY FOR THE CLASS 32 CEQA EXEMPTION

CEQA exemptions must be construed narrowly. See County of Amador v. El Dorado County Water Agency (1999) 76 Cal.App.4th 931, 966. With regard to Class 32 exemptions for in-fill development projects, the project must meet all of the conditions identified in CEQA Guidelines section 15332, as follows:

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations;
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses;
- (c) The project site has no value, as habitat for endangered, rare or threatened species;
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and
- (e) The site can be adequately served by all required utilities and public services.

Moreover, categorical exemptions are not absolute. Even if a project fits into a categorical exemption class, the agency must consider whether a codified exception to exemption applies. Guidelines § 15300.2. A project falling within a categorical exemption may require environmental review if the project is subject to exceptions-tothe-exemptions listed under CEQA Guidelines § 15300.2, which include projects involving: (a) locations involving environmental resources of hazardous or critical concern; (b) significant cumulative impact of successive projects of the same type in the same place; (c) reasonable possibility of significant environmental effect due to unusual circumstances; (d) damage to scenic resources on State scenic highways; (e) locations listed as a hazardous waste site; or (f) substantial adverse changes to a historical resource.

Here, the Project fails to comply with all the required conditions. Therefore, the Project does not qualify for the Class 32 CEQA exemption.

# A. The Project Is Inconsistent with the General Plan

Each California city and county must adopt a comprehensive, long-term general plan governing development. Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors (2001) 91 Cal.App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy, and serves as a "constitution" or "charter" for all future development. DeVita v. County of Napa (1995) 9 Cal.4th 763, 773; Lesher Communications, Inc. v. City of Walnut Creek (1990) 52 Cal.3d 531, 540.

General plan consistency is "the linchpin of California's land use and development laws; it is the principle which infused the concept of planned growth with the force of law." *Debottari v. Norco City Council* (1985) 171 Cal.App.3d 1204, 1213. It is well established that development projects may not be approved if they interfere with, or frustrate, the general plan's policies and objectives. See *Napa Citizens*, 91 Cal.App.4th at 378-79; see also *Lesher*, 52 Cal.3d at 544.

Here, the Project is located in a commercial district rather than a residential one. On those grounds alone, development of 129-unit residential unit development renders the Project inconsistent with the General Plan.

Further, the Project requests numerous departures from the ordinary limits permitted by the General Plan and zoning designations, including, including a density bonus, floor area ration, and building height incentives. Given that the incentives have not yet been approved, there is a colorful argument that the Project is inconsistent with the General Plan and all applicable zoning regulations, rendering it ineligible for a Class 32 CEQA exemption.

Finally, the Project requires a Project Permit Compliance Review to ensure that the Project is complaint with the Ventura Cahuenga Specific Plan. Thus, absent such determination, the Project may be incompliant with the Specific Plan, also making a Class 32 CEQA exemption inapplicable.

# B. The Project May Have Significant Unanalyzed Environmental Effects

CEQA exemptions are reserved for projects without potential to have significant environmental effects. See *Salmon Protection & Watershed Network v. County of Marin* (2004) 125 Cal.App.4th 1098, 1107 ["If a project may have a significant effect on the environment, CEQA review must occur"]. The Project at hand has the potential to cause a number of significant environmental effects, rendering the Class 32 CEQA exemption inapplicable.

The very natures of the Project, i.e. replacing a vacant elderly care facility with a mixed-use 129-unit residential unit development, creates potentially significant traffic, air quality, and noise issues stemming from the sheer increase in density and intensity of land use on the Project site. Coupled with the fact that construction of the Project may involve road closures, street detours, and loud construction equipment, the Project has the potential to cause significant traffic, air quality, and noise impacts, which the Project application does not even attempt to quantify or assess. Such

assessment is all the more necessary given that the Project is directly adjacent to the LA River, a source of fresh water for the City which many species of plants and wildlife rely upon for habitat. Accordingly, without any Project specific analysis quantifying the Project's anticipated traffic, air quality, and noise impacts, the finding that the Project will not have any significant impacts is merely speculatory and the Class 32 CEQA exemption must not apply.

# C. There Is No Evidence that The Project Site Can Be Adequately Served by All Required Utilities and Public Services.

Under CEQA Guidelines section 15332(d), there must be evidence that the Project site can be adequately served by all required utilities and public services. Here, there is no such evidence and, in fact, the evidence shows the opposite. Specifically, the Project has to clear sewer availability and roof/waste drainage items to be issued permits, which have not yet been cleared. Thus, there is no evidence that the Project site be adequately served by all required utilities and public services and, for this reason too, the Project does not qualify for the Class 32 exemption.

# D. <u>The Project May Have Significant Impacts due to Unusual</u> <u>Circumstances, as Well As Cumulative Impacts</u>

Pursuant to CEQA Guidelines section 15300.2(c), "a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances."

Given that the Project is directly adjacent to the LA River, the Project may be unusual as to its nature and location and result in significant effects on the plants and wildlife that use the River as habitat. On these grounds alone, the Project shouldn't be eligible for a CEQA exemption.

Further, pursuant to CEQA Guidelines section 15300.2(b), all exemptions "are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant." For example, a five-story residential building is slated for development, or was recently developed, at 10867 W. Fruitland Drive. <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> See LA Department of Building & Safety Project Permit information, available at <a href="https://www.ladbsservices2.lacity.org/OnlineServices/PermitReport/PcisPermitDetail?id1=22010&id2=10000&id3=05576">https://www.ladbsservices2.lacity.org/OnlineServices/PermitReport/PcisPermitDetail?id1=22010&id2=10000&id3=05576</a>

<sup>&</sup>lt;sup>10</sup> See L.A. City Planning Commission Rejects Five TOC Appeals (Oct. 2019), *available at* https://la.urbanize.city/post/la-city-planning-commission-rejects-five-toc-appeals

The Project, along with other nearby projects, may collectively contribute to potentially significant cumulative impacts on air quality, noise, and traffic congestion in Studio City. Therefore, the Class 23 CEQA exemption is not applicable since the exceptions under CEQA Guidelines section 15300.2 apply.

#### V. CONCLUSION

In sum, SMSWRCC requests that the City require a local workforce, that the City impose training requirements for the Project's construction activities to prevent community spread of COVID-19 and other infectious diseases, and that the City prepare an EIR for the Project and determine that the Project does not qualify for a Class 32 CEQA exemption for the aforementioned concerns. If the City has any questions, feel free to contact my Office.

Sincerely,

Talia Nimmer

Attorneys for Southwest Mountain States Regional Council of Carpenters

#### Attached:

Exhibit A: March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling;

Exhibit B: Air Quality and GHG Expert Paul Rosenfeld CV; and

Exhibit C: Air Quality and GHG Expert Matt Hagemann CV.



2656 29<sup>th</sup> Street, Suite 201 Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg. (949) 887-9013 mhagemann@swape.com

> Paul E. Rosenfeld, PhD (310) 795-2335 prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai 155 South El Molino, Suite 104 Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai.

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

### Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects." CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.<sup>2</sup>

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

<sup>&</sup>lt;sup>2</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

<sup>&</sup>lt;sup>3</sup> "CalEEMod User's Guide." CAPCOA, November 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/01\_user-39-s-guide2016-3-2\_15november2017.pdf?sfvrsn=4">http://www.aqmd.gov/docs/default-source/caleemod/01\_user-39-s-guide2016-3-2\_15november2017.pdf?sfvrsn=4</a>, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.<sup>4</sup>

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

```
"VMT<sub>d</sub> = \Sigma(Average Daily Trip Rate _i * Average Overall Trip Length _i) _n Where:
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n = Number of land uses being modeled."5

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

```
"Emissions<sub>pollutant</sub> = VMT * EF<sub>running,pollutant</sub>

Where:

Emissions<sub>pollutant</sub> = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

EF_{running,pollutant} = emission factor for running emissions."
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Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

### Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction. In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence. The default number of construction-related worker trips is calculated by multiplying the

<sup>&</sup>lt;sup>4</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

<sup>&</sup>lt;sup>5</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

<sup>&</sup>lt;sup>6</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

<sup>&</sup>lt;sup>7</sup> "CalEEMod User's Guide." CAPCOA, November 2017, *available at*: <a href="http://www.aqmd.gov/docs/default-source/caleemod/01">http://www.aqmd.gov/docs/default-source/caleemod/01</a> user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

<sup>&</sup>lt;sup>8</sup> CalEEMod User Guide, available at: <a href="http://www.caleemod.com/">http://www.caleemod.com/</a>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.<sup>9</sup> Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."<sup>10</sup> Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trip lengths are:

"[B]ased on the <u>location</u> and <u>urbanization</u> selected on the project characteristic screen. These values were <u>supplied by the air districts or use a default average for the state</u>. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). <sup>12</sup>

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).<sup>13</sup>

Worker Trip Length by Air Basin									
Air Basin	Rural (miles)	Urban (miles)							
Great Basin Valleys	16.8	10.8							
Lake County	16.8	10.8							
Lake Tahoe	16.8	10.8							
Mojave Desert	16.8	10.8							
Mountain Counties	16.8	10.8							
North Central Coast	17.1	12.3							
North Coast	16.8	10.8							
Northeast Plateau	16.8	10.8							
Sacramento Valley	16.8	10.8							
Salton Sea	14.6	11							
San Diego	16.8	10.8							
San Francisco Bay Area	10.8	10.8							
San Joaquin Valley	16.8	10.8							
South Central Coast	16.8	10.8							
South Coast	19.8	14.7							
Average	16.47	11.17							
Minimum	10.80	10.80							
Maximum	19.80	14.70							
Range	9.00	3.90							

<sup>&</sup>lt;sup>9</sup> "CalEEMod User's Guide." CAPCOA, November 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/01">http://www.aqmd.gov/docs/default-source/caleemod/01</a> user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

<sup>&</sup>lt;sup>10</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

<sup>&</sup>lt;sup>11</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

<sup>&</sup>lt;sup>12</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

<sup>&</sup>lt;sup>13</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4">http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4</a>, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

#### Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles. <sup>14</sup> In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO₂e)	3,623
Amortized Construction GHG Emissions (MT CO₂e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO₂e/year)	100.80
% Decrease in Construction-related GHG Emissions	<b>17%</b>

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

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<sup>&</sup>lt;sup>14</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4">http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4</a>, p. D-85.

#### Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul Rosupeld

M Horam

Paul E. Rosenfeld, Ph.D.

# Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	<b>Butte County</b>	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8	
County	Orange	19.8	14.7	
County	Placer-Lake	16.8	10.8	
County	Placer-Mountain	16.8	10.8	
County	Placer-	16.8	10.8	
County	Plumas	16.8	10.8	
County	Riverside-	16.8	10.8	
County	Riverside-	19.8	14.7	
County	Riverside-Salton	14.6	11	
County	Riverside-South	19.8	14.7	
County	Sacramento	15	10	
County	San Benito	16.8	10.8	
County	San Bernardino-	16.8	10.8	
County	San Bernardino-	19.8	14.7	
County	San Diego	16.8	10.8	
County	San Francisco	10.8	10.8	
County	San Joaquin	16.8	10.8	
County	San Luis Obispo	13	13	
County	San Mateo	10.8	10.8	
County	Santa Barbara-	8.3	8.3	
County	Santa Barbara-	8.3	8.3	
County	Santa Clara	10.8	10.8	
County	Santa Cruz	16.8	10.8	
County	Shasta	16.8	10.8	
County	Sierra	16.8	10.8	
County	Siskiyou	16.8	10.8	
County	Solano-	15	10	
County	Solano-San	16.8	10.8	
County	Sonoma-North	16.8	10.8	
County	Sonoma-San	10.8	10.8	
County	Stanislaus	16.8	10.8	
County	Sutter	16.8	10.8	
County	Tehama	16.8	10.8	
County	Trinity	16.8	10.8	
County	Tulare	16.8	10.8	
County	Tuolumne	16.8	10.8	
County	Ventura	16.8	10.8	
•	Yolo	15.8	10.8	
County				
County	Yuba	16.8	10.8	
Statewide	Statewide	16.8	10.8	

Worker Trip Length by Air Basin									
Air Basin	Rural (miles)	Urban (miles)							
Great Basin Valleys	16.8	10.8							
Lake County	16.8	10.8							
Lake Tahoe	16.8	10.8							
Mojave Desert	16.8	10.8							
Mountain Counties	16.8	10.8							
North Central Coast	17.1	12.3							
North Coast	16.8	10.8							
Northeast Plateau	16.8	10.8							
Sacramento Valley	16.8	10.8							
Salton Sea	14.6	11							
San Diego	16.8	10.8							
San Francisco Bay Area	10.8	10.8							
San Joaquin Valley	16.8	10.8							
South Central Coast	16.8	10.8							
South Coast	19.8	14.7							
Average	16.47	11.17							
Mininum	10.80	10.80							
Maximum	19.80	14.70							
Range	9.00	3.90							

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit		25,000.00	72
Apartments Mid Rise	975.00 Dwelling Unit		25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

# 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR 5.86		4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
		•	

# 2.0 Emissions Summary

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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												МТ	/yr		
2021	0.1713	1.8242	1.1662	2.4000e- 003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 5	1,627.529 5	0.1185	0.0000	1,630.492 5
2024	4.1619	0.1335	0.2810	5.9000e- 004	0.0325	6.4700e- 003	0.0390	8.6300e- 003	6.0400e- 003	0.0147	0.0000	52.9078	52.9078	8.0200e- 003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

### **Mitigated Construction**

	ROG	NOx	СО	SO2	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	ear tons/yr											M	Г/уг			
2021	0.1713	1.8242	1.1662	2.4000e- 003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 1	1,627.529 1	0.1185	0.0000	1,630.492 1
2024	4.1619	0.1335	0.2810	5.9000e- 004	0.0325	6.4700e- 003	0.0390	8.6300e- 003	6.0400e- 003	0.0147	0.0000	52.9077	52.9077	8.0200e- 003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
	ROG	NOx	СО	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	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

# 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	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

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# 2.2 Overall Operational

### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	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**

#### Village South Specific Plan (Proposed) - 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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

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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	458.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	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	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	9.7000e- 004	7.5000e- 004	8.5100e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.5000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.2251	2.2251	7.0000e- 005	0.0000	2.2267
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233	 	0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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
1	9.7000e- 004	7.5000e- 004	8.5100e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.5000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.2251	2.2251	7.0000e- 005	0.0000	2.2267
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814
Total	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Fugitive Dust	 				0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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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					ton	s/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	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814
Total	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814

#### 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			i i i		0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377	 	0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607
Total	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607
Total	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607

### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻/yr		
Fugitive Dust	ii ii				0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 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					ton	s/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

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 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					ton	s/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e- 003	1.1192	0.2949	8.1700e- 003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 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					ton	s/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e- 003	1.1192	0.2949	8.1700e- 003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

#### 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e- 003	1.0924	0.2879	7.7400e- 003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e- 003	1.0924	0.2879	7.7400e- 003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

## 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968
Total	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003	 	3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
	0.0000		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968
Total	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968

## 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	<sup>-</sup> /yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706
Total	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706
Total	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706

## 3.7 Architectural Coating - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003	1	1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558
Total	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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## 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558
Total	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558

## 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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		Miles			Trip %			Trip Purpos	e %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

### 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated					       	0.0000	0.0000	       	0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003	       	0.0966	0.0966	       	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	,	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

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## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr				MT	/уг					
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

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## 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

## 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998			 		0.0000	0.0000	       	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143	       	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	 	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

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6.2 Area by SubCategory

#### <u>Mitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Architectural Coating	0.4137		 	 		0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		       	 		0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143	·	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	i i	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

#### 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
"	585.8052	3.0183	0.0755	683.7567
	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
	2.42827 / 0.154996	11.3934	0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	√yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)			0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
-,,	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

#### 8.0 Waste Detail

## **8.1 Mitigation Measures Waste**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	7/yr	
"	207.8079	12.2811	0.0000	514.8354
	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

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#### 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

## 9.0 Operational Offroad

ı	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

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

## 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	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/d	day							lb/d	day		
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 21
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

0.00

Percent Reduction 0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	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	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 20
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
	ROG	NOx	СО	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

0.00

0.00

0.00

0.00

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 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/d	day				lb/d	lay					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	 	50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	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	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003	     	170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	     	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	       	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296

#### 3.4 Grading - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217

#### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	 	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 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/d	day							lb/d	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	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003	       	219.8941
Total	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941

#### 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	     	3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429	     	8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

#### 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982	       	3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190	     	8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982	       	3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190	       	8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

# 3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 			     	0.0000	0.0000		0.0000	0.0000		       	0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003	       	158.8748
Total	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1			0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000		       	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458

## 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609		281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401	,	1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	 	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401	       	1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

# 4.0 Operational Detail - Mobile

### **4.1 Mitigation Measures Mobile**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

		Miles			Trip %			Trip Purpos	se %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

#### 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/c	lay			
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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/d	day		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003	#	29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category													lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

### <u>Unmitigated</u>

	ROG	NOx	СО	SO2	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/d	day							lb/d	lay		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000		,	0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

### 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/d	day		
Architectural Coating	2.2670					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085	 		   		0.0000	0.0000	i i	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	! !	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	! ! !	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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
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### 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### **Village South Specific Plan (Proposed)**

#### 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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

# 2.0 Emissions Summary

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### 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/d	day							lb/d	lay		
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

Percent

Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	CO	SO2	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			<u> </u>		lb/	/day	l					<u> </u>	lb/d	day		
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
	ROG	NOx	СО	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

0.00

0.00

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 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/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

#### **Trips and VMT**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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	458.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	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	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549	       	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003	     	160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

## 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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/d	day							lb/d	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	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472

#### 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003	       	214.6080
Total	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003		214.6080

#### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965	1 1 1	! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	 	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 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/d	day							lb/d	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	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563

#### 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.901 3	8,286.901 3	0.2282	     	8,292.605 8
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.97 63	12,075.97 63	0.4663		12,087.63 41

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.901 3	8,286.901 3	0.2282	     	8,292.605 8
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.97 63	12,075.97 63	0.4663		12,087.63 41

#### 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	       				0.0000	0.0000	       	0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000				       	0.0000	0.0000	 	0.0000	0.0000		i i i	0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1			0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228	! !	0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140	i i	2,225.396 3
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	       	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	       	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	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	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	     	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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#### Village South Specific Plan (Proposed) - 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	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

## **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

### **4.3 Trip Type Information**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

		Miles			Trip %			Trip Purpos	se %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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/o	day							lb/d	day		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666	#	4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003	#	150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/o	day							lb/c	lay		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003	! !	8.3400e- 003	8.3400e- 003	1 1 1	131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666	,	0.2666	0.2666	#	4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004	<del></del>	9.5600e- 003	9.5600e- 003	,	9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	,	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003	<del></del>	0.0377	0.0377	,	0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	/ Ib/day										lb/d	lay				
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	lay			
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000	       	0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	       	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	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		Ib/day											lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 	 		0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

# 2.0 Emissions Summary

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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					tor				MT	-/yr						
2021	0.1704	1.8234	1.1577	2.3800e- 003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.441 2	1,342.441 2	0.1115	0.0000	1,345.229 1
2024	4.1592	0.1313	0.2557	5.0000e- 004	0.0221	6.3900e- 003	0.0285	5.8700e- 003	5.9700e- 003	0.0118	0.0000	44.6355	44.6355	7.8300e- 003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

#### **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					tor	ns/yr							M	Г/yr		
2021	0.1704	1.8234	1.1577	2.3800e- 003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.440 9	1,342.440 9	0.1115	0.0000	1,345.228 7
2024	4.1592	0.1313	0.2557	5.0000e- 004	0.0221	6.3900e- 003	0.0285	5.8700e- 003	5.9700e- 003	0.0118	0.0000	44.6354	44.6354	7.8300e- 003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
	ROG	NOx	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	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

#### 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					ton				MT	/yr						
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	       	0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				MT	/yr						
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste			i			0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	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**

#### Village South Specific Plan (Proposed) - 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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	7.2000e- 004	5.3000e- 004	6.0900e- 003	2.0000e- 005	1.6800e- 003	1.0000e- 005	1.6900e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.5281	1.5281	5.0000e- 005	0.0000	1.5293
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	<sup>-</sup> /yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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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					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	7.2000e- 004	5.3000e- 004	6.0900e- 003	2.0000e- 005	1.6800e- 003	1.0000e- 005	1.6900e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.5281	1.5281	5.0000e- 005	0.0000	1.5293
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234
Total	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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					ton	s/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	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234
Total	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234

#### 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust			i i i		0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377	 	0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828
Total	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828
Total	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828

### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003	       	5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/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	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590
Total	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590
Total	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590

### 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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# 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					ton	s/yr							МТ	/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e- 003	0.7557	6.2300e- 003	0.7619	0.2007	5.7400e- 003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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### 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e- 003	0.7557	6.2300e- 003	0.7619	0.2007	5.7400e- 003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

#### 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cil rioda	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864	 	0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e- 003	0.7377	5.9100e- 003	0.7436	0.1960	5.4500e- 003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e- 003	0.7377	5.9100e- 003	0.7436	0.1960	5.4500e- 003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

## 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirribad	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160
Total	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003	 	3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
	0.0000		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160
Total	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160

## 3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100
Total	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100
Total	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100

### 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003	 	1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394
Total	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005	       	1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394
Total	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394

## 4.0 Operational Detail - Mobile

### **4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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		Miles			Trip %			Trip Purpos	e %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

### 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

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## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003	       	0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							МТ	/yr		
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 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					ton	s/yr							MT	/yr		
Architectural Coating	0.4137		 	 		0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		       	 		0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143	·	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	i i	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

#### 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
ı	585.8052	3.0183	0.0755	683.7567
	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e				
Land Use	Mgal		MT/yr						
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471				
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363				
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019				
High Turnover (Sit Down Restaurant)			0.3580	8.8200e- 003	62.8482				
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079				
-,,	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663				
Regional Shopping Center	4.14806 / 27.5250 2.54236		0.1363	3.4200e- 003	31.9490				
Total		585.8052	3.0183	0.0755	683.7567				

#### 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

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# Category/Year

	Total CO2 CH4 N2O		CH4 N2O C							
	MT/yr									
	207.8079	12.2811	0.0000	514.8354						
	207.8079	12.2811	0.0000	514.8354						

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons		MT/yr						
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834				
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513				
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464				
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430				
Hotel	27.38	5.5579	0.3285	0.0000	13.7694				
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712				
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706				
Total		207.8079	12.2811	0.0000	514.8354				

