8497-8499 Sunset Boulevard Commercial Project

Initial Study – Mitigated Negative Declaration

prepared by

City of West Hollywood
8300 Santa Monica Boulevard
West Hollywood, California 90069

prepared with the assistance of

Rincon Consultants, Inc.
706 South Hill Street, Suite 1200
Los Angeles, California 90014

November 2017

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
www.rinconconsultants.com

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Initial Study

1. Project Title

8497-8499 Sunset Boulevard Commercial Project

2. Lead Agency Name, Address and Contact

City of West Hollywood
Community Development Department
8300 Santa Monica Blvd.
West Hollywood, California 90069
Contact: Laurie Yelton, Associate Planner, (323) 848-6890

3. Project Sponsor's Name and Address

United El Segundo, Inc.
1418 Amherst Avenue, Apt. 1
Los Angeles, California 90025
(310) 820-7111

4. Project Location

The project site is an approximately 14,810-square-foot (0.34-acre) parcel located at 8497-8499 Sunset Boulevard in the City of West Hollywood (Assessor's Parcel No. 5555-007-009). Figure 1 shows the location of the project site in the region. Figure 2 shows an aerial view of the project site and immediate surroundings.

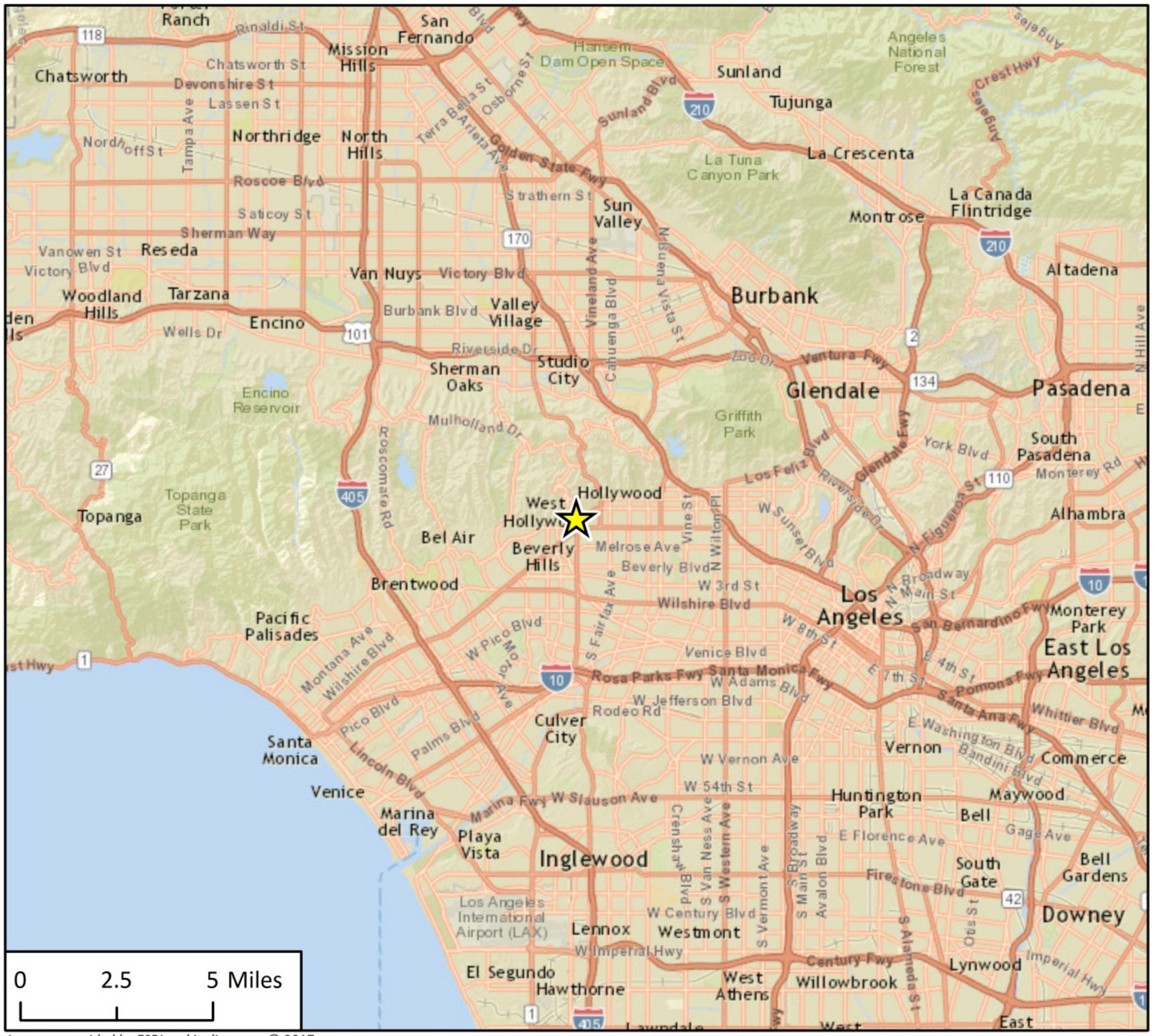
5. General Plan Designation

Sunset Specific Plan (SSP)

6. Zoning

Sunset Specific Plan (SSP)

Figure 1 Regional Location



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Project Location

N

Fig 1 Regional Location

Figure 2 Project Site Location

Imagery provided by Google and its licensors © 2017.

7. Project Site Background and Existing Setting

The project site is located on the Sunset Boulevard commercial corridor in an area characterized by commercial uses along the corridor surrounded by residential uses to the north and south. The Sunset Boulevard commercial corridor generally comprises the area along Sunset Boulevard from Doheny Drive (near the Beverly Hills city limit) to Laurel Canyon Boulevard/Crescent Heights Boulevard. Sunset Boulevard is an internationally known corridor recognized for its entertainment uses, restaurants, and billboards. Sometimes referred to as the “Sunset Strip,” Sunset Boulevard serves as a major traffic artery for the Los Angeles region, connecting Downtown to the Westside. It also serves as a shopping district for West Hollywood residents and tourists. Mid- and high-rise buildings are dispersed among the residential neighborhoods that directly abut Sunset Boulevard. In the hills (Los Angeles) to the north are primarily single family residences. South of Sunset Boulevard (West Hollywood) is a combination of low-density single family residences and high-density multifamily housing units. The Sunset Boulevard landscape contains automobile and billboard advertisements that have been incorporated into the urban design (City of West Hollywood 1996).

The project site is also within the planning boundary of the Sunset Specific Plan (SSP). The project site is part of the La Cienega Gateway subarea (Area 4-A) of the SSP, which is intended to provide a link between the shopping and eating establishments of Sunset Plaza to the west and the hotels and offices located east of La Cienega Boulevard (City of West Hollywood 1996). The La Cienega Gateway area extends from Alta Loma Road on the west to Queens Road on the east and includes a cluster of restaurants, retail stores and offices designed for pedestrian use. From Alta Loma Road to La Cienega Boulevard, buildings are one and two-stories in height on the north side of Sunset Boulevard. On the south side of Sunset Boulevard, buildings range from two to ten stories in height.

Adjacent to the project site to the east (north side of Sunset Boulevard) is a single-story commercial retail development that includes a minimart, shoe store, and mailing service. Several of the retail stores are vacant. A billboard structure facing east on Sunset Boulevard is located on top of the minimart structure. East of this commercial development, there is a paved lot used for billboards that extends to Queens Road. Immediately north of the billboards is steep hillside. Also adjacent to the east of the project site is an 8-foot storm drain easement separating the site from neighboring retail uses.

Adjacent to the project site to the west (north side of Miller Drive) are multi-level (two- and three-story) multi-unit residential structures. Proceeding west from the project site, Miller Drive crosses the Los Angeles City boundary. South of the project site at the intersection of Sunset Boulevard and La Cienega Boulevard are two tall office buildings. On the west side of La Cienega Boulevard is a nine-story building displaying billboards on both the north and west sides of the building and on the east side a ten-story building. The two office buildings obstruct views of the Los Angeles Basin from the project site. Views are only available between the buildings down La Cienega Boulevard. North of the project site, atop the steeply sloping hillside, are single-family residences in the City of Los Angeles.

Photos of the project site and surrounding development are shown in Figure 3 and Figure 4.

The project site encompasses approximately 14,810 square feet, or 0.34 acres, and is currently developed with a three-story, 16,240 square-foot multi-family residential building. The ground floor level is a covered parking area and the upper two floors contain 31 residential units. Residents of the existing multi-family residential building access their covered parking spaces directly from Sunset Boulevard, across from the intersection of Sunset Boulevard and La Cienega Boulevard.

Figure 3 Photographs of the Project Site and Surrounding Development

Photo 1: View of existing multi-unit residential building from Sunset Boulevard.

Photo 2: View from project site facing south, down La Cienega Boulevard toward downtown Los Angeles.

Figure 4 Photographs of Development Surrounding the Project Site

Photo 3: Eastward view of Sunset Boulevard from project site.

Photo 4: Westward view of Sunset Boulevard from project site.

Regional access to the site is provided by the US-101 or the I-405 freeways connecting to Santa Monica Boulevard/State Route (SR) 2.

Previous CEQA Analysis

On January 18, 2011, the City of West Hollywood certified an Environmental Impact Report (EIR) for a development proposed by Karma Development, LLC, that would encompass the project site (APN 5555-007-009) and the adjoining site (APN 5555-007-010) located in the City of Los Angeles. That application involved demolition of the existing 31-unit apartment complex for the construction of an 8-level, 40-foot tall, 62,605-gross-square-foot mixed use project consisting of 34 residential dwelling units (including 10 on site affordable units) and 9,160 square feet of commercial (retail and restaurant) use, as well as an integrated 20' x 60' billboard. The project required approvals from both the City of West Hollywood and the City of Los Angeles. While the City of West Hollywood approved the portion of the project located in West Hollywood, approval of the entire project was contingent on the applicant acquiring approvals from the City of Los Angeles for that portion of the project that was located in the jurisdiction of Los Angeles. Because the applicant did not successfully obtain the required approvals from the City of Los Angeles, the larger project was never built.

In 2012, the City of West Hollywood adopted a Mitigated Negative Declaration (MND) for another mixed-use project on the 14,810 square foot portion of the project site in West Hollywood only (APN 555-007-009). The 2012 project, also proposed by Karma Development, LLC, involved a five-level, 40-foot-tall, 28,139-gross-square-foot mixed-use building including 11 rental apartments (including one affordable rental unit) and approximately 11,240 square feet of commercial space. This approved project was never built.

The current project is located on the same site as the 2012 project and involves construction of a 22,566-gross-square-foot building (see Section 8 below for a full description of the current project). The current project involves fewer gross square feet of development than the two prior projects.

8. Description of Project

The project would involve the demolition of the existing building on the project site and construction of a 22,566 gross-square-foot building with a four-level below grade subterranean parking garage and three stories of office and restaurant space above grade. Restaurant space would be located on the first and second stories and office space would be located on the first, second, and third stories. The project would also include either a static or digital billboard on the east section of the south side of the building, fronting Sunset Boulevard. The project would incorporate a digital billboard only if the Sunset Strip Off-Site Signage Policy is adopted. In the event the policy is not adopted, the project would incorporate a static billboard. The proposed three-story building would have a maximum height of 45 feet above natural grade.

Table 1 summarizes the characteristics of the project. Figures 5 through 15 show the proposed floor plans and conceptual building elevations.

Table 1 Project Summary

Floor Area	
Office	11,520 square feet (sf)
Restaurant (including terrace dining area)[1]	9,775 sf
Circulation (stairs, elevators, restrooms, storage, corridors)	4,091 sf
Terrace Circulation & Garden	4,538 sf
Lobby	760 sf
Subterranean Parking Garage	54,080 sf
Total Gross Floor Area[2]	22,566 sf
Height/FAR	
Maximum Building Height	45 feet
Total Lot Size	14,810 sf
Floor Area Ratio (FAR)[2]	1.5
Parking	
Total Vehicle Parking Spaces	138 stalls
Total Bicycle Parking Spaces	10 stalls

[1] Includes 3,580 sf of terrace restaurant space

[2] Gross floor area and FAR calculations do not include exterior spaces (terrace restaurant, garden, and circulation) or the subterranean parking garage.

Access and Parking

Vehicular access to the subterranean parking garage would be provided via a ramp from Miller Drive on the southwest corner of the site. The project would include a total of 138 on-site parking spaces, six of which would be compliant with the Americans with Disabilities Act (ADA). Ten bicycle parking spaces would also be provided. Parking level 1 (P1) would contain valet parking spaces, two elevators, and two fully automated automobile lifts to lower parking levels. Parking levels 2 – 4 (P2 – P4) would be fully automated and accessed through the lifts on level P1.

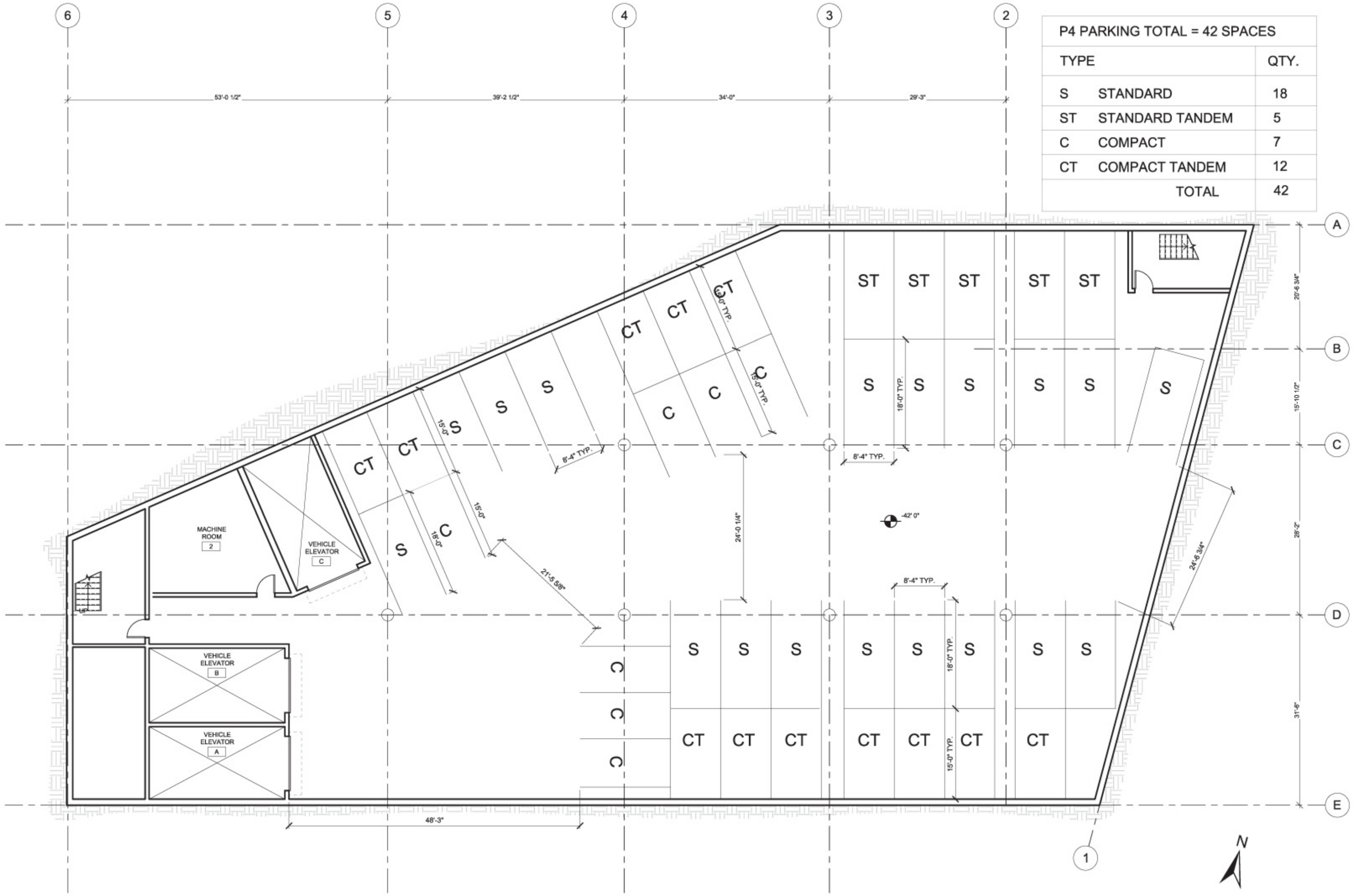
Landscaping

There are no existing trees on-site. On-site vegetation is limited to one planter on the project frontage along Miller Drive. The proposed project would include 1,740 square feet of total landscape coverage, including planters on the project's frontage along Sunset Boulevard, vegetation on the eastern side of the project, and on a rooftop deck garden. Drought-resistant native plant species would be used.