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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## 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834			
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513			
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464			
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430			
Hotel	27.38	5.5579	0.3285	0.0000	13.7694			
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712			
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706			
Total		207.8079	12.2811	0.0000	514.8354			

# 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

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#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value	
tblFireplaces	FireplaceWoodMass	1,019.20	0.00	
tblFireplaces	FireplaceWoodMass	1,019.20	0.00	
tblFireplaces	NumberWood	1.25	0.00	
tblFireplaces	NumberWood	48.75	0.00	
tblTripsAndVMT	WorkerTripLength	14.70	10.00	
tblTripsAndVMT	WorkerTripLength	14.70	10.00	
tblTripsAndVMT	WorkerTripLength	14.70	10.00	
tblTripsAndVMT	WorkerTripLength	14.70	10.00	
tblTripsAndVMT	WorkerTripLength	14.70	10.00	
tblTripsAndVMT	WorkerTripLength	14.70	10.00	
tblVehicleTrips	ST_TR	7.16	6.17	
tblVehicleTrips	ST_TR	6.39	3.87	
tblVehicleTrips	ST_TR	2.46	1.39	
tblVehicleTrips	ST_TR	158.37	79.82	

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
	·	·	

# 2.0 Emissions Summary

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### 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	Year Ib/day								lb/d	lay						
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 6
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	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	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 5
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
	ROG	NOx	СО	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

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 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/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

## **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/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	1 1 1 1	50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003	     	117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	 	1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	     	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414

#### 3.4 Grading - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620	     	1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428	     	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003	       	156.4904
Total	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904

## 3.4 Grading - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621	       	1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003	       	150.9813
Total	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 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/d	day							lb/d	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	       	3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697	 	6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 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/d	day							lb/d	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	       	3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697	 	6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

## 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

# 3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000				       	0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	1 1 1	0.0000	0.0000		       	0.0000		i i i	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000				 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1 1		       	0.0000	0.0000	i i	0.0000	0.0000		i i i	0.0000		i i	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609		281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	       	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	 	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	       	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

# 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

#### **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

## **4.3 Trip Type Information**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

		Miles			Trip %			Trip Purpos	e %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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 Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	<del></del>	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	<del></del>	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	<del></del>	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/c	lay		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003	<del></del>	9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134	<del></del>	0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	,	0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003	<del></del>	0.0377	0.0377	,	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	lay		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Consumer Products	24.1085					0.0000	0.0000	       	0.0000	0.0000			0.0000		 	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	       	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	       	0.4574	0.4574		148.5950	148.5950	0.1424	 	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 			0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
		1.00.0, 2.0,	1,00,00			

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
	·	·	

# 2.0 Emissions Summary

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### 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/d	day							lb/d	day		
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

Percent

Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	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/d	day		
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
	ROG	NOx	со	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

0.00

0.00

0.00

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

#### 3.3 Site Preparation - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	; ; ;	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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/d	day							lb/c	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	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646

#### 3.4 Grading - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003	,	147.4051
Total	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051

# 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	0; 0; 0; 0;				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust		i i			8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	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	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602	     	5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 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/d	day							lb/d	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	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

#### 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442		5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442		5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	       				0.0000	0.0000	       	0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1		       	0.0000	0.0000		0.0000	0.0000		       	0.0000		       	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228	! !	0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140	i i	2,225.396 3
Paving	0.0000	 			 	0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	       	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	       	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	1 1 1 1	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	, , ,	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	,	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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#### Village South Specific Plan (Proposed) - 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	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

# **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

		Miles			Trip %			Trip Purpos	se %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

# 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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 Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486	
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9	
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884	
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0	
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	<del></del>	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782	
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	<del></del>	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658	
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	<del></del>	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778	
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7	

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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 Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486		
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9		
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884		
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0		
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	,	0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782		
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003	<del></del>	0.0377	0.0377	,	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658		
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778		
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7		

#### 6.0 Area Detail

### **6.1 Mitigation Measures Area**

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

# <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		! !	0.0000
Consumer Products	24.1085	<del></del>	7	,		0.0000	0.0000	,	0.0000	0.0000	#	,	0.0000	<del></del> -     	,	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	,	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	,	0.4574	0.4574		148.5950	148.5950	0.1424	,	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 6.2 Area by SubCategory

### **Mitigated**

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

### 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

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# **Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
		1.00.0, 2.0,	1,00,00			, , , ,

### **Boilers**

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

# **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

# Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%



#### SOIL WATER AIR PROTECTION ENTERPRISE

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

**Education** 

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

**Professional Experience** 

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

# **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner

UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)

UCLA School of Public Health; 2003 to 2006; Adjunct Professor

UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator

UCLA Institute of the Environment, 2001-2002; Research Associate

Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist

National Groundwater Association, 2002-2004; Lecturer

San Diego State University, 1999-2001; Adjunct Professor

Anteon Corp., San Diego, 2000-2001; Remediation Project Manager

Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager

Bechtel, San Diego, California, 1999 – 2000; Risk Assessor

King County, Seattle, 1996 – 1999; Scientist

James River Corp., Washington, 1995-96; Scientist

Big Creek Lumber, Davenport, California, 1995; Scientist

Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist

Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

### **Publications:**

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- **Rosenfeld, P.E.,** and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.
- Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.
- Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.
- **Rosenfeld, P.E.,** and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

- Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.
- Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. Heritage Magazine of St. Kitts, 3(2).
- **Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).
- **Rosenfeld, P. E.** (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.
- Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.
- **Rosenfeld, P. E.** (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

### **Presentations:**

- **Rosenfeld, P.E.,** Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. 44th Western Regional Meeting, American Chemical Society. Lecture conducted from Santa Clara, CA.
- Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.
- Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.
- **Rosenfeld**, **P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, Lecture conducted from Tuscon, AZ.
- Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting. Lecture conducted from Tuscon, AZ.
- Wu, C., Tam, L., Clark, J., Rosenfeld, P. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution. Lecture conducted from Tallinn, Estonia.
- **Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.
- **Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., Rosenfeld P.E., Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D.** (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. 2005 National Groundwater Association Ground Water And Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. 2005 National Groundwater Association Ground Water and Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

- **Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.
- Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL.
- **Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants.*. Lecture conducted from Hyatt Regency Phoenix Arizona.
- **Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.
- **Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.
- **Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.
- **Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.
- **Rosenfeld. P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.
- **Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.
- Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.
- **Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.
- **Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.
- **Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

# **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

# **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

# **Deposition and/or Trial Testimony:**

In the United States District Court For The District of New Jersey

Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.

Case No.: 2:17-cv-01624-ES-SCM Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles - Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles - Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles

Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC

Case No.: LC102019 (c/w BC582154)

Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division

Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants

Case Number: 4:16-cv-52-DMB-JVM

Rosenfeld Deposition: July 2017

#### In The Superior Court of the State of Washington, County of Snohomish

Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants

Case No.: No. 13-2-03987-5

Rosenfeld Deposition, February 2017

Trial, March 2017

#### In The Superior Court of the State of California, County of Alameda

Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants

Case No.: RG14711115

Rosenfeld Deposition, September 2015

#### In The Iowa District Court In And For Poweshiek County

Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants

Case No.: LALA002187

Rosenfeld Deposition, August 2015

### In The Iowa District Court For Wapello County

Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants

Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015

#### In The Iowa District Court For Wapello County

Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants

Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015

#### In The Circuit Court of Ohio County, West Virginia

Robert Andrews, et al. v. Antero, et al.

Civil Action No. 14-C-30000

Rosenfeld Deposition, June 2015

#### In The Third Judicial District County of Dona Ana, New Mexico

Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward

DeRuyter, Defendants

Rosenfeld Deposition: July 2015

#### In The Iowa District Court For Muscatine County

Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant

Case No 4980

Rosenfeld Deposition: May 2015

### In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida

Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.

Case Number CACE07030358 (26) Rosenfeld Deposition: December 2014

#### In the United States District Court Western District of Oklahoma

Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City

Landfill, et al. Defendants. Case No. 5:12-cv-01152-C

Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas

Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.

Case Number cc-11-01650-E

Rosenfeld Deposition: March and September 2013

Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants* 

Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)

Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division

Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.

Case 3:10-cv-00622

Rosenfeld Deposition: February 2012

Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., Plaintiffs vs. Two Farms, Inc. d/b/a Royal Farms, Defendants

Case Number: 03-C-12-012487 OT Rosenfeld Deposition: September 2013



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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization Industrial Stormwater Compliance Investigation and Remediation Strategies Litigation Support and Testifying Expert CEOA Review

#### **Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984. B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

#### **Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

#### **Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

#### Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 present);
- Geology Instructor, Golden West College, 2010 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989– 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 1998);
- Instructor, College of Marin, Department of Science (1990 1995);
- Geologist, U.S. Forest Service (1986 1998); and
- Geologist, Dames & Moore (1984 1986).

#### **Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shippard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

#### With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

•	Expert witness testimony in a case of oil production-related contamination in Mississippi. Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

• Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

#### **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

#### **Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities
  through designation under the Safe Drinking Water Act. He prepared geologic reports,
  conducted public hearings, and responded to public comments from residents who were very
  concerned about the impact of designation.

 Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed
  the basis for significant enforcement actions that were developed in close coordination with U.S.
  EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nationwide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

#### **Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the
  potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking
  water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

#### **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aguifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

#### **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

#### **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann**, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann**, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann**, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.**F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

# Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.



T 510.836.4200 F 510.836.4205 1939 Harrison Street, Ste. 150 Oakland, CA 94612 www.lozeaudrury.com richard@lozeaudrury.com

Via Email

May 9, 2023

Vince Bertoni, AICP, Director Department of City Planning City of Los Angeles 200 N. Spring Street, Room 525 Los Angeles, CA 90012 vince.bertoni@lacity.org

Renata Ooms, City Planner Department of City Planning City of Los Angeles 200 N. Spring Street. Room 763 Los Angeles, CA. 90012 renata.ooms@lacity.org Holly L. Wolcott, City Clerk City of Los Angeles 200 N. Spring Street, Room 360 Los Angeles, CA 90012 cityclerk@lacity.org

Re: CEQA and Land Use Notice Request for The Crescent Project (CPC-2021-10345-DB-SPP-SPR-HCA)

Dear Mr. Bertoni, Ms. Wolcott, and Ms. Ooms,

I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Crescent Project including all actions related or referring to the proposed construction of five-story residential project with 129 dwelling units, located at 4260 North Arch Drive and 11201 West Ventura Boulevard ("Project").

We hereby request that the City of Los Angeles send by electronic mail, if possible or U.S. mail to our firm at the address below notice of any and all actions or hearings related to activities undertaken, authorized, approved, permitted, licensed, or certified by the City of Los Angeles and any of its subdivisions, and/or supported, in whole or in part, through contracts, grants, subsidies, loans or other forms of assistance from the City of Los Angeles, including, but not limited to the following:

- Notice of any public hearing in connection with the Project as required by California Planning and Zoning Law pursuant to Government Code Section 65091.
- Any and all notices prepared for the Project pursuant to the California Environmental Quality Act ("CEQA"), including, but not limited to:
  - Notices of any public hearing held pursuant to CEQA.
  - Notices of determination that an Environmental Impact Report ("EIR") is required for the Project, prepared pursuant to Public Resources Code Section 21080.4.
  - Notices of any scoping meeting held pursuant to Public Resources Code Section 21083.9.
  - Notices of preparation of an EIR or a negative declaration for the Project, prepared pursuant to Public Resources Code Section 21092.
  - Notices of availability of an EIR or a negative declaration for the Project, prepared pursuant to Public Resources Code Section 21152 and Section 15087 of Title 14 of the California Code of Regulations.