Building Architecture and Design

The project would incorporate contemporary architectural features along the frontage of Sunset Boulevard. This would include glazing, fiber reinforced concrete lattice, cast-in-place concrete, glass mullion storefront system, composite decking, and a frost glass partition along the street frontage.

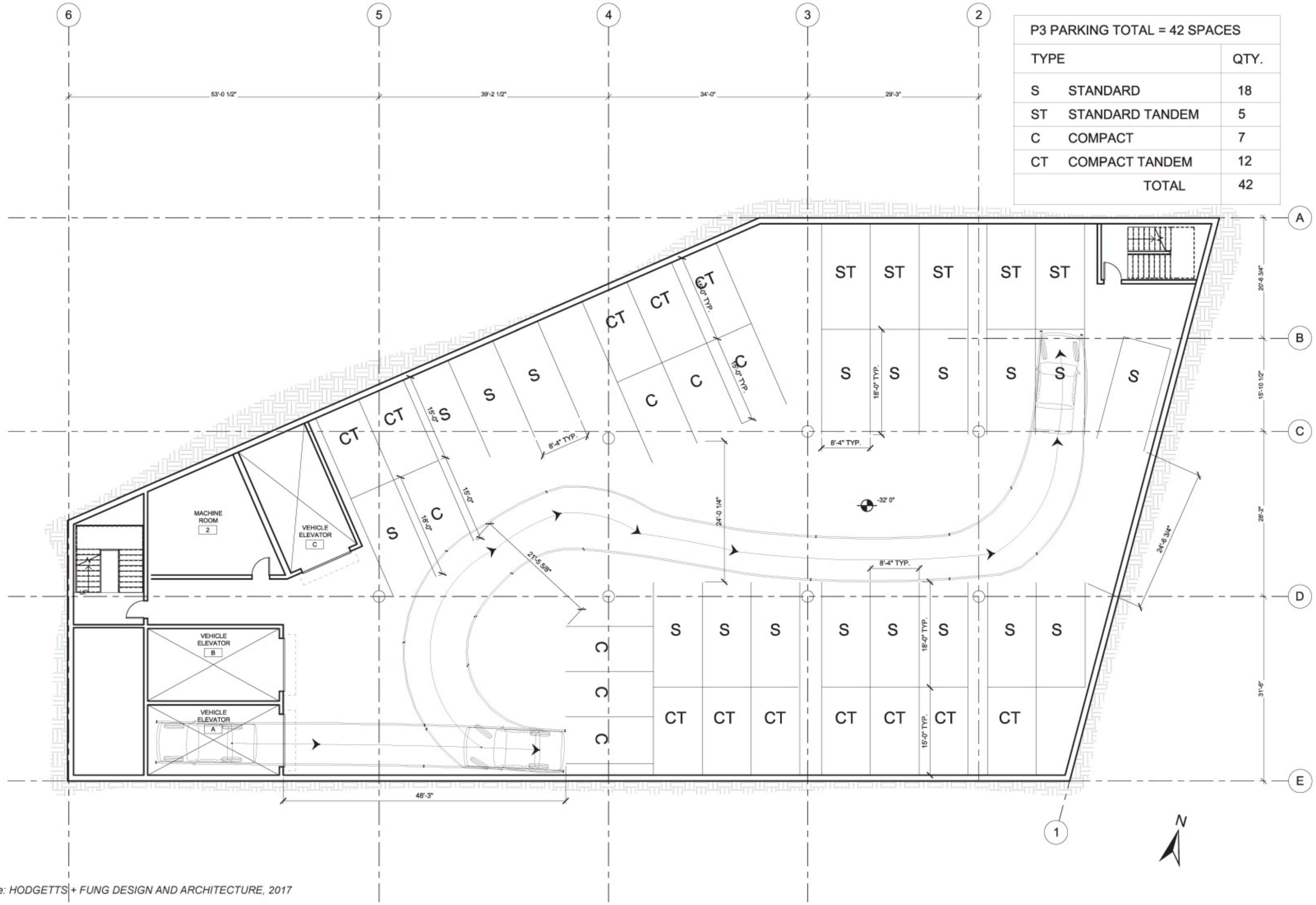
Figure 5 Proposed Sub-Level 4 Parking Garage Floor Plan



P4 PARKING TOTAL = 42 SPACES		
TYPE		QTY.
S	STANDARD	18
ST	STANDARD TANDEM	5
C	COMPACT	7
CT	COMPACT TANDEM	12
	TOTAL	42

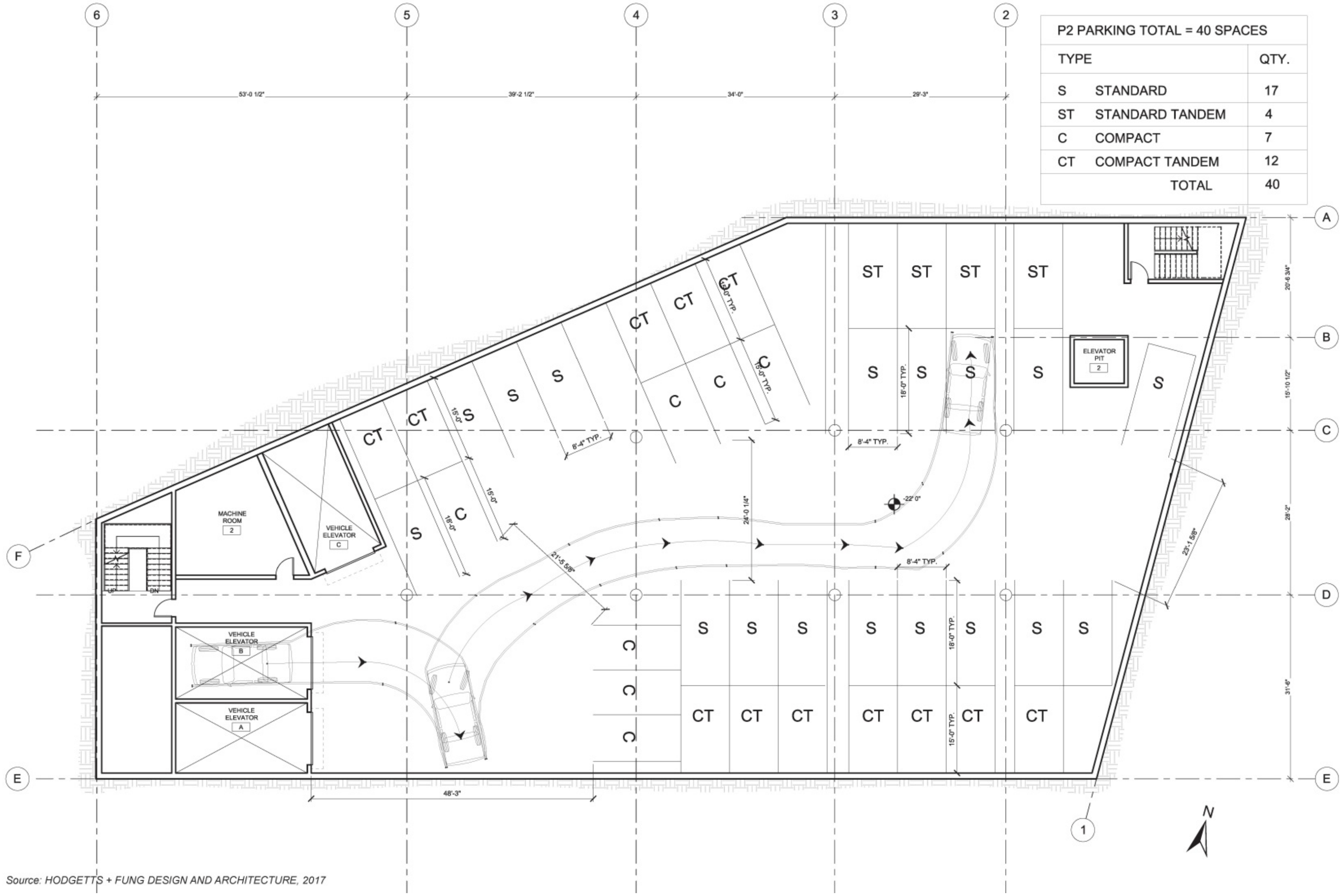
Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 6 Proposed Sub-Level 3 Parking Garage Floor Plan



Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 7 Proposed Sub-Level 2 Parking Garage Floor Plan

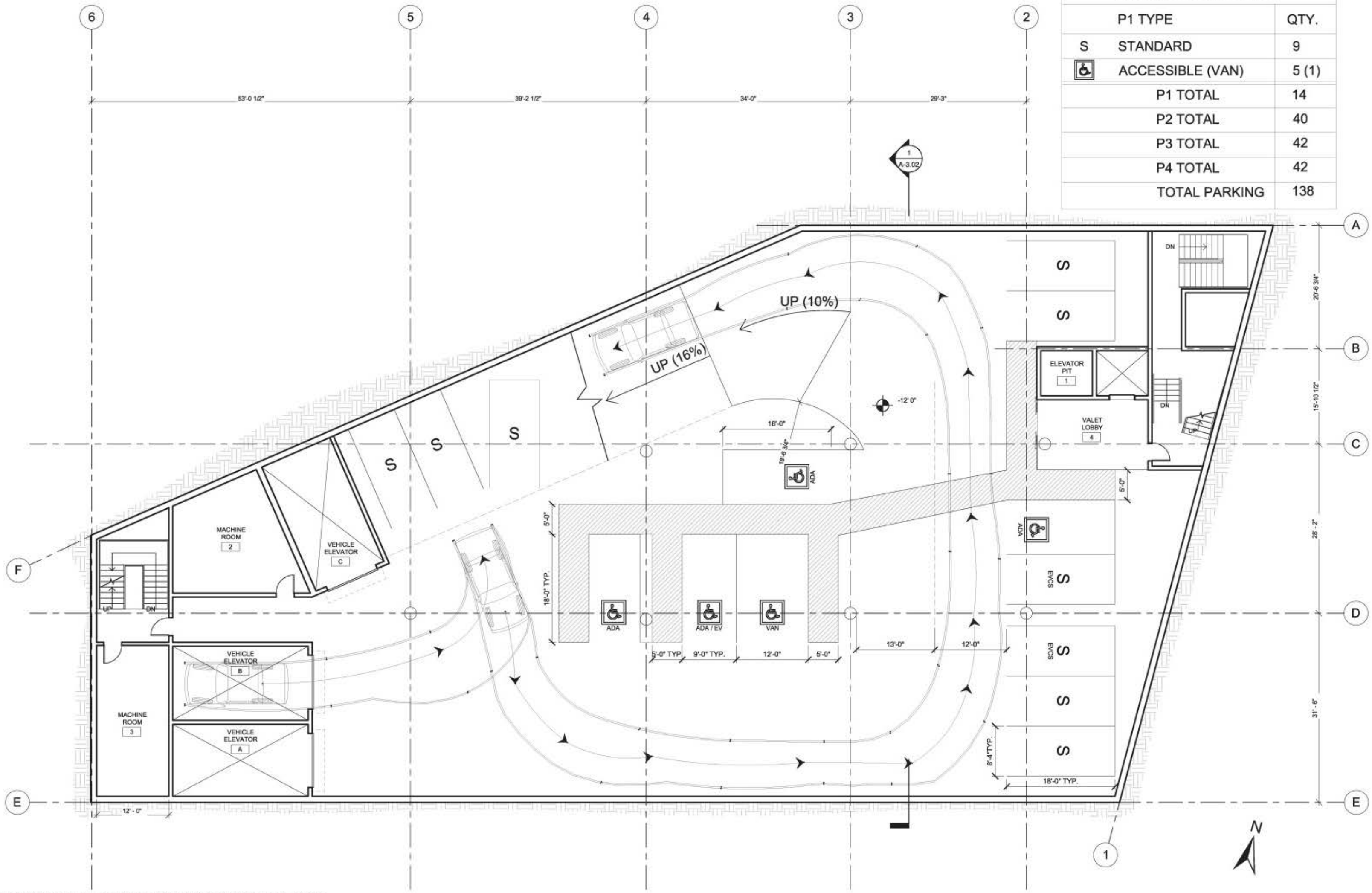


P2 PARKING TOTAL = 40 SPACES		
TYPE		QTY.
S	STANDARD	17
ST	STANDARD TANDEM	4
C	COMPACT	7
CT	COMPACT TANDEM	12
	TOTAL	40

Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

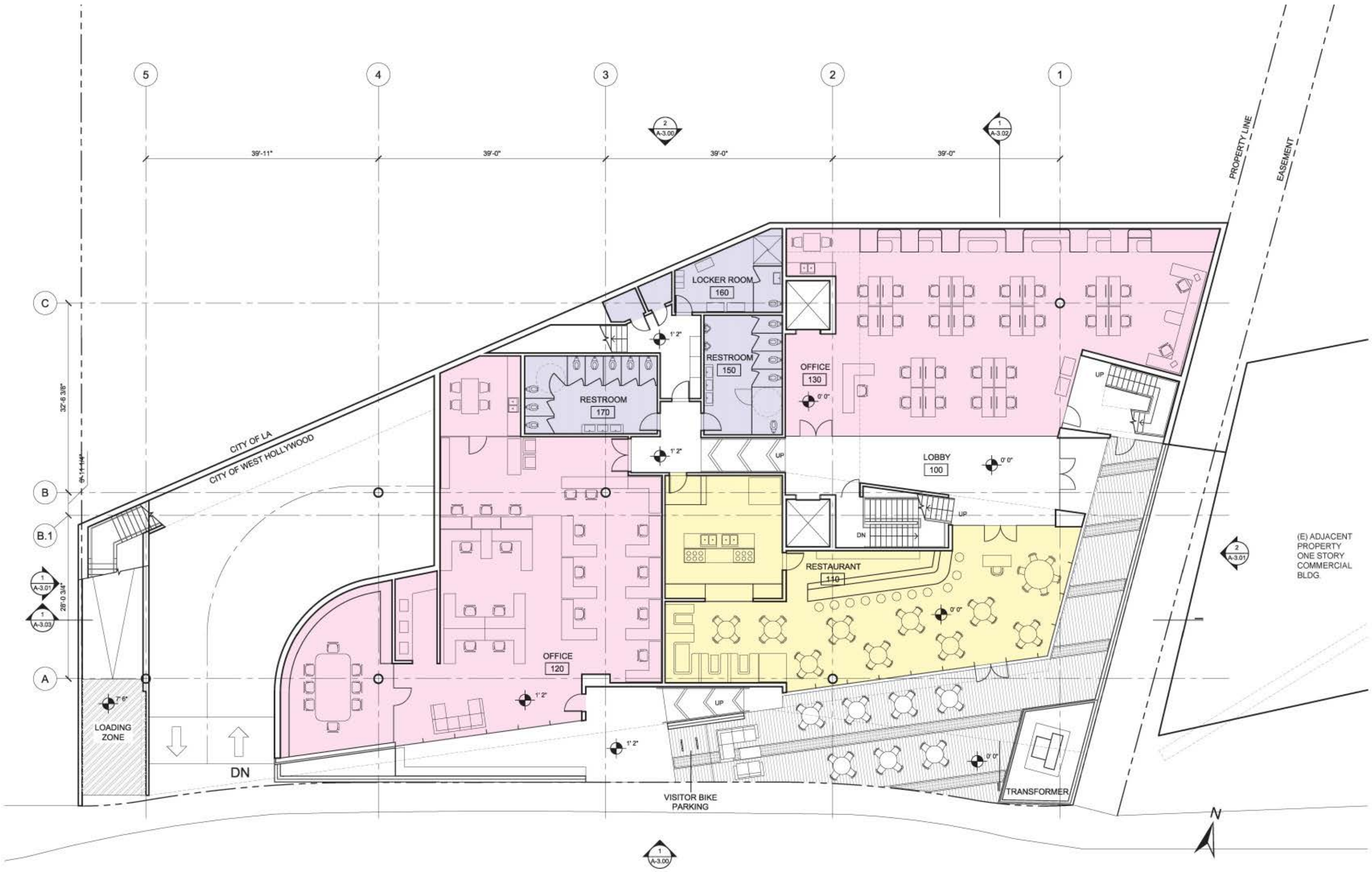
Figure 8 Proposed Sub-Level 1 Parking Garage Floor Plan