- Notices of approval and/or determination to carry out the Project, prepared pursuant to Public Resources Code Section 21152 or any other provision of law.
- Notices of any addenda prepared to a previously certified or approved EIR.
- Notices of approval or certification of any EIR or negative declaration, prepared pursuant to Public Resources Code Section 21152 or any other provision of law.
- Notices of determination that the Project is exempt from CEQA, prepared pursuant to Public Resources Code section 21152 or any other provision of law.
- Notice of any Final EIR prepared pursuant to CEQA.
- Notice of determination, prepared pursuant to Public Resources Code Section 21108 or Section 21152.

Please note that we are requesting notices of CEQA actions and notices of any public hearings to be held under any provision of Title 7 of the California Government Code governing California Planning and Zoning Law. This request is filed pursuant to Public Resources Code Sections 21092.2 and 21167(f), and Government Code Section 65092, which require local counties to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

Please send notice by electronic mail or U.S. Mail to:

Richard Drury
Molly Greene
Colby Gonzalez
Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612
richard@lozeaudrury.com
molly@lozeaudrury.com
colby@lozeaudrury.com

Please call if you have any questions. Thank you for your attention to this matter.

Sincerely,

Colby Gonzalez Lozeau | Drury LLP May 1, 2023

### **VIA EMAIL**

Renata Ooms, City Planner Department of City Planning City of Los Angeles 200 N. Spring Street. Room 763 Los Angeles, CA. 90012 renata.ooms@lacity.org

Re: Comment on Categorical Exemption for 4260 Arch Drive Multi-Family Project (CPC-2021-10345-DB-SPP-SPR-HCA)

Dear Ms. Ooms:

I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER"), regarding the California Environmental Quality Act ("CEQA") Class 32 (In-fill Development) Categorical Exemption prepared for the proposed 4260 Arch Drive Project (CPC-2021-10345-DB-SPP-SPR-HCA), including all actions related or referring to the construction of an approximately 117,000 square foot multi-family residential building with 129 dwelling units and parking provided within a partially subterranean garage, located at 4260 North Arch Drive and 11201 West Ventura Boulevard in the City of Los Angeles ("Project"), which is scheduled to be heard by the Hearing Officer tomorrow, May 2, 2023.

After reviewing the Categorical Exemption ("Exemption"), we conclude that exempting the Project from CEQA based on the Class 32 Exemption violates CEQA because terms of the Class 32 exemption do not apply. Since the Project is not exempt from CEQA, an initial study must be prepared to determine the appropriate level of CEQA review required. The Project should not be approved unless and until proper CEQA review is completed.

Sincerely,

Amalia Bowley Fuentes Lozeau Drury LLP Case No. CPC-2021-10345-DB-SPP-SPR-WDI-HCA Exhibit E to the Staff Report

### CITY OF LOS ANGELES

INTER-DEPARTMENTAL MEMORANDUM

4260 N Arch Drive LADOT Project ID No. 53002

Date: February 10, 2022

To: Deputy Advisory Agency

Department of City Planning

From: Sheila Ahoraian, Transportation Engineering Associate I

**Department of Transportation** 

Subject: CASE NO.: CPC-2021-10345-DB-SPP-SPR-VHCA

ENV-2021-10346-EAF

Reference is made to your request for review of this case regarding potential traffic access problems. Based upon this review, it is recommended that:

- 1. A minimum 20-foot reservoir space is required between any security gate or parking space and the property line, or to the satisfaction of LADOT.
- 2. A two-way driveway width of W=28 feet is required for all driveways, or to the satisfaction of LADOT.
- 3. A parking area and driveway plan should be submitted to the Citywide Planning Coordination Section of the Los Angeles Department of Transportation for approval prior to submittal of building permit plans for plan check by the Department of Building and Safety. Transportation approvals are conducted at 6262 Van Nuys Blvd., Room 320, Van Nuys, CA 91401.
- 4. The subdivision report fee and condition clearance fee be paid to the Los Angeles Department of Transportation as required per Ordinance No. 183270 and LAMC Section 19.15 prior to recordation of the final map. Note: The applicant may be required to comply with any other applicable fees per this new ordinance.

If you have any questions, you may contact me at <a href="mailto:sheila.ahoraian@lacity.org">sheila.ahoraian@lacity.org</a> or 818-374-4699.

#### CITY OF LOS ANGELES

#### INTER-DEPARTMENTAL CORRESPONDENCE

4260 Arch Drive/11201 Ventura Boulevard LADOT Case Nos. VEN22-110828 & VEN20-109071 LADOT Project ID Nos. 53606 & 49258

Date: May 2, 2023

To: Jojo Pewsawang, Senior City Planner

Department of City Planning

From: Vicente Cordero, Transportation Engineer

Department of Transportation

Subject: SUPPLEMENT TO THE TRANSPORTATION IMPACT ASSESSMENT FOR THE PROPOSED

MULTI-FAMILY RESIDENTIAL PROJECT AT 4260 ARCH DRIVE/11201 VENTURA BOULEVARD (CPC-2021-10345-DB-SPP-SPR-VHCA/ENV-2021-10346-EAF)

On June 23, 2022, the Department of Transportation (LADOT) issued a traffic assessment for the proposed multi-family residential development located at 4260 Arch Drive/11201 Ventura Boulevard in the Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass Community Planning Area of the City of Los Angeles. LADOT previously issued revised traffic assessment reports for a mixed-use project for this site dated January 6, 2020, and February 14, 2020. Subsequently, on August 18, 2022, Overland Traffic Consultants, Inc. submitted a Voluntary Traffic Calming Measure Proposal detailing additional traffic calming measures along Ventura Boulevard adjacent to the Project Site.

LADOT has accepted the developer's proposal to volunteer a condition of approval to the Los Angeles City Planning Department acknowledging that the developer will submit a deposit to reimburse the City for the costs of the additional traffic calming measures by making a deposit to cover the material and construction costs, plus additional funding for worker overtime pay, for a total of \$55,000. This deposit would be made to LADOT's Fund 523 prior to issuance of the Certificate of Occupancy to ensure that reimbursement for the improvements would occur only if the project were to be built.

If you have any questions, please contact Brandon Wilson of my staff at <a href="mailto:brandon.wilson@lacity.org">brandon.wilson@lacity.org</a>.

#### Attachments

J:\Projects\VEN22-113326 -4260 Arch Dr-11201 Ventura Bl\_Supplement

c: Mashael Majid, Council District 4
Mehmet Berker, Council District 4
Jonathan Riker, Venable LLP
Renata Ooms, LADCP
Steve Rostam, LADOT East Valley District
Ali Nahass, BOE Valley District
Quyen Phan, BOE Land Development Group
Jerry Overland, Overland Traffic Consultants, Inc.

FORM GEN. 160 (Rev. 6-80)

# CITY OF LOS ANGELES INTER-DEPARTMENTAL CORRESPONDENCE

**Date:** 2/3/2022

**To:** Charlie Rausch, Senior City Planner

Department of City Planning

200 N. Spring St., 6th Floor MS-395

From: Gil De La Cruz, P.E.

Case Management Supervisor Private Development Division Bureau of Street Lighting

SUBJECT: STREET LIGHTING REQUIREMENTS FOR DISCRETIONARY ACTIONS

CITY PLANNING CASE No.: CPC 2021-10345 DB SPP SPR

4260 N ARCH DR

The Bureau of Street Lighting's recommended condition of approval for the subject city planning case is as follows: (Improvement condition added to S-3 (c) where applicable.)

SPECIFIC CONDITION: Prior to the recordation of the final map or issuance of the Certificate of Occupancy (C of O), street lighting improvement plans shall be submitted for review and the owner shall provide a good faith effort via a ballot process for the formation or annexation of the property within the boundary of the development into a Street Lighting Maintenance Assessment District.

IMPROVEMENT CONDITION: Construct new street light: one (1) on Arch Dr. If street widening per BOE improvement conditions, relocate and upgrade street light: one (1) on Arch Dr.

#### NOTES:

The quantity of street lights identified may be modified slightly during the plan check process based on illumination calculations and equipment selection.

Conditions set: 1) in compliance with a Specific Plan, 2) by LADOT, or 3) by other legal instrument excluding the Bureau of Engineering conditions, requiring an improvement that will change the geometrics of the public roadway or driveway apron may require additional or the reconstruction of street lighting improvements as part of that condition.

CC: Land Development Group MS 901

Engineering District Office: VAL

#### **CITY OF LOS ANGELES**

### INTER-DEPARTMENTAL CORRESPONDENCE

**DATE:** March 7, 2022

TO: Heather Bleemers, Senior City Planner

Department of City Planning

FROM: Bryan Ramifez, Street Tree Superintendent I

Bureau of Street Services, Urban Forestry Division

**SUBJECT:** <u>CPC-2021-10345-DB-SPP-SPR – 4260 N. ARCH DR.</u>

In regard to your request for review of this case regarding Urban Forestry requirements, it is our recommendation that:

#### 1. STREET TREES

- a. Project shall preserve all healthy mature street trees whenever possible. All feasible alternatives in project design should be considered and implemented to retain healthy mature street trees. A permit is required for the removal of any street tree and shall be replaced 2:1 as approved by the Board of Public Works and Urban Forestry Division.
- b. Plant street trees at all feasible planting locations within dedicated streets as directed and required by the Bureau of Street Services, Urban Forestry Division. All tree plantings shall be installed to current tree planting standards when the City has previously been paid for tree plantings. The sub divider or contractor shall notify the Urban Forestry Division at: (213) 847-3077 upon completion of construction for tree planting direction and instructions.

**Note:** Removal of street trees requires approval from the Board of Public Works. All projects must have environmental (CEQA) documents that appropriately address any removal and replacement of street trees. Contact Urban Forestry Division at: (213) 847-3077 for tree removal permit information.

BR:djm

#### **CITY OF LOS ANGELES**

#### INTER-DEPARTMENTAL CORRESPONDENCE

February 1, 2022

TO: Vincent Bertoni, AICP, Director of Planning

Department of City Planning

Attention: planning.expedited@lacity.org

FROM: Los Angeles Fire Department

SUBJECT: CPC-2021-10345-DB-APP-SPR-VHCA.: 4260 N Arch Drive

Submit plot plans for Fire Department approval and review prior to recordation of City Planning Case.

#### **RECOMMENDATIONS:**

Access for Fire Department apparatus and personnel to and into all structures shall be required.

Address identification. New and existing buildings shall have approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.

One or more Knox Boxes will be required to be installed for LAFD access to project. Location and number to be determined by LAFD Field Inspector. (Refer to FPB Reg # 75).

The entrance or exit of all ground dwelling units shall not be more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.