PARKING COUNT TABLE		
	P1 TYPE	QTY.
S	STANDARD	9
♿	ACCESSIBLE (VAN)	5 (1)
	P1 TOTAL	14
	P2 TOTAL	40
	P3 TOTAL	42
	P4 TOTAL	42
	TOTAL PARKING	138



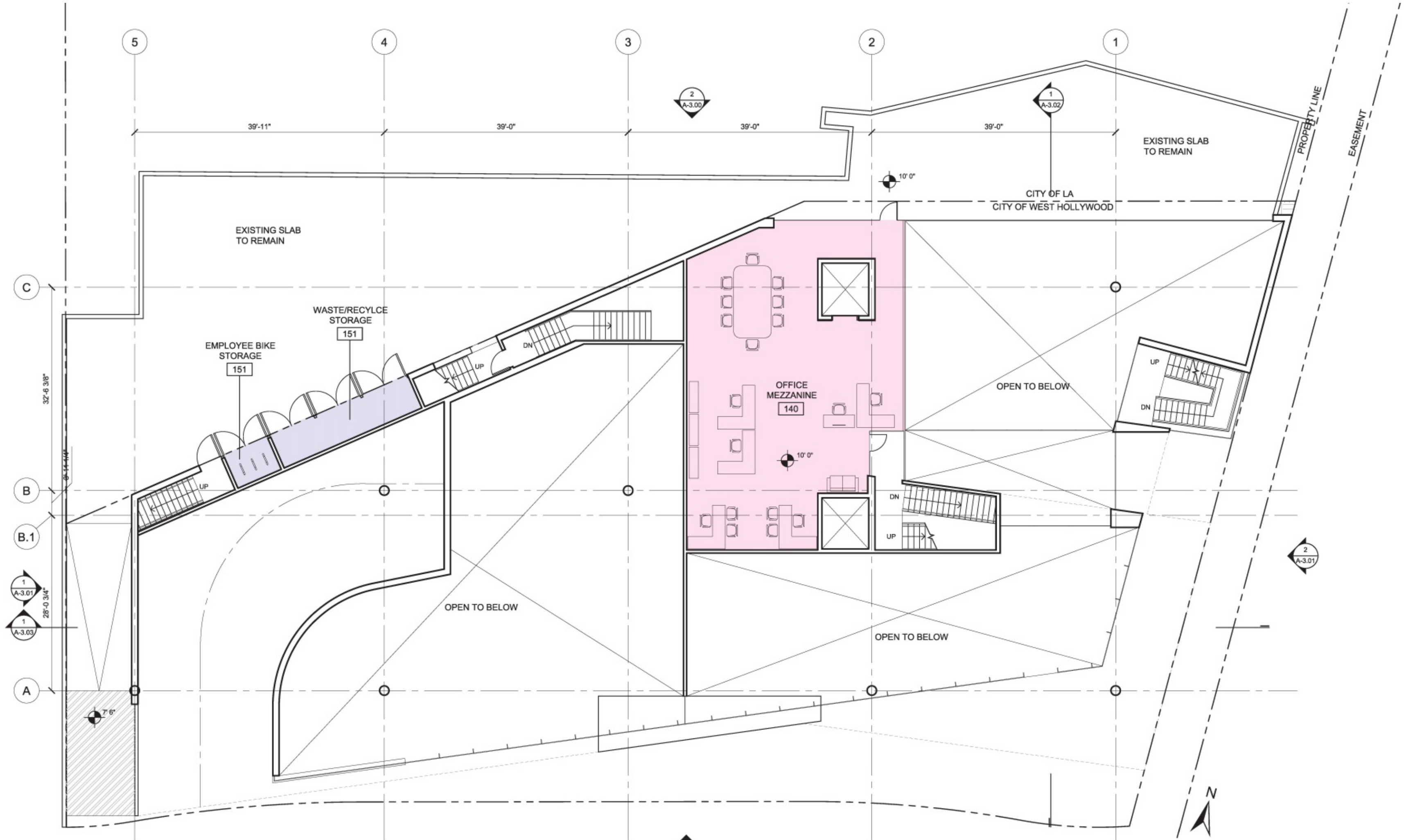
Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 9 Proposed Level 1 (Ground) Floor Plan



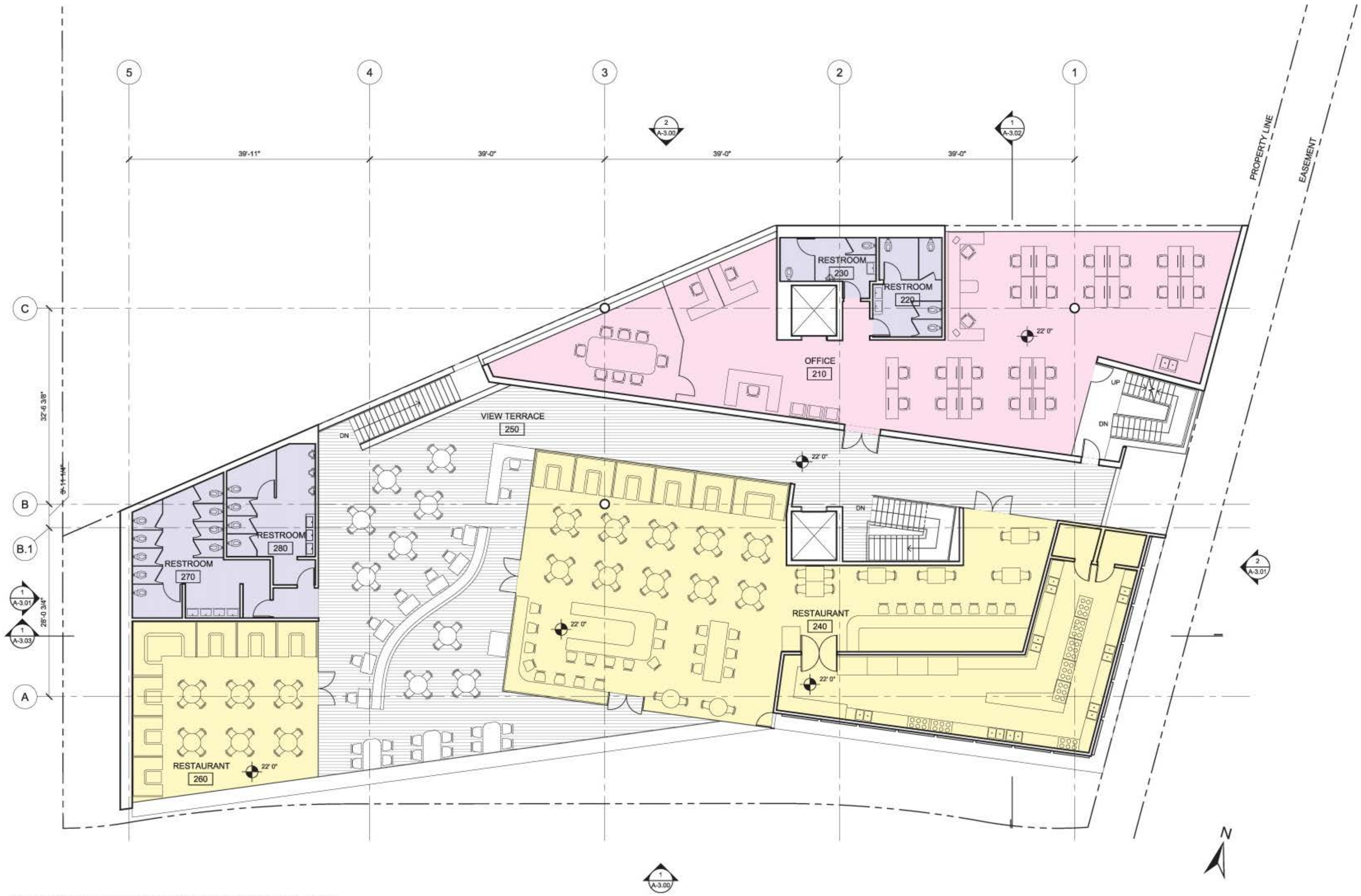
Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 10 Mezzanine Floor Plan



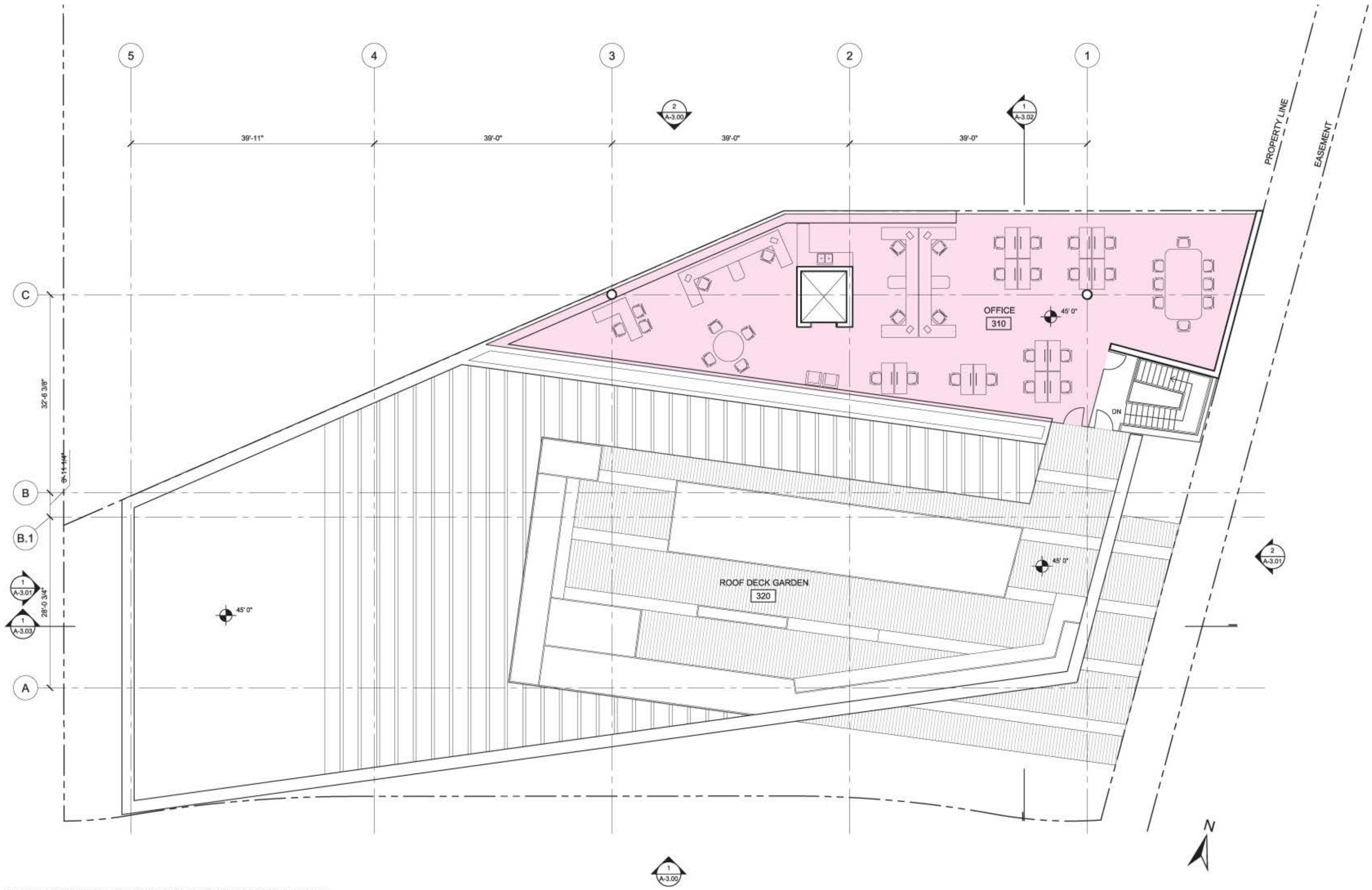
Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 11 Proposed Level 2 Floor Plan



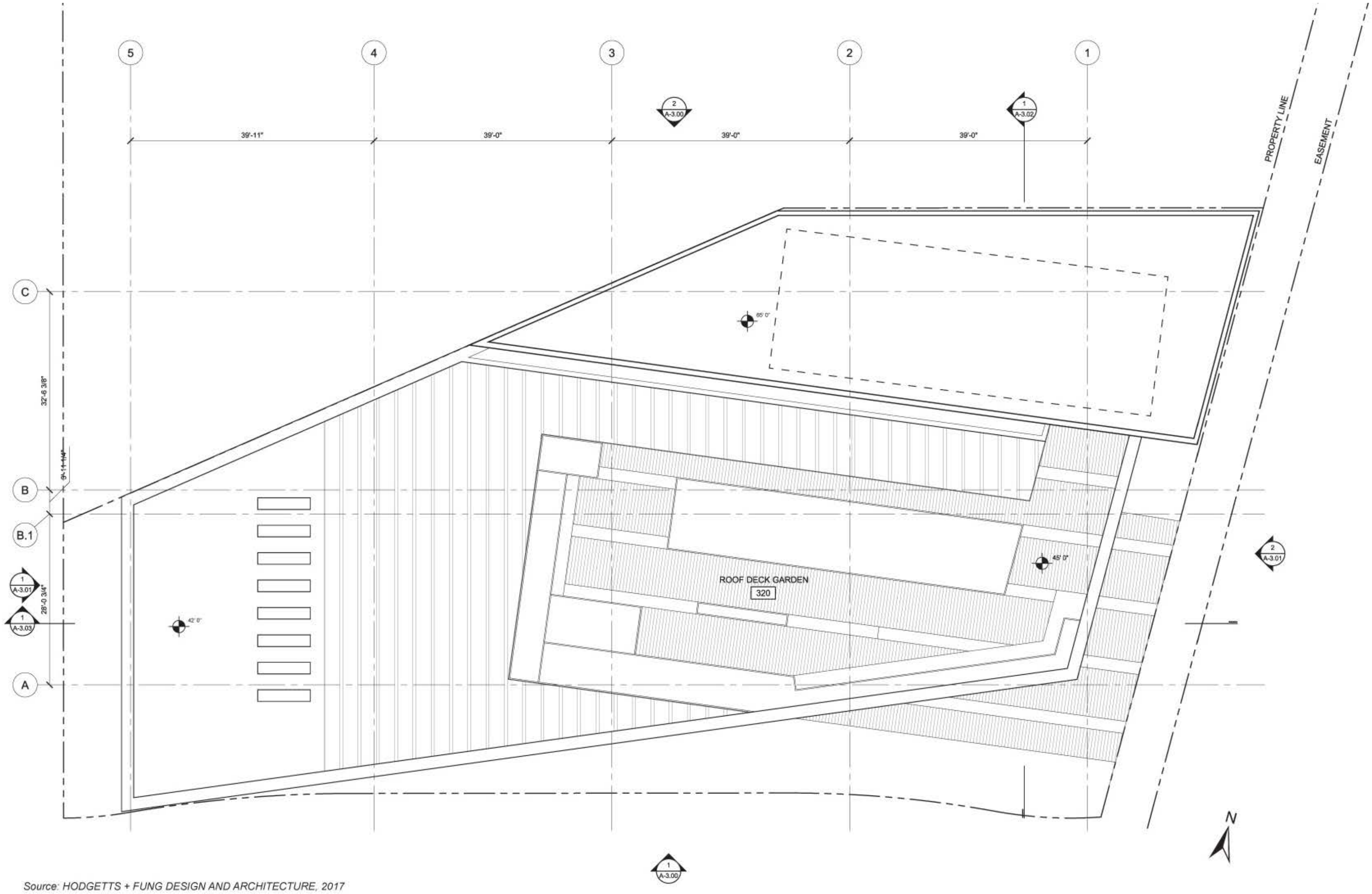
Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 12 Proposed Level 3 Floor Plan



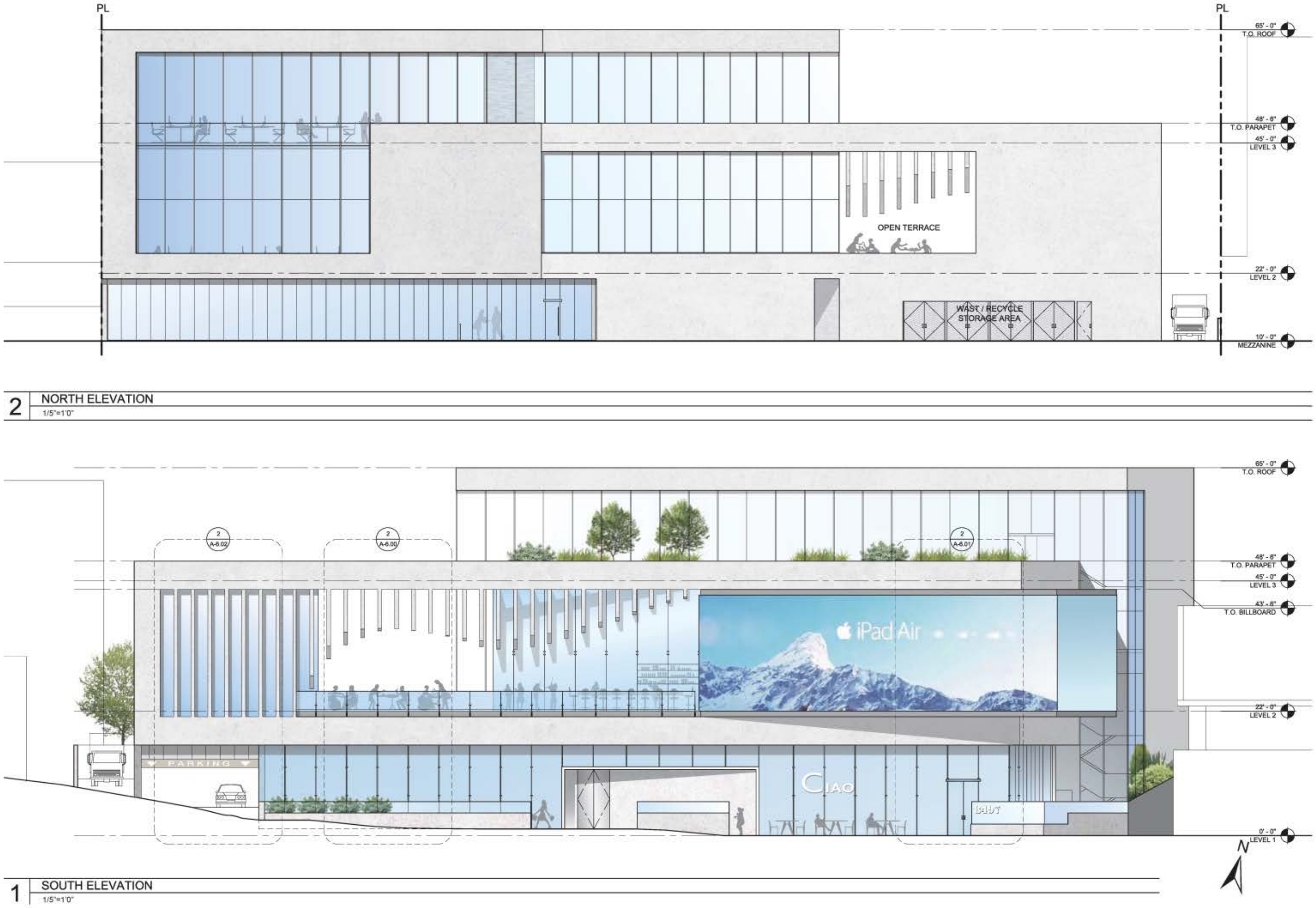
Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 13 Proposed Roof Plan



Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 14 Proposed North and South Elevations



Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Figure 15 Proposed West and East Elevations

Source: HODGETTS + FUNG DESIGN AND ARCHITECTURE, 2017

Utilities

The project would receive its water from the Los Angeles Department of Water and Power (LADWP). Storm drain infrastructure in West Hollywood is owned and operated by the City of West Hollywood or the County of Los Angeles. The County of Los Angeles would provide fire and police services. Wastewater collection, treatment, and disposal would be provided by Los Angeles' Hyperion Wastewater Treatment plan. Solid waste collection and recycling would be provided by Athens Services. Southern California Edison provides the site with electricity and the Southern California Gas Company provides it with natural gas.

Green Building Features

West Hollywood's Green Building Ordinance ensures that new buildings will be healthier for residents and use energy and resources more efficiently. The requirements are structured as a point system to allow for maximum flexibility and the points allowed each reflect West Hollywood's unique opportunities and constraints. Specifically, the point system was designed to emphasize locally-available materials, encourage green elements to be incorporated early into project design and provide flexibility to alter green elements as the project evolves. The proposed project would achieve 93 points on the City's Green Building Point System Checklist due to the project's inclusion of energy- and water-efficient systems and environmentally-friendly building materials. In order to reduce energy use, the proposed project would exceed Title 24 California Building Code energy efficiency standards by at least 10 percent and would include Energy Star appliances, lighting and signage. In order to reduce water use, the proposed project would install low-flow showerheads and water -efficient toilets and faucets.

The proposed project would include recycled-content materials in the foundation, insulation, and landscaping. In addition, the interior spaces would use materials composed of recycled content or rapidly renewable and sustainably harvested resources. In order to provide increased indoor air quality, No-VOC paints and low-VOC sealants and adhesives would be used and carpet would not be installed. High-efficiency HVAC systems would be used to minimize exposure to toxins and dust by managing ventilation and filtration.

Construction and Grading

Construction of the project would occur over approximately 66 weeks, or over 16 months. The approximate construction schedule includes:

- Site preparation activities – 12 weeks
- Site work – 36 weeks
- Off-site work – 16 weeks
- Underground structure construction – 36 weeks
- Tenant Improvement construction – 32 weeks

During construction, it is estimated that the project would export 24,600 cubic yards of earth material from the project site. The existing topographic contours of the relatively flat southern portion of the site would generally remain.

Off-site Work

The parcel adjacent to the north side of the project site is located in the City of Los Angeles. The project would require some improvements on the parcel. None of the planned improvements would require a building permit from the City of Los Angeles. The improvements would include:

- A four-foot concrete pad for mounting an electrical transformer
- Repaving a portion of the parcel to be level on-grade
- Reinforcing and/or reconstructing retaining walls
- Landscape planting infill along the rear hill for slope stability and privacy

9. Other Public Agencies Whose Approval is Required

The City of West Hollywood is the lead agency with responsibility for approving the project. No other public agency's approval is required.

Environmental Factors Potentially Affected

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

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

Determination

Based on this initial evaluation:

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

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

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

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

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

Laurie Yelton
Signature

11/27/17
Date

LAURIE YELTON
Printed Name

ASSOCIATE PLANNER
Title

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Environmental Checklist

1 Aesthetics

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

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

The project site is located along the north side of Sunset Boulevard within a commercial corridor in West Hollywood. While West Hollywood, located at the base of the Santa Monica Mountains, offers views of the Hollywood Hills to the north and the Los Angeles Basin to the south, there are no officially designated scenic vistas in the City.

The project site is currently developed with a three-story residential building. The proposed project would involve the demolition of all existing structures on-site and the construction of a three-story structure with office and restaurant space. The project would be approximately 18 feet taller than the existing residential building. Views of the Hollywood Hills would be incrementally blocked by the project. However, views of the ridgeline would still be visible for those traveling along La Cienega Boulevard. Views of the Hollywood Hills behind the project site are currently blocked for those traveling on Sunset Boulevard; thus, the project would not significantly impact views of the Hollywood Hills from Sunset Boulevard. The project would not block views of the Los Angeles Basin from surrounding buildings or public spaces along Sunset Boulevard. The residential developments located north of the project site are raised more than 40 feet above the maximum height of the proposed project; therefore, the project would not block views of the Los Angeles Basin from these residences. Therefore, the project would have a less than significant impact on significant views or scenic vistas.

LESS THAN SIGNIFICANT IMPACT

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

The project site is not situated along or visible from any state scenic highway or eligible state scenic highway (Department of Transportation [DOT] 2017). Therefore, the project would have no impact related to scenic resources within a state scenic highway.

NO IMPACT

c. *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

The project site is located in a developed commercial corridor in West Hollywood. In the close vicinity to the project site are several new developments designed in a contemporary architectural style. The project site is currently developed with an aged three-story residential building built in 1929, with a dulled white finish and green trim. Several rusted air conditioner units are found along the frontage of the building along with minimal landscaping. The existing building has a generally low visual quality.

The proposed project would change the visual character of the site by replacing the existing building with a structure greater in mass, height, and with a visually more contemporary architectural design. The project would also increase on-site landscaping coverage, including the addition of a rooftop deck garden.

An analysis of the massing and scale of buildings within a one-block radius of the project site shows that buildings of similar mass and scale as the proposed project are found within the Sunset Boulevard corridor. Examples of existing structures of similar or greater mass and scale as the proposed project include the nine-story building south of the project site on the west side of La Cienega Boulevard, the ten-story building south of the site on the east side of La Cienega Boulevard, the fourteen-story building east of the site on the southwest corner of Sunset Boulevard and North Olive Drive, and the ten-story building located southwest of the site on the southwest corner of Sunset Boulevard and Alta Loma Road. The proposed structure would be generally consistent with the mass and scale of development along the Sunset Boulevard corridor. In addition, the building is articulated to recede at each higher level, thus diminishing the bulk and mass of the project.

The project would include either a static or digital billboard connected to the east side of the building, fronting Sunset Boulevard. The billboard would be integrated into the building face, preventing it from protruding above or beyond the building’s façade. This would prevent the billboard from obstructing east-west public views. The Sunset Boulevard landscape contains automobile and billboard advertisements that have been incorporated into much of the urban design. According to the Sunset Specific Plan (SSP), “with their extra-large scale, unique designs, and symbolic reference to movie glamour, the billboards are a significant part of the street’s visual character” (City of West Hollywood 1996). Approximately ten billboards can be found within a one-block radius of the project site on Sunset Boulevard, including one directly adjacent to the east of the project site found on the roof of the single-story minimart. Although the project’s billboard would be consistent with the visual character of the site’s surrounding area, it would still be required to follow all applicable regulations found within the SSP and West Hollywood Municipal Code (WHMC). In addition, West Hollywood is currently in the process of developing the Sunset Strip Off-Site Signage Policy. This policy would amend the City’s SSP and Zoning Ordinance to revise regulations for both static and digital billboards and new off-site signage along a 1.6 mile corridor of Sunset Boulevard known as the Sunset Strip, allowing a limited number of new billboards to be integrated into new development and façade remodels and permitting modifications to existing billboards. Should the Sunset Strip Off-Site Signage Policy be adopted, the project would be required to follow all applicable regulations for digital billboards, such as:

- Digital Billboards shall not directly face Sunset Boulevard.
- No Digital Billboard shall exceed 1,000 square feet in total area unless it is converted from an existing billboard with a Sign Face area greater than 1,000 square feet, in which case the Digital Billboard may have a Sign Face area equal to the existing Traditional Billboard of the size listed in the 2017 Inventory, but in no case may the Sign Face area be greater than 1,200 square feet.
- Digital Billboards shall not incorporate driver interaction features.
- Digital Billboards located less than 100 feet above the adjacent sidewalk height shall maintain a daytime Luminance level that does not exceed 2,400 candelas per meter squared.
- Sign illuminance shall not exceed 1.4 foot candles at an adjacent residential zoned property line.
- Sign Luminance measured on the sign surface perpendicular to the Sign Face shall not exceed 6,000 candelas per meter squared during daylight hours, and 300 candelas per meter squared for evening hours.
- Sign Luminance shall change during each day on the following schedule:
  - Daytime: From sunrise until 20 minutes prior to sunset, Luminance shall not exceed 6,000 candelas per meter squared.
  - Evening: From sunset until 20 minutes prior to sunrise Luminance shall not exceed 300 candelas per meter squared.
  - After Hours: From 2:00 AM until Sunrise, no Animated Content, or Moving Patterns shall be permitted.
- Each image displayed on a Digital Billboard shall not be refreshed more often than once every 16 seconds.
- Digital Billboards shall not use stroboscopic or flashing images which rapidly change direction, oscillate, flash or reverse in contrast.

The project would incorporate a digital billboard only if the Sunset Strip Off-Site Signage Policy is adopted. In the event the policy is not adopted, the project would incorporate a static billboard. A Final Negative Declaration (ND) for the Sunset Strip Off-Site Signage Policy was completed in June 2017. The ND found that the implementation of the policy would cause no significant environmental impacts and would require no mitigation. The ND found that new billboards and modifications to existing billboards undertaken pursuant to the Sunset Strip Off-Site Signage Policy are would not anticipated to represent substantial changes in the existing visual conditions of the Sunset Strip or the surrounding areas such that the visual character or quality of these areas would be substantially degraded. The ND also found that the policy's regulations set forth a number of standards that would prevent new billboards and changes to existing billboards from causing visual blight or new obstructions. Therefore, consistent with the findings of the ND for the Signage Policy, adherence to the policy's regulations would prevent the proposed project's digital billboard from visual blight or visual character degradation.

The maximum height of the proposed building would be 45 feet above natural grade based on the height measurement methodology for sloping sites, as defined in Section 19.20.080.B.2(c) of the WHMC. The proposed building would be approximately 18 feet taller than the existing on-site building. However, as the project would be set against an approximately 100 foot high steep slope, the proposed building's height would be subordinate to the hillside above, reducing the impact of the height. The proposed building's stepped-back design would also help de-emphasize the increase in height.

The proposed project would change but not degrade the visual character or quality of the site or neighborhood, would be generally consistent with the scale and massing of surrounding developments, would provide visual interest while maintaining consistency with the SSP, and would include elements (i.e., static or digital billboard) similar to those found on surrounding developments. Therefore, the project would not result in a significant impact to the existing visual character or quality of the site or its surroundings.

LESS THAN SIGNIFICANT IMPACT

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

The Sunset Strip is a brightly lit, vibrant urban corridor with high volumes of vehicular and pedestrian traffic. Within a one-block radius of the project site are several large static billboards and a digital screen. The adjacent commercial, residential, billboard, and roadway uses generate light and glare along all sides of the property. Primary sources of light adjacent to the project site including lighting associated with the existing commercial and residential buildings, including headlights from vehicles on nearby streets and street lights. The primary source of glare adjacent to the project site is the Sun's reflection from metallic, glass and light-colored surfaces on buildings and on vehicles parked on adjacent streets and in adjacent parking areas.