### Fire Lane Requirements:

- 1) Fire lane width shall not be less than 20 feet. When a fire lane must accommodate the operation of Fire Department aerial ladder apparatus or where fire hydrants are installed, those portions shall not be less than 28 feet in width.
- 2) The width of private roadways for general access use and fire lanes shall not be less than 20 feet, and the fire lane must be clear to the sky.
- 3) Fire lanes, where required and dead ending streets shall terminate in a cul-de-sac or other approved turning area. No dead ending street or fire lane shall be greater than 700 feet in length or secondary access shall be required.
- 4) Submit plot plans indicating access road and turning area for Fire Department approval.
- 5) All parking restrictions for fire lanes shall be posted and/or painted prior to any Temporary Certificate of Occupancy being issued.
- 6) Plans showing areas to be posted and/or painted, "FIRE LANE NO PARKING" shall be submitted and approved by the Fire Department prior to building permit application sign-off.
- 7) Electric Gates approved by the Fire Department shall be tested by the Fire Department prior to Building and Safety granting a Certificate of Occupancy.
- 8) All public street and fire lane cul-de-sacs shall have the curbs painted red and/or be posted "No Parking at Any Time" prior to the issuance of a Certificate of Occupancy or Temporary Certificate of Occupancy for any structures adjacent to the cul-de-sac.
- 9) No framing shall be allowed until the roadway is installed to the satisfaction of the Fire Department.

Construction of public or private roadway in the proposed development shall not exceed 10 percent in grade.

Planning.expedited@lacity.org February 1, 2022

TRACT MAP NO.: CPC-2021-10345-DB-APP-SPR-VHCA.: 4260 N Arch Drive

Page 2

Where above ground floors are used for residential purposes, the access requirement shall be interpreted as being the horizontal travel distance from the street, driveway, alley, or designated fire lane to the main entrance of individual units.

No building or portion of a building shall be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.

The following recommendations of the Fire Department relative to fire safety shall be incorporated into the building plans, which includes the submittal of a plot plan for approval by the Fire Department either prior to the recordation of a final map or the approval of a building permit. The plot plan shall include the following minimum design features: fire lanes, where required, shall be a minimum of 20 feet in width; all structures must be within 300 feet of an approved fire hydrant, and entrances to any dwelling unit or guest room shall not be more than 150 feet in distance in horizontal travel from the edge of the roadway of an improved street or approved fire lane.

### 2014 CITY OF LOS ANGELES FIRE CODE, SECTION 503.1.4 (EXCEPTION)

- a. When this exception is applied to a fully fire sprinklered residential building equipped with a wet standpipe outlet inside an exit stairway with at least a 2 hour rating the distance from the wet standpipe outlet in the stairway to the entry door of any dwelling unit or guest room shall not exceed 150 feet of horizontal travel AND the distance from the edge of the roadway of an improved street or approved fire lane to the door into the same exit stairway directly from outside the building shall not exceed 150 feet of horizontal travel.
- b. It is the intent of this policy that in no case will the maximum travel distance exceed 150 feet inside the structure and 150 feet outside the structure. The term "horizontal travel" refers to the actual path of travel to be taken by a person responding to an emergency in the building.
- c. This policy does not apply to single-family dwellings or to non-residential buildings.

Site plans shall include all overhead utility lines adjacent to the site.

Where access for a given development requires accommodation of Fire Department apparatus, overhead clearance shall not be less than 14 feet.

No proposed development utilizing cluster, group, or condominium design of one or two family dwellings shall be more than 150 feet from the edge of the roadway of an improved street, access road, or designated fire lane.

On small lot subdivisions, any lots used for access purposes shall be recorded on the final map as a "Fire Lane".

Private development shall conform to the standard street dimensions shown on Department of Public Works Standard Plan S-470-0.

Planning.expedited@lacity.org February 1, 2022

TRACT MAP NO.: CPC-2021-10345-DB-APP-SPR-VHCA.: 4260 N Arch Drive

Page 3

Standard cut-corners will be used on all turns.

#### FPB #105

5101.1 Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

That in order to provide assurance that the proposed common fire lane and fire protection facilities, for the project, not maintained by the City, are properly and adequately maintained, the sub-divider shall record with the County Recorder, prior to the recordation of the final map, a covenant and agreement (Planning Department General Form CP-6770) to assure the following:

- A. The establishment of a property owners association, which shall cause a yearly inspection to be, made by a registered civil engineer of all common fire lanes and fire protection facilities. The association will undertake any necessary maintenance and corrective measures. Each future property owner shall automatically become a member of the association or organization required above and is automatically subject to a proportionate share of the cost.
- B. The future owners of affected lots with common fire lanes and fire protection facilities shall be informed or their responsibility for the maintenance of the devices on their lots. The future owner and all successors will be presented with a copy of the maintenance program for their lot. Any amendment or modification that would defeat the obligation of said association as the Advisory Agency must approve required hereinabove in writing after consultation with the Fire Department.
- C. In the event that the property owners association fails to maintain the common property and easements as required by the CC and R's, the individual property owners shall be responsible for their proportional share of the maintenance.
- D. Prior to any building permits being issued, the applicant shall improve, to the satisfaction of the Fire Department, all common fire lanes and install all private fire hydrants to be required.
- E. That the Common Fire Lanes and Fire Protection facilities be shown on the Final Map.

The plot plans shall be approved by the Fire Department showing fire hydrants and access for each phase of the project prior to the recording of the final map for that phase. Each phase shall comply independently with code requirements.

Any roof elevation changes in excess of 3 feet may require the installation of ships ladders.

Provide Fire Department pathway front to rear with access to each roof deck via gate or pony wall less than 36 inches.

Building designs for multi-storied residential buildings shall incorporate at least one access stairwell off the main lobby of the building; But, in no case greater than 150ft horizontal travel distance from the edge of the public street, Private Street or Fire Lane. This stairwell shall extend onto the roof.

Planning.expedited@lacity.org February 1, 2022

TRACT MAP NO.: CPC-2021-10345-DB-APP-SPR-VHCA.: 4260 N Arch Drive

Page 4

Entrance to the main lobby shall be located off the address side of the building.

Any required Fire Annunciator panel or Fire Control Room shall be located within 20ft visual line of site of the main entrance stairwell or to the satisfaction of the Fire Department.

Where rescue window access is required, provide conditions and improvements necessary to meet accessibility standards as determined by the Los Angeles Fire Department.

Adequate off-site public and on-site private fire hydrants may be required. Their number and location to be determined after the Fire Department's review of the plot plan.

Any required fire hydrants to be installed shall be fully operational and accepted by the Fire Department prior to any building construction.

The applicant is further advised that all subsequent contact regarding these conditions must be with the Hydrant and Access Unit. This would include clarification, verification of condition compliance and plans or building permit applications, etc., and shall be accomplished **BY APPOINTMENT ONLY**, in order to assure that you receive service with a minimum amount of waiting please call **(213)** 482-6543. You should advise any consultant representing you of this requirement as well.

RALPH M. TERRAZAS Fire Chief

Kristin Crowley, Fire Marshal Bureau of Fire Prevention and Public Safety

KC:MRC:mrc

CPC-2021-10345-DB-APP-SPR-VHCA.: 4260 N Arch Drive

# INITIAL SUBMISSIONS

The following submissions by the public are in compliance with the Commission Rules and Operating Procedures (ROPs), Rule 4.3a. Please note that "compliance" means that the submission complies with deadline, delivery method (hard copy and/or electronic) <u>AND</u> the number of copies. The Commission's ROPs can be accessed at <a href="http://planning.lacity.org">http://planning.lacity.org</a>, by selecting "Commissions & Hearings" and selecting the specific Commission.

The following submissions are not integrated or addressed in the Staff Report but <u>have</u> been distributed to the Commission.

Material which does not comply with the submission rules is not distributed to the Commission.

#### **ENABLE BOOKMARKS ONLINE:**

\*\*If you are using Explorer, you will need to enable the Acrobat to see the bookmarks on the left side of the screen.

If you are using Chrome, the bookmarks are on the upper right-side of the screen. If you do not want to use the bookmarks, simply scroll through the file.

If you have any questions, please contact the Commission Office at (213) 978-1300.

P: (626) 381-9248 F: (626) 389-5414 E: info@mitchtsailaw.com 139 South Hudson Avenue Suite 200 Pasadena, California 91101

#### VIA E-MAIL

July 17, 2023

Renata Ooms City of Los Angeles 200 N. Spring Street, Suite 525 Los Angeles, CA 90012

Em: renata.ooms@lacity.org

RE: 4260 N. Arch Dr. Project [ENV-2021-10346-EAF]

Dear Honorable Commissioners,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**The Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments to the City of Los Angles ("**City**") regarding the 4260 N. Arch Dr. project ("**Project**").

The Project proposes to develop a new multifamily residential building with 129 dwelling units, 17 of which will be set aside for very low income households, and a partially subterranean parking garage with 145 parking spaces.

SWMSRCC is a labor union representing 63,000 union carpenters in ten states, including California, and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects. Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

SWMSRCC expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); Bakersfield Citizens for Local Control v. Bakersfield (2004) 124 Cal. App. 4th 1184, 1199-1203; see Galante Vineyards v. Monterey Water Dist. (1997) 60 Cal. App. 4th 1109, 1121.

SWMSRCC incorporates by reference all comments raising issues regarding the Project's environmental review submitted prior to approval of the Project. *Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any

party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

# I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

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Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words,

well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.<sup>1</sup>

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas ("**GHG**") emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.<sup>2</sup>

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.<sup>3</sup>

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled ("VMT"). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents. 4 Some municipalities have even tied local hire and

<sup>&</sup>lt;sup>1</sup> California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <a href="https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf">https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf</a>.

<sup>&</sup>lt;sup>2</sup> South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, available at <a href="http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10">http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10</a>.

<sup>&</sup>lt;sup>3</sup> California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

<sup>&</sup>lt;sup>4</sup> Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* <a href="http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf">http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf</a>.

other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

# II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* <a href="https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx">https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx</a>.

Southwest Mountain States Carpenters recommend that the City adopt additional requirements to mitigate public health risks from the Project's construction activities. SWMSRCC requests that the City require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Mountain States Carpenters' experience with safe construction site work practices, SWMSRCC recommends that the City require that while construction activities are being conducted at the Project Site:

# **Construction Site Design:**

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

# **Testing Procedures:**

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.

- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

# **Planning**

• Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches)

communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.<sup>6</sup>

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The City should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Mountain States Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.<sup>7</sup>

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

# III. THE CITY SHOULD PREPARE AN ENVIRONMENTAL IMPACT REPORT FOR THE PROJECT

CEQA is a California statute designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of

<sup>7</sup> For details concerning Southwest Carpenters's ICRA training program, *see* https://icrahealthcare.com/.

<sup>&</sup>lt;sup>6</sup> See also The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, available at <a href="https://www.cpwr.com/sites/default/files/NABTU\_CPWR\_Standards\_COVID-19.pdf">https://www.cpwr.com/sites/default/files/NABTU\_CPWR\_Standards\_COVID-19.pdf</a>; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at <a href="https://dpw.lacounty.gov/building-and-safety/docs/pw\_guidelines-construction-sites.pdf">https://dpw.lacounty.gov/building-and-safety/docs/pw\_guidelines-construction-sites.pdf</a>.

Regulations ("CEQA Guidelines") § 15002(a)(1).8 At its core, "[i]ts purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made." Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal. 3d 553, 564.

To achieve this purpose, CEQA mandates preparation of an Environmental Impact Report ("EIR") for projects so that the foreseeable impacts of pursuing the project can be understood and weighed. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80. The EIR requirement "is the heart of CEQA." CEQA Guidelines, § 15003(a).

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard, under which an agency must prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1602; *Friends of "B" St.* v. *City of Hayward* (1980) 106 Cal. 3d 988, 1002.