The City has established codes and design guidelines that regulate the design of outdoor lighting and signs. The sections of the WHMC that apply to the proposed project's lighting include the following:

- Section 19.20.100: Outdoor Lighting
    A. General Standards for Outdoor Lighting. Outdoor lighting shall be designed to prevent glare, light trespass, and sky glow as much as possible. Permanently installed lighting shall not blink, flash, or be of unusually high intensity or brightness. Exterior lighting shall:
    - Be architecturally integrated with the character of the structures
    - Be directed away from adjacent properties and public rights-of-way
    - Be energy-efficient and shielded so that all glare is confined within the boundaries of the site
    - Use timers, where acceptable, to turn outdoor lights off during hours when they are not needed
    - Be appropriate in height, intensity, and scale to the uses they are serving
    - Use no more intensity than absolutely necessary. Illuminating Engineering Society of North America (IENSA)-recommended light levels are as follows[1]
    - Make use of "full-cutoff" fixtures to avoid glare and up-light. Note that these are different from "cutoff" fixtures, which still allow some up-light
    - Be on poles that are low and relatively closely spaced. Lighting in large surface areas (e.g., parking lots), shall use a larger number of lower, pole-mounted fixtures rather than fewer, taller fixtures. Wattage shall be kept below 250 watts

[1] With 20 for light-colored surfaces and 30 for dark-colored surfaces.

- Section 19.34.040: General Provisions for On-Site Signs

  B. Illumination of Signs. The illumination of signs, either from an internal or external source, shall be designed to avoid negative impacts on surrounding rights-of-way and properties. The following standards shall apply to all illuminated signs:

     - External light sources shall be directed and shielded to limit direct illumination of any object other than the sign;
     - Sign lighting shall not be of an intensity or brightness that will create a nuisance for residential properties in a direct line of sight to the sign;
     - Light sources shall utilize energy-efficient fixtures to the greatest extent possible.

- Section 19.34.060: Creative Signs

  E. Design Criteria. In approving an application for a creative sign , the review authority shall ensure that a proposed sign meets the following design criteria:

     - Neighborhood Impact. The sign shall be located and designed not to cause light and glare impacts on neighboring residential uses.

- Section 19.46.050: General Design Standards

  A. The architectural design and situation of structures and their materials and colors are compatible with the scale and character of surrounding development and other improvements on the site or of a higher caliber design quality than surrounding development. Specific design elements (e.g., screening of equipment, exterior lighting, signs, awnings, etc.) have been incorporated into the project to further ensure the compatibility of the structures with the character of surrounding development.

As discussed in Item c, West Hollywood is also currently in the process of developing the Sunset Strip Off-Site Signage Policy. Should the Sunset Strip Off-Site Signage Policy be adopted, the project would incorporate a digital rather than a static billboard and would be required to follow applicable lighting standards for digital billboards, such as:

- The billboard shall be located and designed not to cause light and glare impacts on neighboring uses.
- Sign illuminance (foot candles) to not exceed 1.4 foot candles at any adjacent residential zoned property line.
- Sign Luminance (candelas per meter squared or nits) measured on the sign surface perpendicular to the Sign Face shall not exceed 6,000 candelas per meter squared during daylight hours, and 300 candelas per meter squared for evening hours.
- Sign Luminance shall change during each day on the following schedule:
  - Daytime: From sunrise until 20 minutes prior to sunset, Luminance shall not exceed 6,000 candelas per meter squared.
  - Evening: From sunset until 20 minutes prior to sunrise Luminance shall not exceed 300 candelas per meter squared.
  - After Hours: From 2:00 AM until Sunrise, no Animated Content, or Moving Patterns shall be permitted.

Light

Lighting is of most concern when it may potentially spill over or trespass from a project site onto properties or areas including residential buildings and the public sidewalk or right-of-way. The proposed project would eliminate some existing light sources on-site and introduce new ones. Potential new sources of lighting would include the windows of the proposed building and spillover of light onto the street and toward neighboring land uses from the illumination of exterior building areas. The subterranean parking garage ingress and egress points in the western portion of the site would also be lighted, and headlights of vehicles entering and exiting the subterranean garage at night would cast light onto roadways and surrounding properties.

The proposed static or digital billboard fronting Sunset Boulevard would also emit light. Digital billboards usually emit more light than static billboards as they are illuminated by high luminance LED lighting and display regularly changing, sometimes flashing, imagery. The proposed billboard would be of brightness equivalent to that of other billboards found in West Hollywood.

The City of West Hollywood does not define a specific threshold for light trespass. However, the project would be required to comply with all adopted City regulations, such as the WHMC Sections and Sunset Strip Off-Site Signage Policy regulations listed above that limit the design, luminance intensity, and impacts of night lighting. Furthermore, as a standard condition of approval in West Hollywood, prior to the issuance of any building permits, the applicant is required submit plans and specifications for all building materials, including a lighting plan for the proposed billboard, to the Planning Division for review and approval by the Community Development Director. Therefore, impacts related to outdoor lighting, including light associated with the billboard would be less than significant.

Glare

The proposed project would eliminate some existing glare sources on-site and introduce new ones. The proposed three-story building would increase glare on the project site through the use of materials that are more reflective compared to the current low- to moderately reflective building. Potential sources of glare would consist of glazing (windows) and other reflective materials used in the façade of the proposed structure; however, the glare from the proposed building would be similar to glare produced by other structures in the vicinity. Given that glare would be similar to that of surrounding development and with the mandatory compliance with glare regulations of the WHMC, impacts related to light and glare would be less than significant. Furthermore, pursuant to Section 19.46.050 of the WHMC, the Community Development Director would have review and approval of authority over the architectural design, which includes exterior finishing for proposed development; this section of the code prescribes that specific design elements such as exterior finishes “have been incorporated into the project to further ensure the compatibility of the structures with the character of surrounding development.” Therefore, impacts due to glare from the proposed building would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

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

a. Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

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

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

d. Result in the loss of forest land or conversion of forest land to non-forest use?

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

The project site is within a highly urbanized neighborhood in West Hollywood. There is no existing agriculture or timberland on-site or nearby. The project site is zoned SSP, which allows for commercial neighborhood uses, not agriculture or timberland uses. In addition, West Hollywood does not contain any agricultural land, agriculturally zoned land, or land under Williamson Act contract (California Department of Conservation 2016). Therefore, the project would have no impact on agriculture, forestland, or forestry resources.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	■	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	■	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

The project site lies within the South Coast Air Basin (the Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Basin is classified as being in “attainment” or “nonattainment.” The health effects associated with criteria pollutants upon which attainment of state and federal air quality standards is measured are described in Table 2.

The Basin is a non-attainment area for federal standards for ozone, $PM_{2.5}$, and lead, as well the state standards for ozone, PM_{10}, and $PM_{2.5}$. Thus, the Basin currently exceeds several state and federal ambient air quality standards and is required to implement strategies to reduce pollutant levels to recognized acceptable standards. This non-attainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate air pollutants, and the number, type, and density of emission sources within the Basin.

Table 2 Health Effects Associated with Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals, risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Carbon monoxide (CO)	Reduces oxygen delivery leading to: (1) Aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses.
Nitrogen dioxide (NO_2)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Sulfur dioxide (SO_2)	(1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[a]
Suspended particulate matter ($PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.[a]

[a] More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, Particulate Matter Health Effects and Standard Recommendations, www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may, May 9, 2002; and EPA, Air Quality Criteria for Particulate Matter, October 2004.

Source: US EPA 2016

The SCAQMD recommends the use of quantitative thresholds to determine the regional significance of temporary construction-related pollutant emissions and project operations. These thresholds are shown in Table 3.

The SCAQMD has also developed Localized Significance Thresholds (LST). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NOX, CO, PM10 and PM2.5. LSTs do not apply to mobile sources such as cars on a roadway (SCAQMD 2008). As such, LSTs for operational emissions do not apply to residential development since the majority of emissions would be generated by cars on the roadways.

Table 3 SCAQMD Regional Significance Thresholds

	Mass Daily Thresholds	
Pollutant	**Operation Thresholds (lbs/day)**	**Construction Thresholds (lbs/day)**
NO_X	55	100
ROG[1]	55	75
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3

[1] Reactive Organic Gases (ROG) are formed during combustion and evaporation of organic solvents. ROG are also referred to as Volatile Organic Compounds (VOC).

Source: SCAQMD 2015

LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. The proposed project involves 0.34 acres of on-site construction. SCAQMD's *Sample Construction Scenarios for Projects Less than 5 Acres in Size* contains methodology for determining the thresholds for projects that are not exactly 1, 2, or 5 acres in size. This methodology was implemented to determine the thresholds for the proposed project. The project site is located in Source Receptor Area 2 (SRA-2, Northwest Coastal LA County). LSTs for construction on a 0.34 acre site in SRA-2 are shown in Table 4. LSTs are provided for receptors at a distance of 82 to 1,640 feet from the project site boundary. According to the SCAQMD's publication *Final Localized Significant (LST) Thresholds Methodology*, projects with boundaries located closer than 82 feet to the nearest receptor should use the LSTs for receptors located at 82 feet. The use of LSTs is voluntary, to be implemented at the discretion of local agencies.

Table 4 SCAQMD LSTs for Construction

Pollutant	**Allowable emissions from a 0.34-acre site in SRA-2 for a receptor 82 feet away**
Gradual conversion of NO_X to NO_2	74
CO	387
PM_{10}	3
$PM_{2.5}$	2

Source: SCAQMD 2009

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

Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the Air Quality Management Plan (AQMP) if it would generate population exceeding the forecasts used in the development of the AQMP. The AQMP for the SCAQMD relies on population data from the Southern California Association of Governments (SCAG).

The proposed project would replace a 31-unit multi-family residential building with an infill commercial development. Implementation of the project would not directly generate population growth. The project would involve commercial uses, which would result in the generation of additional employment opportunities. As discussed in Section 13, *Population and Housing, t*he project would not induce economic expansion to the extent that significant environmental impacts directly associated with the project's contribution would occur. Therefore, the project would not generate growth exceeding AQMP forecasts or otherwise conflict with the AQMP. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

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

The project would generate temporary construction emissions and long-term operation emissions. Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1. Complete CalEEMod results and assumptions can be viewed in Appendix A.

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings.

As mentioned in the Description of Project, the proposed project would require approximately 24,600 cubic yards of cut that would be exported off-site. Construction of the project would occur over approximately 66 weeks, or over 16 months.

Table 5 summarizes the estimated maximum daily emissions of pollutants during construction of the project. As shown in Table 5, neither regional nor LST thresholds would be exceeded. Therefore, impacts would be less than significant.

Table 5 Maximum Daily Construction Emissions (pounds/day)

Pollutant	Total Maximum Daily Emissions	SCAQMD Regional Significance Thresholds	Significant Impacts?	Total Maximum Daily On-site Emissions	LSTs	Significant Impact?
ROG	3.1	75	No	3.1	NA	No
NO_x	17.5	100	No	11.0	74	No
CO	9.8	550	No	7.8	387	No
PM_{10}	1.6	150	No	1.1	3	No
$PM_{2.5}$	1.0	55	No	0.8	2	No
SO_x	<0.1	150	No	<0.1	NA	No

See Appendix A for CalEEMod worksheets.

NA = Not applicable

Operational Emissions

Operational emissions associated with project operation would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products and architectural coating associated with on-site development (area sources). As shown in Table 6, operational emissions would not exceed SCAQMD thresholds for any criteria pollutant. Consequently, operational emissions would have a less than significant impact on regional air quality.

Table 6 Estimated Project Operational Emissions

	Estimated Emissions (lbs/day)					
Sources	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$	SO_x
Area	0.5	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.1	0.6	0.5	<0.1	<0.1	<0.1
Mobile	1.6	7.4	15.5	3.7	1.0	<0.1
Total Emissions (lbs/day)	2.1	8.1	16.1	3.7	1.1	0.1
SCAQMD Thresholds	55	55	550	150	55	150
Thresholds Exceeded?	No	No	No	No	No	No

See Appendix A for CalEEMod worksheets.

Note: numbers may not add up due to rounding.

Lead and Asbestos

The project site is currently developed with a three-story residential building built in 1929. Due to the age of the existing multi-family building on-site (88 years old), there is the potential for lead and lead-based paint to be disturbed and exposed during construction activities. If not properly abated in advance of demolition or renovation, workers could be exposed to lead, which could adversely affect their health. Lead-based materials are regulated by the California Occupational Safety and Health Administration (Cal OSHA). The California Code of Regulations (CCR), §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed Cal OSHA standards. Under this rule, construction workers may not be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an eight-hour period and exposure must be reduced to lower concentrations if the work day exceeds eight hours. Prior to the issuance of a permit for the demolition of the on-site structure, the developer would be required to contract with a licensed lead-based paint consultant to evaluate the structure for lead-based paint. If present, the lead-based paint requires abatement prior to demolition or renovation of any existing buildings.

In addition to lead, the age of the existing building on-site may also result in the presence of asbestos. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials (ACMs) are damaged or disturbed. If not properly abated in advance of demolishment or renovation, workers may be exposed to friable asbestos. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems (United States Environmental Protection Agency [USEPA] 2008). Asbestos is categorized as a hazardous air pollutant by the U.S. EPA (SCAQMD 2017). They are regulated at the federal level under the Clean Air Act, at the state level under Cal OSHA, and at the local level by SCAQMD. Federal asbestos requirements are listed under the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) (Code of Federal Regulations [CFR] Title 40, Part 61, Subpart M), and require the control of asbestos during the renovation and demolition of buildings. The asbestos NESHAPs require a thorough inspection for asbestos where demolition would occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable (U.S. EPA 2016). At the state level, CCR §1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers. At the local level, SCAQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from being released during renovation and demolition activities. Rule 1403 incorporates NESHAP requirements and SCAQMD has the authority to enforce the federal asbestos NESHAP and is responsible for enforcement at a local level. If present in the existing multi-family residential structure, these ACMs would require abatement prior to demolishment or renovation of any existing buildings.

The project would be required to comply with all applicable federal, state, and local regulations pertaining to lead and asbestos. This would reduce potential impacts associated with exposure of sensitive receptors to lead and asbestos to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

e. Would the project create objectionable odors affecting a substantial number of people?

The proposed development includes office and restaurant space. These uses are not listed on Figure 4-3 of the 1993 *SCAQMD CEQA Air Quality Handbook* as uses that require analysis of odor impacts. Further, office and restaurant uses are not identified on Figure 5-5, Land Uses Associated with Odor Complaints, of the *Handbook*. Substantial objectionable odors are normally associated with such uses as agriculture, wastewater treatment, industrial facilities, or landfills. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people. No impact would occur.

NO IMPACT

4 Biological Resources

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

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

The project site is located on an existing commercial corridor in a highly urbanized area in West Hollywood. The site is developed with a multi-family residential structure, a swimming pool, surface carports for resident parking, and has minimal landscaping. Behind the existing building to the north is an empty hillside lot, consisting of a very disturbed cliff. According to the 2012 MND conducted for the project site, the hillside is dominated by the highly invasive fountain grass (*Pennisetum setaceum*) with scattered native laurel sumac shrubs (*Malosma laurina*) (City of West Hollywood 2012). The only other species observed on this lot were native species including holly-leaf cherry (*Prunus ilicifolia*), man-root (*Marah macrocarpus*) and one-sided blue grass (*Poa secunda*); and nonnative species including ripgut grass (*Bromus diandrus*), Spanish broom (*Spartium junceum*), mock orange (*Pittosporum undulatum*) and blue gum eucalyptus (*Eucalyptus globulus*). None of the abovementioned species are listed as sensitive or special-status species.