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." Public Resources Code ("PRC") § 21151; No Oil, Inc. v. City of Los Angeles (1974) 13 Cal. App. 3d 68, 75; Jensen v. City of Santa Rosa (2018) 23 Cal. App. 5th 877, 884. Under this test, if a proposed project is not exempt and may cause a significant effect on the environment, the lead agency must prepare an EIR. PRC §§ 21100(a), 21151; CEQA Guidelines § 15064(a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. Parker Shattuck Neighbors v. Berkeley City Council (2013) 222 Cal. App. 4th 768, 785. In such a situation, the agency must adopt a negative declaration. PRC § 21080(c)(1); CEQA Guidelines §§ 15063(b)(2), 15064(f)(3).

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The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." PRC § 21068; CEQA Guidelines § 15382. A project "may" have a significant effect on the environment if there is a "reasonable probability" that it will result in a significant impact. No Oil, Inc. v. City of Los Angeles, 13 Cal. 3d at 83 fn. 16; Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. CEQA Guidelines § 15063(b)(1). See County Sanitation Dist. No. 2 v. County of Kern (2005) 127 Cal. App. 4th 1544, 1580.

This standard sets a "low threshold" for preparation of an EIR. Consolidated Irrig. Dist. v. City of Selma (2012) 204 Cal. App. 4th 187, 207; Nelson v. County of Kern (2010) 190 Cal. App. 4th 252; Pocket Protectors v. City of Sacramento (2004) 124 Cal. App. 4th 903, 928; Bowman v. City of Berkeley (2004) 122 Cal. App. 4th 572, 580; Citizen Action to Serve All Students v. Thornley (1990) 222 Cal. App. 3d 748, 754; Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d 296, 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See Jensen v. City of Santa Rosa (2018) 23 Cal. App. 5th 877, 886; Clews Land & Livestock v. City of San Diego (2017) 19 Cal. App. 5th 161, 183; Stanislaus Audubon Soc'y, Inc. v. County of Stanislaus (1995) 33 Cal. App. 4th 144, 150; Brentwood Ass'n for No Drilling, Inc. v. City of Los Angeles (1982) 134 Cal. App. 3d 491; Friends of "B" St. v. City of Hayward (1980) 106 Cal. App. 3d 988; CEQA Guidelines § 15064(f)(1).

As there is a fair argument that the Project may cause significant environmental impacts, as explained below, the low threshold is met and the City should prepare an EIR for the Project.

# IV. THE CITY SHOULD DETERMINE THAT THE PROJECT DOES NOT QUALIFY FOR THE CLASS 32 CEQA EXEMPTION

CEQA exemptions must be construed narrowly. See County of Amador v. El Dorado County Water Agency (1999) 76 Cal.App.4th 931, 966. With regard to Class 32 exemptions for in-fill development projects, the project must meet all of the conditions identified in CEQA Guidelines section 15332, as follows:

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations;
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses;
- (c) The project site has no value, as habitat for endangered, rare or threatened species;
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and
- (e) The site can be adequately served by all required utilities and public services.

Moreover, categorical exemptions are not absolute. Even if a project fits into a categorical exemption class, the agency must consider whether a codified exception to exemption applies. Guidelines § 15300.2. A project falling within a categorical exemption may require environmental review if the project is subject to exceptions-tothe-exemptions listed under CEQA Guidelines § 15300.2, which include projects involving: (a) locations involving environmental resources of hazardous or critical concern; (b) significant cumulative impact of successive projects of the same type in the same place; (c) reasonable possibility of significant environmental effect due to unusual circumstances; (d) damage to scenic resources on State scenic highways; (e) locations listed as a hazardous waste site; or (f) substantial adverse changes to a historical resource.

Here, the Project fails to comply with all the required conditions. Therefore, the Project does not qualify for the Class 32 CEQA exemption.

# A. The Project Is Inconsistent with the General Plan and Zoning Regulations

Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy, and serves as a "constitution" or

"charter" for all future development. DeVita v. County of Napa (1995) 9 Cal.4th 763, 773; Lesher Communications, Inc. v. City of Walnut Creek (1990) 52 Cal.3d 531, 540.

General plan consistency is "the linchpin of California's land use and development laws; it is the principle which infused the concept of planned growth with the force of law." *Debottari v. Norco City Council* (1985) 171 Cal.App.3d 1204, 1213. It is well established that development projects may not be approved if they interfere with, or frustrate, the general plan's policies and objectives. See *Napa Citizens*, 91 Cal.App.4th at 378-79; see also *Lesher*, 52 Cal.3d at 544.

Here, the Project is located in a commercial district rather than a residential one. On those grounds alone, development of 129-unit residential unit development renders the Project inconsistent with the General Plan and zoning regulations.

Further, the Project requests numerous departures from the ordinary limits permitted by the General Plan and zoning designations, including a density bonus, floor area ration, and building height incentives. Given that the incentives have not yet been approved, there is a colorful argument that the Project is inconsistent with the General Plan and all applicable zoning regulations, rendering it ineligible for a Class 32 CEQA exemption.

Finally, the Project requires a Project Permit Compliance Review to ensure that the Project is complaint with the Ventura Cahuenga Specific Plan. Thus, absent such determination, the Project may be incompliant with the Specific Plan, also making a Class 32 CEQA exemption inapplicable.

# B. The Project May Have Significant Unanalyzed Environmental Effects

CEQA exemptions are reserved for projects without potential to have significant environmental effects. See *Salmon Protection & Watershed Network v. County of Marin* (2004) 125 Cal.App.4th 1098, 1107 ["If a project may have a significant effect on the environment, CEQA review must occur"]. The Project at hand has the potential to cause a number of significant environmental effects, rendering the Class 32 CEQA exemption inapplicable.

The very natures of the Project, i.e. replacing a vacant elderly care facility with a mixed-use 129-unit residential unit development, creates potentially significant traffic, air quality, and noise issues stemming from the sheer increase in density and intensity of land use on the Project site. Coupled with the fact that construction of the Project may involve road closures, street detours, and loud construction equipment, the

Project has the potential to cause significant traffic, air quality, and noise impacts, which the Project application does not even attempt to quantify or assess. Such assessment is all the more necessary given that the Project is directly adjacent to the LA River, a source of fresh water for the City which many species of plants and wildlife rely upon for habitat. Accordingly, without any Project specific analysis quantifying the Project's anticipated traffic, air quality, and noise impacts, the finding that the Project will not have any significant impacts is merely speculatory and the Class 32 CEQA exemption must not apply.

# C. There Is No Evidence that The Project Site Can Be Adequately Served by All Required Utilities and Public Services.

Under CEQA Guidelines section 15332(d), there must be evidence that the Project site can be adequately served by all required utilities and public services. Here, there is no such evidence and, in fact, the evidence shows the opposite. Specifically, the Project has to clear sewer availability and roof/waste drainage items to be issued permits, which have not yet been cleared. Thus, there is no evidence that the Project site be adequately served by all required utilities and public services and, for this reason too, the Project does not qualify for the Class 32 exemption.

# D. <u>The Project May Have Significant Impacts due to Unusual</u> <u>Circumstances, as Well As Cumulative Impacts</u>

Pursuant to CEQA Guidelines section 15300.2(c), "a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances."

Given that the Project is directly adjacent to the LA River, the Project may be unusual as to its nature and location and result in significant effects on the plants and wildlife that use the River as habitat. On these grounds alone, the Project shouldn't be eligible for a CEQA exemption.

Further, pursuant to CEQA Guidelines section 15300.2(b), all exemptions "are inapplicable when the cumulative impact of successive projects of the same type in

<sup>&</sup>lt;sup>9</sup> See LA Department of Building & Safety Project Permit information, available at <a href="https://www.ladbsservices2.lacity.org/OnlineServices/PermitReport/PcisPermitDetail?id1=22010&id2=10000&id3=05576">https://www.ladbsservices2.lacity.org/OnlineServices/PermitReport/PcisPermitDetail?id1=22010&id2=10000&id3=05576</a>

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the same place, over time is significant." For example, a five-story residential building is slated for development, or was recently developed, at 10867 W. Fruitland Drive. 10

The Project, along with other nearby projects, may collectively contribute to potentially significant cumulative impacts on air quality, noise, and traffic congestion in Studio City. Therefore, the Class 23 CEQA exemption is not applicable since the exceptions under CEQA Guidelines section 15300.2 apply.

### V. CONCLUSION

In sum, SMSWRCC requests that the City require a local workforce, that the City impose training requirements for the Project's construction activities to prevent community spread of COVID-19 and other infectious diseases, and that the City prepare an EIR for the Project and determine that the Project does not qualify for a Class 32 CEQA exemption for the aforementioned concerns. If the City has any questions, feel free to contact my Office.

Sincerely,

Talia Nimmer

Attorneys for Southwest Mountain States Regional Council of Carpenters

Attached:

Exhibit A: March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling;

Exhibit B: Air Quality and GHG Expert Paul Rosenfeld CV; and

Exhibit C: Air Quality and GHG Expert Matt Hagemann CV.

<sup>&</sup>lt;sup>10</sup> See L.A. City Planning Commission Rejects Five TOC Appeals (Oct. 2019), available at <a href="https://la.urbanize.city/post/la-city-planning-commission-rejects-five-toc-appeals">https://la.urbanize.city/post/la-city-planning-commission-rejects-five-toc-appeals</a>



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March 8, 2021

Mitchell M. Tsai 155 South El Molino, Suite 104 Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai.

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

## Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects." CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.<sup>2</sup>

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

<sup>&</sup>lt;sup>2</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

<sup>&</sup>lt;sup>3</sup> "CalEEMod User's Guide." CAPCOA, November 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/01\_user-39-s-guide2016-3-2\_15november2017.pdf?sfvrsn=4">http://www.aqmd.gov/docs/default-source/caleemod/01\_user-39-s-guide2016-3-2\_15november2017.pdf?sfvrsn=4</a>, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.<sup>4</sup>

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

```
"VMT<sub>d</sub> = \Sigma(Average Daily Trip Rate _i * Average Overall Trip Length _i) _n Where:
```

n = Number of land uses being modeled."5

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

```
"Emissions<sub>pollutant</sub> = VMT * EF<sub>running,pollutant</sub>

Where:

Emissions<sub>pollutant</sub> = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

EF_{running,pollutant} = emission factor for running emissions."
```

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

# Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction. In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence. The default number of construction-related worker trips is calculated by multiplying the

<sup>&</sup>lt;sup>4</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

<sup>&</sup>lt;sup>5</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

<sup>&</sup>lt;sup>6</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

<sup>&</sup>lt;sup>7</sup> "CalEEMod User's Guide." CAPCOA, November 2017, *available at*: <a href="http://www.aqmd.gov/docs/default-source/caleemod/01">http://www.aqmd.gov/docs/default-source/caleemod/01</a> user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

<sup>&</sup>lt;sup>8</sup> CalEEMod User Guide, available at: <a href="http://www.caleemod.com/">http://www.caleemod.com/</a>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.<sup>9</sup> Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."<sup>10</sup> Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trip lengths are:

"[B]ased on the <u>location</u> and <u>urbanization</u> selected on the project characteristic screen. These values were <u>supplied by the air districts or use a default average for the state</u>. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). <sup>12</sup>

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).<sup>13</sup>

Worker Trip Length by Air Basin									
Air Basin	Rural (miles)	Urban (miles)							
Great Basin Valleys	16.8	10.8							
Lake County	16.8	10.8							
Lake Tahoe	16.8	10.8							
Mojave Desert	16.8	10.8							
Mountain Counties	16.8	10.8							
North Central Coast	17.1	12.3							
North Coast	16.8	10.8							
Northeast Plateau	16.8	10.8							
Sacramento Valley	16.8	10.8							
Salton Sea	14.6	11							
San Diego	16.8	10.8							
San Francisco Bay Area	10.8	10.8							
San Joaquin Valley	16.8	10.8							
South Central Coast	16.8	10.8							
South Coast	19.8	14.7							
Average	16.47	11.17							
Minimum	10.80	10.80							
Maximum	19.80	14.70							
Range	9.00	3.90							

<sup>&</sup>lt;sup>9</sup> "CalEEMod User's Guide." CAPCOA, November 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/01">http://www.aqmd.gov/docs/default-source/caleemod/01</a> user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

<sup>&</sup>lt;sup>10</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

<sup>&</sup>lt;sup>11</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

<sup>&</sup>lt;sup>12</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

<sup>&</sup>lt;sup>13</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4">http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4</a>, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

### Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles. <sup>14</sup> In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO₂e)	3,623
Amortized Construction GHG Emissions (MT CO₂e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO₂e/year)	100.80
% Decrease in Construction-related GHG Emissions	<b>17%</b>

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

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<sup>&</sup>lt;sup>14</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4">http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4</a>, p. D-85.

#### Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul Rosupeld

M Horam

Paul E. Rosenfeld, Ph.D.

# Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	<b>Butte County</b>	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8	
County	Orange	19.8	14.7	
County	Placer-Lake	16.8	10.8	
County	Placer-Mountain	16.8	10.8	
County	Placer-	16.8	10.8	
County	Plumas	16.8	10.8	
County	Riverside-	16.8	10.8	
County	Riverside-	19.8	14.7	
County	Riverside-Salton	14.6	11	
County	Riverside-South	19.8	14.7	
County	Sacramento	15	10	
County	San Benito	16.8	10.8	
County	San Bernardino-	16.8	10.8	
County	San Bernardino-	19.8	14.7	
County	San Diego	16.8	10.8	
County	San Francisco	10.8	10.8	
County	San Joaquin	16.8	10.8	
County	San Luis Obispo	13	13	
County	San Mateo	10.8	10.8	
County	Santa Barbara-	8.3	8.3	
County	Santa Barbara-	8.3	8.3	
County	Santa Clara	10.8	10.8	
County	Santa Cruz	16.8	10.8	
County	Shasta	16.8	10.8	
County	Sierra	16.8	10.8	
County	Siskiyou	16.8	10.8	
County	Solano-	15	10	
County	Solano-San	16.8	10.8	
County	Sonoma-North	16.8	10.8	
County	Sonoma-San	10.8	10.8	
County	Stanislaus	16.8	10.8	
County	Sutter	16.8	10.8	
County	Tehama	16.8	10.8	
County	Trinity	16.8	10.8	
County	Tulare	16.8	10.8	
County	Tuolumne	16.8	10.8	
County	Ventura	16.8	10.8	
•	Yolo	15.8	10.8	
County				
County	Yuba	16.8	10.8	
Statewide	Statewide	16.8	10.8	

Worker Trip Length by Air Basin									
Air Basin	Rural (miles)	Urban (miles)							
Great Basin Valleys	16.8	10.8							
Lake County	16.8	10.8							
Lake Tahoe	16.8	10.8							
Mojave Desert	16.8	10.8							
Mountain Counties	16.8	10.8							
North Central Coast	17.1	12.3							
North Coast	16.8	10.8							
Northeast Plateau	16.8	10.8							
Sacramento Valley	16.8	10.8							
Salton Sea	14.6	11							
San Diego	16.8	10.8							
San Francisco Bay Area	10.8	10.8							
San Joaquin Valley	16.8	10.8							
South Central Coast	16.8	10.8							
South Coast	19.8	14.7							
Average	16.47	11.17							
Mininum	10.80	10.80							
Maximum	19.80	14.70							
Range	9.00	3.90							

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit		25,000.00	72
Apartments Mid Rise	975.00 Dwelling Unit		25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

# 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR 5.86		4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
		•	

# 2.0 Emissions Summary

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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												МТ	/yr		
2021	0.1713	1.8242	1.1662	2.4000e- 003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 5	1,627.529 5	0.1185	0.0000	1,630.492 5
2024	4.1619	0.1335	0.2810	5.9000e- 004	0.0325	6.4700e- 003	0.0390	8.6300e- 003	6.0400e- 003	0.0147	0.0000	52.9078	52.9078	8.0200e- 003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

## **Mitigated Construction**

	ROG	NOx	СО	SO2	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	ear tons/yr											M	Г/уг			
2021	0.1713	1.8242	1.1662	2.4000e- 003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 1	1,627.529 1	0.1185	0.0000	1,630.492 1
2024	4.1619	0.1335	0.2810	5.9000e- 004	0.0325	6.4700e- 003	0.0390	8.6300e- 003	6.0400e- 003	0.0147	0.0000	52.9077	52.9077	8.0200e- 003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
	ROG	NOx	СО	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	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

# 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					ton	s/yr							MT	<sup>7</sup> /yr		
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 2.2 Overall Operational

## **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

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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	458.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	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	160.00	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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	9.7000e- 004	7.5000e- 004	8.5100e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.5000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.2251	2.2251	7.0000e- 005	0.0000	2.2267
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233	 	0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	9.7000e- 004	7.5000e- 004	8.5100e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.5000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.2251	2.2251	7.0000e- 005	0.0000	2.2267
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

# 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204	1 1 1	0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814
Total	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Fugitive Dust	 				0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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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					ton	s/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	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814
Total	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814

#### 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust			i i i		0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377	 	0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607
Total	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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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					ton	s/yr							МТ	/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	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607
Total	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607

### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻/yr		
Fugitive Dust	ii ii				0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 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					ton	s/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

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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# 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					ton	s/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e- 003	1.1192	0.2949	8.1700e- 003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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## 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					ton	s/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e- 003	1.1192	0.2949	8.1700e- 003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

#### 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e- 003	1.0924	0.2879	7.7400e- 003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e- 003	1.0924	0.2879	7.7400e- 003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

## 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968
Total	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
	0.0000		1 1 1 1		       	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968
Total	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968

## 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	<sup>-</sup> /yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706
Total	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706
Total	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706

## 3.7 Architectural Coating - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003	1	1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558
Total	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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## 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558
Total	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558

## 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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		Miles			Trip %			Trip Purpos	e %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

### 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated					       	0.0000	0.0000	       	0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003	       	0.0966	0.0966	       	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	,	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

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## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/уг		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

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## 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998			 		0.0000	0.0000	       	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143	       	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	 	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

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6.2 Area by SubCategory

#### <u>Mitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Architectural Coating	0.4137		 	 		0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		       	 		0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143	·	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	i i	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

#### 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
"	585.8052	3.0183	0.0755	683.7567
	585.8052	3.0183	0.0755	683.7567

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7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	√yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
	2.42827 / 0.154996	11.3934	0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

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## 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	√yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)			0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
-,,	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

#### 8.0 Waste Detail

## **8.1 Mitigation Measures Waste**

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## Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	7/yr	
"	207.8079	12.2811	0.0000	514.8354
	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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#### 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons	MT/yr							
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834				
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513				
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464				
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430				
Hotel	27.38	5.5579	0.3285	0.0000	13.7694				
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712				
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706				
Total		207.8079	12.2811	0.0000	514.8354				

## 9.0 Operational Offroad

-							
ı	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

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

## 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **Village South Specific Plan (Proposed)**

#### 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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### 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	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 21
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

0.00

Percent Reduction 0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	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	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 20
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
	ROG	NOx	СО	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

0.00

0.00

0.00

0.00

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0.00

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 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/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

## **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	 	50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

## **Trips and VMT**

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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	458.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	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	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003	     	170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

## 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	     	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	       	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296

## 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217

## 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	 	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 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/d	day							lb/d	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	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003	       	219.8941
Total	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941

## 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 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/d	day							lb/d	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	     	3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429	     	8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

## 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982	       	3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190	     	8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982	       	3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190	       	8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

## 3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 			     	0.0000	0.0000		0.0000	0.0000		       	0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003	       	158.8748
Total	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748

## 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1			0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000		       	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458

## 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609		281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401	,	1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401	       	1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

## 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

## **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

## **4.3 Trip Type Information**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

		Miles			Trip %			Trip Purpos	se %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

## 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

## Village South Specific Plan (Proposed) - 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	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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/d	day		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003	#	29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

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## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

## 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	СО	SO2	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/d	lb/day				
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000		,	0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 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	y Ib/day It								lb/d	day						
Architectural Coating	2.2670					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085	 		   		0.0000	0.0000	i i	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	! !	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	! ! !	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **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
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## 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

## **Village South Specific Plan (Proposed)**

#### 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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

## 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

## 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	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4	
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63	
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60	
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0	
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63	

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

Percent

Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	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	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4	
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63	
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60	
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0	
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63	
	ROG	NOx	СО	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	

0.00

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 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/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

# **Trips and VMT**

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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	458.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	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	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549	       	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003	     	160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

# 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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/d	day							lb/d	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	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472

# 3.4 Grading - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003	       	214.6080
Total	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003		214.6080

# 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965	1 1 1	! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	 	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 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/d	day							lb/d	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	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563

# 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.901 3	8,286.901 3	0.2282	     	8,292.605 8
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.97 63	12,075.97 63	0.4663		12,087.63 41

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.901 3	8,286.901 3	0.2282	     	8,292.605 8
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.97 63	12,075.97 63	0.4663		12,087.63 41

# 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	       				0.0000	0.0000	       	0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000				       	0.0000	0.0000	 	0.0000	0.0000		i i i	0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1			0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228	! !	0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140	i i	2,225.396 3
Paving	0.0000	 			 	0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	       	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	       	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	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	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	     	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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# Village South Specific Plan (Proposed) - 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	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

# **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

# **4.3 Trip Type Information**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

		Miles			Trip %			Trip Purpos	se %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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/o	day							lb/d	day		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666	#	4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003	#	150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/o	day							lb/c	lay		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003	! !	8.3400e- 003	8.3400e- 003	1 1 1	131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211	<del></del>	0.2666	0.2666	,	0.2666	0.2666	#	4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004	<del></del>	9.5600e- 003	9.5600e- 003	,	9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134	<del></del>	0.1696	0.1696	,	0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355	,	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	,	0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

# 6.0 Area Detail

# **6.1 Mitigation Measures Area**

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# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

# <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day					lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000	       	0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	       	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 			0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### **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
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# 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

# 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

# 2.0 Emissions Summary

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# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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					tor	ıs/yr							MT	-/yr		
2021	0.1704	1.8234	1.1577	2.3800e- 003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.441 2	1,342.441 2	0.1115	0.0000	1,345.229 1
2024	4.1592	0.1313	0.2557	5.0000e- 004	0.0221	6.3900e- 003	0.0285	5.8700e- 003	5.9700e- 003	0.0118	0.0000	44.6355	44.6355	7.8300e- 003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5

# Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

#### **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	0.1704	1.8234	1.1577	2.3800e- 003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.440 9	1,342.440 9	0.1115	0.0000	1,345.228 7
2024	4.1592	0.1313	0.2557	5.0000e- 004	0.0221	6.3900e- 003	0.0285	5.8700e- 003	5.9700e- 003	0.0118	0.0000	44.6354	44.6354	7.8300e- 003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
	ROG	NOx	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	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

# 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	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	       	0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste			i			0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	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**

#### Village South Specific Plan (Proposed) - 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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	7.2000e- 004	5.3000e- 004	6.0900e- 003	2.0000e- 005	1.6800e- 003	1.0000e- 005	1.6900e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.5281	1.5281	5.0000e- 005	0.0000	1.5293
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	<sup>-</sup> /yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
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	7.2000e- 004	5.3000e- 004	6.0900e- 003	2.0000e- 005	1.6800e- 003	1.0000e- 005	1.6900e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.5281	1.5281	5.0000e- 005	0.0000	1.5293
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234
Total	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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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					ton	s/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	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234
Total	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234

#### 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			i i i		0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377	 	0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828
Total	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828
Total	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828

### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003	       	5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/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	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590
Total	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590
Total	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590

### 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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# 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					ton	s/yr							МТ	/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e- 003	0.7557	6.2300e- 003	0.7619	0.2007	5.7400e- 003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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## 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					ton	s/yr							МТ	/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	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e- 003	0.7557	6.2300e- 003	0.7619	0.2007	5.7400e- 003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

#### 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cil rioda	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864	 	0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e- 003	0.7377	5.9100e- 003	0.7436	0.1960	5.4500e- 003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e- 003	0.7377	5.9100e- 003	0.7436	0.1960	5.4500e- 003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirribad	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160
Total	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003	 	3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
	0.0000		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160
Total	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160

# 3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100
Total	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100
Total	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100

## 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003	 	1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394
Total	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005	       	1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

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3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394
Total	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394

## 4.0 Operational Detail - Mobile

### **4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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		Miles			Trip %			Trip Purpos	e %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

### 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

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## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003	       	0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# **5.2 Energy by Land Use - NaturalGas Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978			
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9			
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165			
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135			
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672			
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141			
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395			
Total		2,512.646 5	0.1037	0.0215	2,521.635 6			

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978			
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9			
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165			
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135			
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672			
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141			
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395			
Total		2,512.646 5	0.1037	0.0215	2,521.635 6			

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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								МТ	/yr						
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 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	0.4137		 	 		0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		       	 		0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143	·	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	i i	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

#### 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e				
Category	MT/yr							
ı	585.8052	3.0183	0.0755	683.7567				
	585.8052	3.0183	0.0755	683.7567				

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471			
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363			
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019			
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e- 003	62.8482			
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079			
	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663			
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490			
Total		585.8052	3.0183	0.0755	683.7567			

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471			
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363			
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019			
High Turnover (Sit Down Restaurant)			0.3580	8.8200e- 003	62.8482			
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079			
-,,	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663			
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490			
Total		585.8052	3.0183	0.0755	683.7567			

#### 8.0 Waste Detail

### **8.1 Mitigation Measures Waste**

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## Category/Year

	Total CO2	CH4	N2O	CO2e					
	MT/yr								
	207.8079	12.2811	0.0000	514.8354					
	207.8079	12.2811	0.0000	514.8354					

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834			
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513			
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464			
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430			
Hotel	27.38	5.5579	0.3285	0.0000	13.7694			
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712			
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706			
Total		207.8079	12.2811	0.0000	514.8354			

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

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## 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e						
Land Use	tons		MT/yr								
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834						
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513						
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464						
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430						
Hotel	27.38	5.5579	0.3285	0.0000	13.7694						
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712						
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706						
Total		207.8079	12.2811	0.0000	514.8354						

# 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

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
	·	·	

# 2.0 Emissions Summary

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### 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	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 6
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	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	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 5
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
	ROG	NOx	СО	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

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	1 1 1 1	50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003	     	117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	 	1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
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	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

#### 3.3 Site Preparation - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	     	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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/d	day							lb/d	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	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414

#### 3.4 Grading - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620	     	1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428	     	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003	       	156.4904
Total	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904

## 3.4 Grading - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621	       	1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003	       	150.9813
Total	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	       	3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697	 	6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	       	3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697	 	6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

## 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

# 3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	1 1 1	0.0000	0.0000		       	0.0000		i i i	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000				 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1 1		       	0.0000	0.0000	i i	0.0000	0.0000		i i i	0.0000		i i	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609		281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	       	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	       	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	     	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	       	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

# 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

#### **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

## **4.3 Trip Type Information**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

		Miles			Trip %			Trip Purpos	e %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	<del></del>	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	<del></del>	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	<del></del>	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	lay		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003	<del></del>	9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134	<del></del>	0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	,	0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003	<del></del>	0.0377	0.0377	,	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	, : : : :	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Consumer Products	24.1085					0.0000	0.0000	       	0.0000	0.0000			0.0000		       	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	       	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424	       	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

## 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	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	2.2670					0.0000	0.0000	i i	0.0000	0.0000			0.0000		 	0.0000
Consumer Products	24.1085			 		0.0000	0.0000	i i	0.0000	0.0000			0.0000		 	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	·	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	i i	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

#### **Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
		1.00.0, 2.0,	1,00,00			

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### **Village South Specific Plan (Proposed)**

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 Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
	·	·	

# 2.0 Emissions Summary

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### 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/d	lb/day			
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6	
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13	
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97	
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7	
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13	

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Mitigated Construction**

Percent

Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	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	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
	ROG	NOx	со	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

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day												lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/d	day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	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	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
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	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

#### 3.3 Site Preparation - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	; ; ;	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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/d	day							lb/c	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	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646

#### 3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003	,	147.4051
Total	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051

## 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	0; 0; 0; 0;				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust		i i			8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	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	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602	     	5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 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/d	day							lb/d	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	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

#### 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442		5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442		5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	       				0.0000	0.0000	       	0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1		       	0.0000	0.0000		0.0000	0.0000			0.0000		       	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228	! !	0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140	i i	2,225.396 3
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	       	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	       	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	1 1 1 1	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	, , ,	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	,	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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#### Village South Specific Plan (Proposed) - 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	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

## **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

#### **4.3 Trip Type Information**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

		Miles			Trip %			Trip Purpos	se %
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 Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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		0.0121 i 0.1031 i 0.0439 i 6.6000e- i 8.3400e- i 8.3400e- i 8.3400e- i 8.3400e-											lb/c	lay		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	<del></del>	0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	<del></del>	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	<del></del>	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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	TU/yr Ib/day										lb/d	lay				
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	,	0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	,	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003	*	29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

# 6.2 Area by SubCategory

# <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		! !	0.0000
Consumer Products	24.1085		1       			0.0000	0.0000	1       	0.0000	0.0000		,	0.0000		,	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	1       	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	y <del></del>       	0.4574	0.4574		148.5950	148.5950	0.1424	,	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 			0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

#### 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

#### Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

#### **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

# Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%



#### SOIL WATER AIR PROTECTION ENTERPRISE

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

**Education** 

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

**Professional Experience** 

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner

UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)

UCLA School of Public Health; 2003 to 2006; Adjunct Professor

UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator

UCLA Institute of the Environment, 2001-2002; Research Associate

Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist

National Groundwater Association, 2002-2004; Lecturer

San Diego State University, 1999-2001; Adjunct Professor

Anteon Corp., San Diego, 2000-2001; Remediation Project Manager

Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager

Bechtel, San Diego, California, 1999 – 2000; Risk Assessor

King County, Seattle, 1996 – 1999; Scientist

James River Corp., Washington, 1995-96; Scientist

Big Creek Lumber, Davenport, California, 1995; Scientist

Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist

Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## **Publications:**

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- Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.
- Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.
- **Rosenfeld**, **P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, Lecture conducted from Tuscon, AZ.
- Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting. Lecture conducted from Tuscon, AZ.
- Wu, C., Tam, L., Clark, J., Rosenfeld, P. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution. Lecture conducted from Tallinn, Estonia.
- **Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.
- **Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., Rosenfeld P.E., Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D.** (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. 2005 National Groundwater Association Ground Water And Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. 2005 National Groundwater Association Ground Water and Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

- **Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.
- Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL.
- **Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants.*. Lecture conducted from Hyatt Regency Phoenix Arizona.
- **Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.
- **Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.
- **Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.
- **Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.
- **Rosenfeld. P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.
- **Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.
- Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.
- **Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.
- **Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.
- **Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

# **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

# **Deposition and/or Trial Testimony:**

In the United States District Court For The District of New Jersey

Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.

Case No.: 2:17-cv-01624-ES-SCM Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles - Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles - Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles

Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC

Case No.: LC102019 (c/w BC582154)

Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division

Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants

Case Number: 4:16-cv-52-DMB-JVM

Rosenfeld Deposition: July 2017

## In The Superior Court of the State of Washington, County of Snohomish

Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants

Case No.: No. 13-2-03987-5

Rosenfeld Deposition, February 2017

Trial, March 2017

#### In The Superior Court of the State of California, County of Alameda

Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants

Case No.: RG14711115

Rosenfeld Deposition, September 2015

#### In The Iowa District Court In And For Poweshiek County

Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants

Case No.: LALA002187

Rosenfeld Deposition, August 2015

## In The Iowa District Court For Wapello County

Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants

Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015

### In The Iowa District Court For Wapello County

Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants

Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015

#### In The Circuit Court of Ohio County, West Virginia

Robert Andrews, et al. v. Antero, et al.

Civil Action No. 14-C-30000

Rosenfeld Deposition, June 2015

## In The Third Judicial District County of Dona Ana, New Mexico

Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward

DeRuyter, Defendants

Rosenfeld Deposition: July 2015

#### In The Iowa District Court For Muscatine County

Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant

Case No 4980

Rosenfeld Deposition: May 2015

## In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida

Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.

Case Number CACE07030358 (26) Rosenfeld Deposition: December 2014

#### In the United States District Court Western District of Oklahoma

Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City

Landfill, et al. Defendants. Case No. 5:12-cv-01152-C

Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas

Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.

Case Number cc-11-01650-E

Rosenfeld Deposition: March and September 2013

Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants* 

Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)

Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division

Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.

Case 3:10-cv-00622

Rosenfeld Deposition: February 2012

Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., Plaintiffs vs. Two Farms, Inc. d/b/a Royal Farms, Defendants

Case Number: 03-C-12-012487 OT Rosenfeld Deposition: September 2013



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Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization Industrial Stormwater Compliance Investigation and Remediation Strategies Litigation Support and Testifying Expert CEOA Review

### **Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984. B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

#### **Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

#### **Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

#### Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 present);
- Geology Instructor, Golden West College, 2010 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989– 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 1998);
- Instructor, College of Marin, Department of Science (1990 1995);
- Geologist, U.S. Forest Service (1986 1998); and
- Geologist, Dames & Moore (1984 1986).

## **Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shippard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

## With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

•	Expert witness testimony in a case of oil production-related contamination in Mississippi. Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

• Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

#### **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

### **Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities
  through designation under the Safe Drinking Water Act. He prepared geologic reports,
  conducted public hearings, and responded to public comments from residents who were very
  concerned about the impact of designation.

 Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed
  the basis for significant enforcement actions that were developed in close coordination with U.S.
  EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nationwide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

### **Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the
  potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking
  water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

## **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aguifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

## **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

## **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

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# Other Experience:

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