Multiple landscape trees are on properties surrounding the site on the adjacent hillside parcel to the north, including a coast live oak (*Quercus agrifolia*) at the top of the cliff. Trees found on the adjacent parcels may be disturbed during construction activities. Therefore, nesting birds and nests could potentially be disturbed. Impacts would be potentially significant without mitigation.

Mitigation Measure

The following mitigation measure would be required to avoid or reduce the project's potentially significant impacts to nesting birds and special-status wildlife.

BIO-1 **Nesting Bird Surveys and Avoidance.** Construction of the project and any other site disturbing activities that would involve vegetation or tree removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist, as approved by the City of West Hollywood, to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and California Fish and Game Code, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed in the buffer areas until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur in this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and February 1.

Implementation of Mitigation Measure BIO-1 would ensure the protection of nesting birds that may be present on the site during construction activities. This measure would reduce the potentially significant impact to special-status species to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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

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

The project site is located in an urbanized area. The project site and vicinity lack native biological habitats, including wetlands. Site development would not adversely affect sensitive plant or animal species. West Hollywood has no adopted habitat conservation plans or natural community conservation plans. No impact would occur.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	■	☐
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	■	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	■	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	■	☐	☐

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

According to CEQA Guidelines §15064.5, the term "historical resources" includes resources listed in or determined eligible for listing in the California Register of Historical Places (CRHR) or resources included in a local register of historical resources. A resource is eligible for listing in the CRHR if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

The existing on-site residential building was built in 1920 so it is over 50 years old. However, the building does not appear to be associated with significant events, the lives of significant persons, to reflect or exemplify a particular period of history, or to yield information important in prehistory or history. Therefore, it does not appear likely that the building meets any of the CRHR eligibility criteria.

According to the West Hollywood cultural resources database, the existing residential building on the project site is not listed as a potential historical resource (City of West Hollywood 2017a). Therefore, the building is not considered a historic resource according to local significance criteria.

Designated historic resources and potentially historic resources are located in the vicinity of the project site. Nearby designated historic resources include the Piazza del Sol building located at 8439 Sunset Boulevard, approximately 530 feet east of the project site, the El Palacio building, located at 8491 Fountain Avenue, approximately 530 feet south of the project site, and the Sunset Tower Hotel, located at 8358 Sunset Boulevard, approximately 1,300 feet east of the project site. Due to the distance from these sites, project development would not adversely affect these designated historic resources or cause a change in the significance of these historic resources. Impacts to historical resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

The project site is currently developed with a multi-family residential structure, a swimming pool, and surface carports for resident parking. The project site is within a highly urbanized area and has been disturbed by grading and excavation to accommodate past and present on-site development. Although unlikely due to previous site grading, during the excavation for the proposed four-level subterranean parking garage subsurface materials would be uncovered and there is the possibility that archaeological and paleontological resources located in the soil could be unearthed. Excavation and ground-disturbing activities could potentially expose, damage, or destroy these previously undiscovered archaeological or paleontological resources. Therefore, impacts would be potentially significant unless mitigated.

Mitigation Measures

The following mitigation measures shall be implemented prior to and during ground-disturbing activities associated with construction on-site.

CR-1 **Archaeological Resources.** In the event that archaeological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The archaeologist shall make recommendations concerning appropriate measures that will be implemented to protect the resources, which may include, but be not limited to, excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Cultural resources could consist of, but are not limited to, stone, bone, wood, or shell artifacts or features, including hearths. Any previously undiscovered resources found during construction in the project area should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance in terms of CEQA criteria.

CR-2 **Paleontological Resources**. In the event a fossil is discovered during construction of the project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of Vertebrate Paleontology standards. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards.

With the implementation of mitigation measures CR-1 and CR-2, which include procedures that would protect cultural resources discovered during construction activities, any potentially significant impacts caused by the project to archaeological, paleontological, and cultural resources would be reduced to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Disturb any human remains, including those interred outside of formal cemeteries?

Based on the prior disturbance of the site associated with construction of the existing three-story multi-family residential building no interred human remains are expected to be located on the site. However, the possibility exists that human remains are located under the project site and that excavation and ground-disturbing activities could potentially uncover, damage, or destroy previously undiscovered human remains. Human remains are defined as any physical remains of a human being. The term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of associated cultural resources (Funerary objects) with the deceased, and the ceremonial burning of human remains. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Based on the potential to disrupt and uncover human remains, impacts would be potentially significant without mitigation.

Mitigation Measure

The following mitigation measure shall be implemented during ground-disturbing construction activities on the project site.

CR-3 **Unanticipated Discovery of Human remains and Associated Funerary Objects.** Prior to the start of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. Any discoveries of human skeletal material shall be immediately reported to the County Coroner. The monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The monitor will then notify the Qualified Archaeologist and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24 hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The project applicant shall consult with the Tribe regarding avoidance of all cemetery sites. Once complete, a final report of all activities is to be submitted to the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

If the coroner determines the remains represent a historic non-Native American burial, the burial shall be treated in the same manner of respect with agreement of the coroner. Reburial will be in an appropriate setting. If the coroner determines the remains to be modern, the coroner will take custody of the remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

With implementation of mitigation measure CR-3, which include procedures to be followed in the event human remains are discovered on the project site during construction activities, any potentially significant impacts caused by the project to human remains would be reduced to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	■
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	■	☐	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■

The following analysis is partially based on the geotechnical evaluation of the site and adjacent parcel north of the project site conducted by Pacific GeoSoils, Inc. in October 2004 and fault evaluation letters that were prepared by Mactec, Inc. and William Lettis & Associates, Inc. These documents, along with a letter approving the geotechnical evaluation by KFM Geoscience, the City's geotechnical consultant, are contained in Appendix B.

a.1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The project site is not located in an Alquist-Priolo Earthquake Fault Zone as defined by the State Geologist (Beverly Hills Quadrangle, California Department of Conservation, 1986). The active fault closest to the site that is capable of surface rupture is the Hollywood fault, located approximately one half mile east of the site at the nearest point. An Alquist-Priolo Earthquake Fault Zone is established for portions of the active Hollywood Fault but the project site does not fall within any of those zones. For planning purposes, the City of West Hollywood has established a Fault Precaution (FP) zone along the Hollywood Fault zone. FP Zone 1 requires a site-specific surface fault rupture evaluation and FP Zone 2 requires either a site-specific surface fault rupture evaluation or foundation strengthening to mitigate up to 2 inches of ground displacement. The project site is not located in the FP Zone 1 or FP Zone 2 (City of West Hollywood Fault Location and Precaution Zone Map, Figure 3.5-2, 2035 General Plan FEIR, 2010). Therefore, the project would not be exposed to hazards associated with surface fault rupture. No impact would occur.

NO IMPACT

a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Seismically-induced ground shaking could damage proposed structures and infrastructure, potentially resulting in loss of property or risk to human health and safety. As shown in Table 7, the estimated maximum peak ground accelerations for the site are on the order of 0.7g for the site from the nearby faults, based on the design level ground acceleration (10 percent probability of exceedance in 50 years). Earthquakes of this magnitude could potentially damage buildings and pose risks to human health and safety.

The faults discussed in Table 7 are not the only faults in the area that can produce earthquakes, but they are the faults most likely to affect the project site. Earthquakes along these faults could produce potentially significant impacts to the proposed structure. However, according to the geotechnical evaluation (see Appendix B) there are no unusual circumstances that would make the project site more prone to seismically- induced ground shaking than other sites in the immediate area.

On-site structures would be required to be constructed to comply with the WHMC Title 13, which adopts the provisions of the Los Angeles County Building Code (Title 26 of the Los Angeles County Code) and the California Building Code (CBC, Title 24 of the California Code of Regulations). With adherence to the WHMC requirements regarding seismic safety, design and construction of the proposed commercial structure would be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for the site would take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. In addition, project construction would be subject to review and approval by City building and safety officials.

Table 7 List of Nearby Regional Faults

Fault Name	Distance Between Site and Surface Projection of Earthquake Rupture (Miles)	Estimated Maximum Peak Ground Accelerations (g)	Estimated Maximum Earthquake (M_w)	Slip Rate (mm/yr)
Hollywood	2.1	0.737	6.4	1.00
Santa Monica	2.8	0.668	6.6	1.00
Newport-Inglewood	4.6	0.388	6.9	1.00
Raymond	9.3	0.233	6.5	0.50
Malibu Coast	9.9	0.248	6.7	0.50
Compton Thrust	10.1	0.260	6.8	0.30
Verdugo	10.5	0.233	6.7	3.00
Elysian Park Thrust	11.8	0.209	6.7	2.00
Northridge	11.9	0.236	6.9	3.00
Palos Verdes	13.3	0.179	7.1	1.00

Source: EQFAULT, Version 3.0

Proper engineering, including mandatory compliance with the seismic design requirements set forth by the CBC and WHMC, would minimize the risk to life and property, resulting in a less than significant impact to new development from seismically-induced groundshaking.

LESS THAN SIGNIFICANT IMPACT

a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The geotechnical evaluation of the site and adjacent parcel (see Appendix B) identified older alluvium deposits of coarse to fine grained sand up to 18 feet thick on the project site. Artificial fill composed of silty, coarse to fine sand was also encountered with varying thickness on the order of 4 to 6 feet. No groundwater was encountered at the site. However, the subsurface studies were performed following several years of below average rainfall. Historic groundwater levels indicate that groundwater could be of sufficient depth to contribute to liquefaction. Liquefaction is a phenomenon where loose, saturated, non-cohesive soils such as silts, sands, and gravels undergo a sudden loss of strength during earthquake shaking. Under certain circumstances, seismic ground shaking can temporarily transform an otherwise solid, granular material to a fluid state. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may suddenly subside and suffer major structural damage. Liquefaction is most often triggered by seismic shaking, but it can also be caused by improper grading, landslides, or other factors. Liquefaction, lateral spreading and/or seismic settlement are commonly associated with well sorted, poorly consolidated, granular soils under saturated/high groundwater conditions.

The project site is underlain by thick sandy alluvial and fill deposits where high groundwater has historically been encountered. Therefore, the site could be prone to liquefaction, lateral spreading and/or seismic settlement during a strong to severe groundshaking event. This could result in damage to proposed structures and infrastructure, resulting in loss of property or risk to human health and safety. As such, impacts would be potentially significant without mitigation.

Mitigation Measure

The following mitigation measures would be required to avoid or reduce the project's potentially significant impacts.

GEO-1 **Removal of Unsuitable Soil.** As part of site grading, existing alluvial soils that may be prone to liquefaction, lateral spread and seismic settlement shall be identified by a State of California Registered Civil Engineer. Such soil shall be densified in place or removed and replaced with soil that is not prone to liquefaction, lateral spread or seismic settlement.

GEO-2 **Slab Foundation, Reinforcement, and Moisture Protection.** The project shall be designed with floor slabs that are cast over undisturbed bedrock and that are designed to resist applicable lateral and vertical loads. Continuous footings of at least 24 inches in width and isolated pad footings of at least three feet square shall be placed at a depth of at least 18 inches into undisturbed rock. Building slabs and footings shall be reinforced with steel bars of the appropriate diameter, spacing, and orientation to resist the estimated settlements and ground movements as determined by a State of California Registered Civil Engineer. A moisture barrier beneath slabs-on-grade, consisting of a waterproof vapor barrier, shall be installed in areas where slab moisture would be detrimental to structural integrity.

Implementation of Mitigation Measures GEO-1 and GEO-2, along with compliance with current CBC and WHMC standards related to structural failure due to seismically induced liquefaction, lateral spreading and seismic settlement would ensure the structural stability of the proposed building and would reduce impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

c. Would the project be located on a geologic unit that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

The geotechnical evaluation of the site and adjacent parcel (see Appendix B) identified a surficial failure on the lower half of the eastern portion of the existing cut slope, which is located on the adjacent parcel, north of the project site. Signs of root invasion upon the open joints were noted. The orientations of the joints are daylighted out of slope. The joint orientation, root invasion, and introduction of water, in conjunction with the steepness of the slope, have led to localized slope failure. Due to the existing surficial stability of the on-site slope, rock-topple and landslides could occur, potentially resulting in loss of property or risk to human safety. Although the slope is located on the adjacent parcel to the project site, it may still affect the project site if it became unstable.

The project would involve the demolition of the existing building on the project site and construction of a new three-story building with a gross floor area of 22,566 square feet, including a four-level subterranean parking garage. The proposed project involves extensive grading and excavation. Grading of the site and construction of the proposed building would be required to adhere to the current CBC standards for design and construction, which address slope stability. In particular, CBC Chapter 18 deals with soils and foundations adjacent to slopes. The project site would be required by CBC to build an on-site retaining wall to guard against off-site slope failure, as required by WHMC and building permit issuance requirements. Conformance with CBC requirements would reduce the incidence of slope failure and the exposure to a risk of loss, injury, or death from the failure of a nearby slope. Therefore, impacts related to surficial slope stability and landslides would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project would involve the demolition of the existing building on the project site and construction of a new three-story building with a gross floor area of 22,566 square feet, including a four-level subterranean parking garage. The proposed project involves extensive grading and excavation. The grading and excavation phase for the subterranean parking garage would have the highest potential for soil erosion. Construction activity would be required to comply with WHMC Section 15.56.090. This section requires storm water runoff containing sediment, construction materials or other pollutants from a construction site to be reduced to the maximum extent practicable. The following requirements would apply to the proposed project:

- Sediment, construction wastes, trash and other pollutants from construction activities shall be reduced to the maximum extent practicable,
- Structural controls such as sediment barriers, plastic sheeting, detention ponds, filters, berms, and similar controls shall be utilized to the maximum extent practicable in order to minimize the escape of sediment and other pollutants from the site,
- Between October 1 and April 15, all excavated soil shall be located on the site in a manner that minimizes the amount of sediment running onto the street, drainage facilities or adjacent properties. Soil piles shall be bermed or covered with plastic or similar materials until the soil is either used or removed from the site,
- No washing of construction or other vehicles is permitted adjacent to a construction site. No water from the washing of construction vehicle of equipment on the construction site is permitted to run off the construction site and enter the municipal storm water system, and
- Erosion from slopes and channels must be controlled through the effective combination of best management practices.

As specified in WHMC Section 15.56.095, the project would be required to develop a low impact development plan (LID) that complies with the current municipal National Pollutant Discharge Elimination System (NPDES) permit. In accordance with the WHMC, the project would be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest, and use in accordance with the West Hollywood LID Technical Guidance Manual. The LID Plan would implement set LID standards and practices for stormwater pollution mitigation and provide documentation to demonstrate compliance with the municipal NPDES permit on the plans and permit application submitted to the city. In addition, the project would be required to follow the requirements for construction activities listed in WHMC Section 15.56.090 to control stormwater runoff containing sediment.

With adherence to WHMC Section 15.56.090 and BMPs as required under state law and the Clean Water Act, substantial temporary erosion-related impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Expansive soils swell or heave with increases in moisture content and shrink with decreases in moisture content. Montmorillontic clays are most susceptible to expansion. In general, on-site soil deposits consist of silty sand and granodiorite bedrock, which were determined to be low to non-expansive (see Appendix B). The proposed subterranean parking garage subgrade would be constructed on top of the bedrock, which has no expansion potential. On-site soils are considered low to non-expansive; therefore, impacts related to expansive soils would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The proposed project would be connected to the local wastewater treatment system. Septic systems would not be used. Therefore, no impact would occur.

NO IMPACT

7 Greenhouse Gas Emissions

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

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs). GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way in which Earth absorbs gases from the atmosphere. Potential impacts of global climate change in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CEC 2017).

In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented AB 32, the "California Global Warming Solutions Act of 2006." AB 32 requires achievement by 2020 of a statewide GHG emissions limit equivalent to 1990 emissions (essentially a

25 percent reduction below 2005 emission levels) and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the governor signed Senate Bill 32, which requires the ARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. While the State has adopted the AB 32 Scoping Plan and multiple regulations to achieve the AB 32 year 2020 target, there is no currently adopted State plan to meet post-2020 GHG reduction goals. ARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target set forth by SB 32. As a result, State reduction strategies cannot be applied to the project to achieve long-term reductions. Achieving these long-term GHG reduction policies will require State and federal plans and policies for achieving post-2020 reduction goals. Placing the entire burden of meeting long-term reduction targets on local government or individual new development projects would be disproportionate and likely ineffective. Given the recent legislative attention and judicial action regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through the year 2050, the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper in 2015 recommending that CEQA analyses for most land use development projects may continue to rely on current adopted thresholds for the immediate future (AEP, *Beyond 2020: The Challenges of Greenhouse Gas Reduction Planning by Local Governments in California*, 2015).

The City of West Hollywood adopted a Climate Action Plan (CAP) in September 2011. The CAP outlines a course of action to reduce municipal and community-wide GHG emissions that contribute to climate change in accordance with AB 32 reduction targets. The CAP includes seven emission reductions strategies: 1) community leadership and engagement, 2) land use and community design, 3) transportation and mobility, 4) energy use and efficiency, 5) water use and efficiency, 6) waste reduction and recycling, and 7) green space. The land use and community design strategy and the transportation and mobility strategy encourage development in areas to promote transit use, walking and bicycling to improve health and decrease driving. According to the CAP, a project-specific GHG analysis "must identify the specific CAP measures applicable to the project and how the project incorporates the measures." If the project is not consistent with the CAP measures or if the measures are not otherwise binding, they must be incorporated as mitigation measures applicable to the project.

The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The 2008 SCAQMD threshold considers emissions of over 10,000 metric tons of carbon dioxide equivalent (MT CO_2e) per year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. Although not formally adopted, the SCAQMD has a recommended tiered GHG significance threshold (SCAQMD 2008). Under Tier 2, project impacts would be less than significant if a project is consistent with an approved GHG reduction plan, such as a CAP. Therefore, GHG emissions associated with the proposed project would be less than significant if it is consistent with the City of West Hollywood CAP. If the proposed project is not consistent with the CAP (or if no adopted GHG reduction plan exists) then projects may be evaluated based on the SCAQMD recommended Tier 3 screening level quantitative thresholds. SCAQMD has a recommended screening level quantitative threshold for residential and commercial land uses of 3,000 MT CO_2e /year (SCAQMD 2010).

The City projects that implementation of the CAP would reduce emissions to 16.9 percent below 2008 emissions levels by 2020. This would enable the City to meet and exceed its AB 32 reduction goal of 15 percent below 2008 emissions by 2020. Because the proposed project would be developed and operational during or before 2020 (the AB 32 target year), consistency with the City's CAP indicates that the project would be consistent with AB 32 and also SB 32, which continues the trajectory set by AB 32 through 2040.

This analysis is based on the methodologies recommended by the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper (January 2008). The analysis focuses on CO_2, N_2O, and CH_4 as these are the GHG emissions that on-site development would generate in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF_6, were also considered for the analysis. However, because the project would involve commercial and residential development, the quantity of fluorinated gases would not be substantial since fluorinated gases are primarily associated with industrial processes. Calculations were based on the methodologies discussed in the CAPCOA white paper (January 2008) and included the use of the California Climate Action Registry General Reporting Protocol (January 2009). Emissions analyzed are for net new commercial uses associated with the new commercial building.

Emissions associated with the proposed project were estimated using CalEEMod, version 2016.3.1, as previously described in Section 3, *Air Quality*. Complete CalEEMod results and assumptions can be viewed in Appendix C.

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

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

Consistency with Approved GHG Reduction Plan

As discussed above, according to the SCAQMD's recommended thresholds, a project would have a less than significant impact if it would be consistent with an approved plan for the reduction of GHG. The City of West Hollywood adopted a CAP in 2011. The City of West Hollywood CAP outlines a course of action to reduce municipal and communitywide GHG emissions that contribute to climate change. According to the CAP, a project-specific GHG analysis "must identify the specific CAP measures applicable to the project and how the project incorporates the measures." If the project is not consistent with the CAP measures or if the measures are not otherwise binding, they must be incorporated as mitigation measures applicable to the project. Table 8 compares the proposed project with applicable CAP measures. The proposed project would implement applicable GHG reduction measures and, therefore, would be consistent with the CAP.

Table 8 Consistency with Applicable West Hollywood Climate Action Plan Reduction Measures

Measure	Project Consistency
Land Use and Community Design	
LU-1.1: Facilitate the establishment of mixed-use, pedestrian- and transit-oriented development along the commercial corridors and in Transit Overlay Zones.	**Consistent** The project site is an infill commercial development along the Sunset Boulevard commercial corridor.

Measure	Project Consistency
Transportation and Mobility	
T-1.1: Increase the pedestrian mode share in West Hollywood with convenient and attractive pedestrian infrastructure and facilities.	**Consistent** The project site is an infill commercial development along the Sunset Boulevard commercial corridor within walking distance of retail facilities, restaurants, and public transportation.
T-2.2: Install bike racks and bike parking in the City where bike parking infrastructure currently does not exist.	**Consistent** The project includes bicycle parking for visitors and employees in accordance with West Hollywood green building program requirements and West Hollywood Zoning Code Section 19.28.150A.
T-2.2: Install bike racks and bike parking in the City where bike parking infrastructure currently does not exist.	**Consistent** The project includes a total of 10 new bicycle parking stalls on the project site, which currently has none.
Energy Use and Efficiency	
E-2.2: Require all new construction to achieve California Building Code Tier II Energy Efficiency Standards (Section 503.1.2).	**Consistent** The project would exceed Title 24 California Building Code Energy Efficiency standards by at least 10 percent.
E-3.2: Require the use of recycled materials for 20% of construction materials in all new construction.	**Consistent** The project includes recycled-content materials in the foundation, insulation, and landscaping.
Water Use and Efficiency	
W-1.1: Reduce per capita water consumption by 30% by 2035.	**Consistent** To reduce water use, the proposed project would include low-flow plumbing fixtures consistent with CalGreen building standards and would utilize drought-tolerant landscaping.
W-1.2: Encourage all automated irrigation systems installed in the City to include a weather-based control system.	**Consistent** The project involves a water efficient irrigation system. Minimal irrigation would be required.
Waste Reduction and Recycling	
SW-1.1: Establish a waste reduction target not to exceed 4.0 pounds per person per day.	**Consistent** The City of West Hollywood's Public Works Department is responsible for complying with AB 939. The City has enacted numerous programs to achieve the mandated diversion rates. In 2015, the per employee disposal rate per day in West Hollywood was 5.6 pounds per employee. This meets CalRecycle's target of 7.7 pounds per employee per day (CalRecycle 2017). The proposed project would include space for the collection and storage of recyclables. In addition, at least 80 percent of construction and demolition waste would be diverted in accordance with WHMC Section 19.20.060. The project would also be subject to all applicable State and City requirements for solid waste reduction as they change in the future.
Green Space	
G-1.1: Increase and enhance the City's urban forest to capture and store carbon and reduce building energy consumption.	**Consistent** The project includes drought-tolerant and native species landscaping around the perimeter of the buildings and a rooftop deck garden.
G-1.2: Establish a green roof and roof garden program to standardize, promote, and incentivize green roofs and roof gardens throughout the City.	**Consistent** The project includes a rooftop deck garden.

Senate Bill (SB) 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing ARB to develop regional greenhouse gas emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8% reduction in GHGs from transportation sources by 2020 and a 13% reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements. In April 2012, SCAG adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to meet the assigned targets in accordance with SB 375.

In April 2016, SCAG adopted the 2016-2040 *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). SCAG's RTP/SCS includes a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably and outlines more than $556.5 billion in transportation system investments through 2040. A main vision of the RTP/SCS is to "...grow in more compact communities in existing urban areas, providing neighborhoods with efficient and plentiful public transit, abundant and safe opportunities to walk, bike and purse other forms of active transportation..." The proposed project would place commercial and office development directly adjacent to residences, along Sunset Boulevard, Miller Drive, and La Cienega Boulevard, and would be located within walking distance of commercial and recreational activities as well as public transportation (less than 100 feet to the Metro Line 2-302 Route bus stop). Therefore, it would provide various opportunities for the use of alternatives to the drive alone automobile (transit, walking) and would not be expected to increase per capita vehicle trips or vehicle miles traveled (VMT). The project would also include a total of 10 new bicycle parking stalls on the project site. For these reasons, the project would be consistent with the core ideals of the RTP/SCS.

GHG Emissions Associated with the Proposed Project

Although the proposed project would be consistent with the West Hollywood CAP and impacts would be less than significant, for informational purposes, a quantitative analysis of GHG emissions associated with construction emissions and operational emissions from the proposed project is provided below. Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1. Complete CalEEMod results and assumptions can be viewed in Appendix C.

Construction-Related Emissions

Emissions of CO2e units generated by construction of the proposed project are estimated at 295.4 metric tons. When amortized over a 30-year period (the assumed life of the project), CO2e construction emissions would be approximately 9.8 metric tons CO2e per year.

Operational Indirect and Stationary Direct Emissions

Operational Emissions include area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, electricity to deliver water, and transportation emissions and are shown in Table 9. Operational emissions were calculated using CalEEMod. Full results are shown in Appendix C. CalEEMod does not calculate N2O emissions related to mobile sources. As such, N2O emissions were calculated based on the proposed project's VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009). As shown in Table 9, total emissions associated with the new commercial building are estimated at 1,453 metric tons CO2e per year.

Table 9 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT of CO_2e)
Construction	10
Operational	
Area	<0.1
Energy	639
Solid Waste	10
Water	41
Mobile	
CO_2 and CH_4	721
N_2O	32
Total	1,453
SCAQMD Threshold	3,000
Exceed Threshold?	No

See Appendix C for CalEEMod worksheets.

The proposed project would generate an estimated 1,453 metric tons CO2e per year, which is below the SCAQMD recommended Tier 3 threshold of 3,000 metric tons CO2e per year for all land use types. As discussed above, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would be consistent with the West Hollywood CAP and objectives of the RTP/SCS, AB 32, SB 97 and SB 375. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	■	☐

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

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

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories. A business plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State of California. Local agencies, including the Los Angeles County Environmental Health Department, administer these laws and regulations.

The project would involve the demolition of the existing three-story residential building on the project site and construction of a new three-story building with a gross floor area of 22,566 square feet, including a four-level subterranean parking garage and three-stories of office and restaurant space. The proposed uses would not involve the routine transport, use or disposal of hazardous substances, other than minor amounts typically used for maintenance, restaurant operation, and landscaping. In the unlikely scenario that licensed vendors bring hazardous materials to and from the project site, they would be required to provide all appropriate documentation for all hazardous materials that are transported in connection with project-site activities (as required by the DOT). This would achieve compliance with the existing hazardous materials regulations. In addition, any hazardous wastes produced on-site would be subject to requirements associated with accumulation time limits, proper storage locations and containers, and proper labeling. As part of any removal of any hazardous waste from the site, hazardous waste generators are required to use a certified hazardous waste transportation company, which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal.

As described in Section 3, *Air Quality,* due to the age of the existing on-site structure, lead and asbestos materials may be present. However, the project applicant would be required to comply with all applicable federal, state, and local regulations pertaining to lead and asbestos removal during demolition. This would reduce potential impacts associated with exposure of sensitive receptors to lead and asbestos to a less than significant level.

Compliance with applicable regulations would ensure that impacts associated with the use, transport, storage, and sale of hazardous materials would not be significant and that the project would not create a significant hazard to the public through upset or accident conditions. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The Pacific Hills School, located at 8628 Holloway Drive, West Hollywood, is approximately one-third of a mile southwest of the project site. Operation of the proposed project would not involve the use or transport of hazardous materials. However, construction of the project would involve demolition of the existing on-site structure, which, due to its age, may contain asbestos and lead-based paints and materials. The removal of any asbestos-containing materials would be required to comply with all applicable existing rules and regulations, including SCAQMD Rule 1403 (Asbestos Demolition and Renovation Activities). In addition, the proposed project would be required to comply with California Occupational Safety and Health Administration (CalOSHA) regulations regarding lead-based materials. The California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed CalOSHA standards. Compliance with applicable regulations regarding the handling and disposal of asbestos and lead-based paint would reduce impacts to nearby school sites to less than significant.

LESS THAN SIGNIFICANT IMPACT

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

California Government Code Section 65962.5 requires various state agencies to compile lists of hazardous waste disposal facilities, unauthorized release from underground storage tanks, contaminated drinking water wells, and solid waste facilities from which there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis. The project site is not listed as a known hazardous cleanup site, does not contain a hazardous waste facility, and has no record of known contamination (Department of Toxic Substances Control [DTSC] 2007). Two cleanup sites are found within a 1,000 feet radius of the project site. The Le Mondrian Hotel (8440 Sunset Boulevard), a leaking underground storage tank (LUST), is located approximately 700 feet east of the project site and UNOVAL #4284 (8569 Sunset Boulevard), a LUST, is located approximately 700 feet southwest of the project site. However, the cleanup status of both sites is listed as completed – case closed and would not pose a threat to the project site. Therefore, the project would not create a significant hazard to the public or the environments and there would be no impact.

NO IMPACT

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

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

There are no airports or airstrips within two miles of West Hollywood and no portion of the City is subject to land use restrictions based on the requirements of an airport land use compatibility plan. The project site is not located within an airport land use plan area or within two miles of a public airport or public use airport. Bob Hope Airport in Burbank is located approximately eight miles north, Santa Monica Airport is located six miles southwest, and LAX is located about ten miles south. The project would have no impact related to safety hazards within two miles of an airport or vicinity of a private airstrip.

NO IMPACT

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

The proposed project involves infill development in an urbanized area of West Hollywood. Project implementation would not alter or otherwise interfere with public rights-of-way and, therefore, would not interfere with emergency response or evacuation. The proposed project would be required to comply with applicable California Fire Code requirements. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

West Hollywood sits at the base of the Hollywood Hills, which includes residential neighborhoods within Los Angeles. The developed portions of the Hollywood Hills are densely populated mostly by single-family homes and some apartment buildings. Roads are difficult to navigate, and significant native vegetation and brush cover the undeveloped areas between homes and neighborhoods. A fire in the Hollywood Hills could easily spread to the northern region of West Hollywood, which is also densely populated, potentially making large evacuations difficult. The project site is located along the border of West Hollywood and Los Angeles. The area in Los Angeles near the project site has a moderate fire hazard level, placing the project site in potential risk (City of West Hollywood 2010a). However, the proposed project would be required to be constructed to the standards of the Uniform Building Code relating to fire safety and would not contribute to the likelihood of fires on this terrain. Furthermore, the project is located in a portion of the City that is urbanized that would not significantly expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☐	■	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (*e.g.*, the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	■	☐
d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	■	☐
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	■	☐
f. Otherwise substantially degrade water quality?	☐	☐	■	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	☐	☐	☐	■
h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows?	☐	☐	☐	■
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?	☐	☐	☐	■
j. Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

a. Would the project violate any water quality standards or waste discharge requirements?

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site??

d. Would the project substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

e. Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f. Would the project otherwise substantially degrade water quality?

Construction Impacts

The project would involve the demolition of the existing building on the project site and construction of a new three-story building with a gross floor area of 22,566 square feet, including a four-level subterranean parking garage. The proposed project involves extensive grading and excavation. During construction, it is estimated that the project would export 24,600 cubic yards of earth material from the project site. During construction activities the site's soils would be exposed to wind and water erosion that could transport sediments into local stormwater drainages. In addition, accidental spills of fluids or fuels from construction vehicles and equipment, or miscellaneous construction materials and debris, could be mobilized and transported off-site in overland flow. These contaminant sources could degrade the water quality of receiving water bodies, potentially resulting in a violation of water quality standards.

The City requires implementation of standard erosion control best management practices (BMPs) for all new construction in accordance with WHMC Section 15.56.090. These include:

- Storm water runoff containing sediment, construction materials or other pollutants from the construction site and any adjacent staging, storage or parking areas shall be reduced to the maximum extent practicable. The following shall apply to all construction projects within the city and shall be required from the time of land clearing, demolition or commencement of construction until receipt of a certificate of occupancy:
    - Sediment, construction wastes, trash and other pollutants from construction activities shall be reduced to the maximum extent practicable.
    - Structural controls such as sediment barriers, plastic sheeting, detention ponds, filters, berms, and similar controls shall be utilized to the maximum extent practicable in order to minimize the escape of sediment and other pollutants from the site.
    - Between October 1 and April 15, all excavated soil shall be located on the site in a manner that minimizes the amount of sediment running onto the street, drainage facilities or adjacent properties. Soil piles shall be bermed or covered with plastic or similar materials until the soil is either used or removed from the site.
    - No washing of construction or other vehicles is permitted adjacent to a construction site. No water from the washing of construction vehicle of equipment on the construction site is permitted to run off the construction site and enter the municipal storm water system.
    - Trash receptacles must be situated at convenient locations on construction sites and must be maintained in such a manner that trash and litter does not accumulate on the site nor migrate off site.
    - Erosion from slopes and channels must be controlled through the effective combination of best management practices.
- The owner or authorized representative of the owner must certify in a form acceptable to the Director or duly authorized representative that best management practices to control runoff from construction activity at all construction sites will be implemented prior to the issuance of any building or grading permit.

Compliance with the requirements of the WHMC would reduce potential impacts from erosion, offsite sedimentation, and pollutant laden stormwater discharges during construction activities to a less than significant level.

Operational Impacts

The project site is almost entirely covered with impervious surfaces (total coverage of approximately 14,472 square feet of impervious surfaces). The proposed project would incorporate landscaped areas around the site, including trees, shrubs, grasses, and a rooftop deck garden, decreasing the amount of impervious surfaces on the site by approximately 1,402 square feet (13,070 square feet of impervious surfaces with the project). The project would be designed in order for 55 percent of the front yard area to have permeable surfaces and 50 percent of the required side yards to have permeable surfaces. This represents a beneficial increase of permeable surfaces from the existing condition on the site. The project would meet the non-permeable surfaces requirements of Section 19.20.190D of the WHMC. The decrease in impervious surface area on the project site would increase ground water recharge and incrementally decrease the flow rate of surface water runoff on-site. These characteristics of the project would benefit the existing storm drain system and reduce the risk of flooding to a less than significant level.

The project would include three-stories of office and restaurant space and a four-level subterranean parking garage. The proposed impermeable surfaces in parking areas would accumulate deposits of oil, grease, and other vehicle fluids and hydrocarbons. In addition, proposed new landscaping could introduce chemical inputs such as pesticides and herbicides. The City of West Hollywood discharges storm water via regional underground storm drains into the upper reach of Ballona Creek, a subwatershed of Santa Monica Bay. During storms, these deposits would be washed into and through the drainage systems, Ballona Creek, and ultimately to the Pacific Ocean. The addition of fertilizers, pesticides and other chemicals to the proposed landscaping has the potential to include higher than natural concentrations of trace metals, biodegradable wastes (which affect dissolved oxygen levels), and excessive major nutrients such as nitrogen and phosphorus. Urban runoff can have a variety of deleterious effects. Oil and grease contain a number of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Heavy metals such as lead, cadmium, and copper are the most common metals found in urban stormwater runoff. These metals can be toxic to aquatic organisms, and have the potential to contaminate drinking water supplies. Nutrients from fertilizers, including nitrogen and phosphorous, can result in excessive or accelerated growth of vegetation or algae, resulting in oxygen depletion and additional impaired uses of water. Therefore, the increased vehicular activity and use of fertilizers on-site could increase the amount of pollutants in on-site runoff, which could adversely affect the water quality of receiving waters, such as the Ballona Creek and the Pacific Ocean.

As specified in WHMC Section 15.56.095, the project would be required to develop a low impact development plan (LID) that complies with the current municipal National Pollutant Discharge Elimination System (NPDES) permit. In accordance with the WHMC, the project would be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest, and use in accordance with the West Hollywood LID Technical Guidance Manual. The LID Plan would implement set LID standards and practices for stormwater pollution mitigation and provide documentation to demonstrate compliance with the municipal NPDES permit on the plans and permit application submitted to the city. Furthermore, the proposed project design must be consistent with the West Hollywood Green Building Ordinance and the Goals of the Ballona Creek Watershed Management Plan. In addition, the overall effect of the proposed project would be to ultimately reduce pollutants from surface parking lots that enter the storm drain system since the new development would be subject to current regulatory requirements, which are more stringent than regulations to which existing on-site development was subject. Compliance with the requirements of the WHMC would reduce potential impacts from pollutant laden stormwater discharges during the operation of the project to a less than significant level.

With implementation of the measures contained in these plans, excessive stormwater runoff, erosion, and sedimentation would not occur and the potential for the project to violate water quality and drainage standards and substantially degrade water quality would be reduced. The project would have a less than significant impact with respect to water quality and drainage.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

As discussed in Section 18, *Utilities and Service Systems*, the project would receive its water from the City of West Hollywood and the Los Angeles Department of Water and Power (LADWP). Local groundwater provides approximately 15 percent of the total water supply for Los Angeles and has provided nearly 30 percent of the total supply in drought years. The LADWP owns water rights in three Upper Los Angeles River Area (ULARA) groundwater basins: San Fernando, Sylmar, and Eagle Rock, as well as Central and West Coast Basins. On average, about 86 percent (90,755 AFY) of Los Angeles' groundwater supply is extracted from ULARA groundwater basins, while the Central Basin provides 14 percent (15,000 AFY). The City also owns 1,503 AFY of West Coast Basin groundwater rights. However, LADWP does not exercise its pumping rights in the West Coast Basin at this time due to localized water quality issues (Metropolitan Water District of Southern California [MWD] 2007).

Groundwater is affected by local hydrology in addition to those basins from which it draws water. However, with conjunctive use management of groundwater (storing imported water in the groundwater basins during wet and normal years) groundwater production can actually be increased during dry years. LADWP operates its groundwater resources in this manner. On average, LADWP can pump its adjudicated right of approximately 107,000 AFY. In dry years, LADWP can pump larger quantities of groundwater. For the purposes of a single-year drought analysis, 135,000 AF is assumed to be the City's local groundwater production. If successive dry years occur, LADWP would likely pump at greater-than-average levels for the first few dry years, then starting pumping at lower levels in order to prevent groundwater overdraft (MWD 2007).

Water demand for the LADWP is based on the amount of development requiring water services. The LADWP supplies the amount demanded for each year and uses other water sources to replenish water sources such as groundwater and reservoir capacity. According to LADWP's 2015 UWMP, the LADWP has sufficient planned supplies available to meet the areas projected water demand over the planning horizon for each of the three hydrologic conditions (LADWP 2015).

Development under the project does not include installation of new groundwater wells, or use of groundwater from existing wells. In addition, the project would reduce the amount of impervious surfaces on the project site through the incorporation of landscaped areas and a rooftop deck garden, which would incrementally increase the potential for groundwater recharge. Therefore, the project would not substantially interfere with groundwater recharge or groundwater supplies. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

g. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?

h. Would the project place structures in a 100-year flood hazard area that would impede or redirect flood flows?

i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?

The Federal Emergency Management Agency (FEMA) is responsible for the preparation of Flood Insurance Rate Maps (FIRMs). These maps present flood hazard, expressed as areas that are subject to inundation in a storm with either a 1 percent Annual Exceedance Probability (AEP), also referred to as a 100-year flood, or a 0.2 percent AEP (500-year flood). The project site is not located within a FEMA designed flood zone.

The major dam nearest to the project site is the Mulholland Dam, approximately three miles northeast of the project site. The 2035 General Plan Safety and Noise chapter does not map the project site as within a Dam Inundation Hazard Area (City of West Hollywood 2011). Therefore, the project would have no impact related to floods.

NO IMPACT

j. Would the project result in inundation by seiche, tsunami, or mudflow?

The body of water nearest to the project site is the Franklin Canyon Reservoir, approximately two miles to the east of the project site. The project site is over nine miles northeast of the Pacific Ocean, the largest body of water to the project. Because the project site is not near any large bodies of water and is approximately two miles inland from the Franklin Canyon Reservoir, the project site would not be subject to inundation by seiche, tsunami, or mudflow. No impact would occur.

NO IMPACT

10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐
c. Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

a. Would the project physically divide an established community?

The project would involve the demolition of the existing three-story residential building on the project site and construction of a new three-story building with office and restaurant space, including a four-level subterranean parking garage. No operational or structural changes are proposed that would separate areas physically or socially, nor are any linear features, new roads or other barriers to movement proposed. There would be no impact.

NO IMPACT

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project would include 11,520 square feet of office space and 9,775 square feet of restaurant space. The project's floor area ratio (FAR) would be approximately 1.5, which is the maximum allowed under the Zoning Code of the City of West Hollywood §19.10.040 with the Green Buildings Code bonus. The project's maximum height of 45 feet is consistent with the maximum building height of 45 feet allowed under the City's Zoning Code §19.20.080 and SSP. As discussed in Section 1, *Aesthetics*, the project would improve the visual character of the site and would not conflict with surrounding uses.

The project would be consistent and compatible with the land use designation of SSP. The proposed structure is also designed to be consistent with vision and objectives set forth in the La Cienega Gateway subarea (Area 4-A) in the SSP. These include:

- Develop a dramatic building of landmark quality at the top of La Cienega that will act as a gateway to Sunset Boulevard at this key location.
- Focus pedestrian activity in this area to provide a link between Sunset Plaza and the hotels to the east.
- Maintain and enhance the area's special urban design features; preserve existing views and create new views of the basin and of the hills; mark vistas along the curves of the street; and maintain characteristic billboards.
- Preserve views from the hillside neighborhoods by prohibiting a continuous wall of tall buildings along the street. Develop the commercial properties in such a way as to be sensitive to nearby residents.

The project is an infill commercial development designed for pedestrian use which would provide employment opportunities for West Hollywood residents and contribute to a strong and diversified local economy. As discussed in Section 1, *Aesthetics*, the project would be similar in scale and character to existing buildings along Sunset Boulevard and incorporate contemporary architectural features along the frontage of Sunset Boulevard. The subterranean parking garage would screen vehicular parking from the public, improving and expanding the pedestrian environment. In addition, the project would increase the amount of greenspace on-site with the inclusion of drought-resistant native plant species and a rooftop deck garden. These aspects of the project would be consistent with land use goals and policies in the 2035 General Plan such as: LU-1.3: Encourage new development to enhance the pedestrian experience.

- LU-1.5: Encourage the retention and success of existing, and the incubation of new, commercial establishments that serve the needs of residents.
- LU-1.8: Promote the establishment, retention, and expansion of businesses that provide employment for West Hollywood's residents and the surrounding region.
- LU-1.10: Encourage new non-residential land uses that contribute to a strong and diversified local economy.
- LU-2.2: Consider the scale and character of existing neighborhoods and whether new development improves and enhances the neighborhood when approving new infill development.
- LU-4.2: Continue to improve the pedestrian environment through a coordinated approach to street tree planting, sidewalk maintenance and enhancement, pedestrian amenities, and a focus on human-scale frontage design for building renovations and new development projects.
- LU-4.3: Continue to implement parking strategies and standards that ensure parking areas do not dominate street frontages and are screened from public views whenever possible.
- LU-4.5: Require development projects to incorporate landscaping in order to extend and enhance the green space network of the City.
- LU-4.6: Require commercial development projects to provide for enhanced pedestrian activity in commercial areas through the following techniques:
  - Minimizing vehicle intrusions across the sidewalk.
  - Locating the majority of a building's frontages in close proximity to the sidewalk edge.
  - Requiring that the first level of the building occupy a majority of the lot's frontage, with exceptions for vehicle access.
  - Allowing for the development of outdoor plazas and dining areas.
  - Requiring that the majority of the linear ground floor frontage be visually and physically "penetrable," incorporating windows and other design treatments to create an attractive street frontage.

  - Requiring that ground floor uses be primarily pedestrian-oriented.
  - Discouraging new surface parking lots.

- LU-5.1: Continue to encourage diverse architectural styles that reflect the City's diversity and creativity.
- LU-7.5: Promote the use of drought-tolerant and native plants throughout the City.
- LU-7.7: Encourage green roofs.
- LU-15.1: Continue to promote a great diversity of uses on Sunset Boulevard including the following:
  - Entertainment and related uses to support the community's vision of a high- quality national and international entertainment destination.
  - Offices catering particularly to entertainment and creative businesses.
  - Night clubs, music venues, theaters, and other live entertainment venues.
  - Restaurants, bars, and cafés that support both the daytime and night-time populations.
  - Neighborhood-serving retail businesses that provide goods and services for nearby residents.
  - Hotels and other hospitality uses.
- LU-15.3: Maintain the identity of Sunset Boulevard as an eclectic urban environment with varied building heights and architectural styles.
- LU-15.5: As feasible, located parking behind buildings or in structures hidden from public view so as not to detract from the pedestrian experience.

Based on the above, the project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?

As discussed in Section 4, *Biological Resources*, West Hollywood has no adopted habitat conservation plans or natural community conservation plans. Therefore, the project would not conflict with any such plan and there would be no impact.

NO IMPACT

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11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

West Hollywood is underlain primarily by Quaternary-aged alluvial fan deposits (City of West Hollywood 2010). This recent alluvium resulted from erosion of the Santa Monica Mountains, which are part of the east-west-trending Transverse Range Geologic Province. Underlying the recent alluvium is the Southwestern Block of the Los Angeles Basin, which consists mainly of marine clastic and organic sedimentary strata of middle Miocene to recent epoch (from 14.5 to 1.7 million years ago), including igneous rocks of middle Miocene epoch (City of West Hollywood 2010). No known mineral resources are located within West Hollywood, and only marginal extraction is occurring from oil fields in the City (City of West Hollywood 2011). The project site is completely developed and in an urbanized area of the City. The project site is not located in an area used or available for mineral resource extraction, nor does it convert a potential future mineral extraction use to another use, nor does the development affect access to a site used for mineral resource extraction. In addition, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, the project would have no impact related to loss of availability of a known mineral resource or a locally-important mineral resource recovery site.

NO IMPACT

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12 Noise

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

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range.

Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance, while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA. The construction style for dwelling units in California generally provides a reduction of exterior-to-interior noise levels of about 30 dBA with closed windows (Federal Highway Administration [FHWA] 2006).

The City of West Hollywood adopted the 2035 General Plan in September 2011. The 2035 General Plan's Safety and Noise chapter provides a description of existing noise levels and sources and incorporates comprehensive goals, policies, and implementing actions. The chapter also includes several policies on noise and acceptable noise levels. These policies address unnecessary, excessive, and annoying noise levels and sources such as vehicles, construction, special sources (e.g., radios, musical instrument, animals, etc.), and stationary sources (e.g., heating and cooling systems, mechanical rooms, etc.). The Safety and Noise chapter also establishes land use compatibility categories for community noise exposure. The maximum "normally acceptable" noise level for the exterior of residential areas is 60 dBA CNEL or Ldn.

To implement the City's noise policies, the City adopted a Noise Ordinance. The City of West Hollywood Noise Ordinance has no numerical standards, but restricts unnecessary or excessive noise within the City limits. Radios, musical instruments or similar devices operated between 10:00 PM and 8:00 AM may not be operated at a level to be plainly audible at a distance of 50 feet (Section 9.08.050[a]); the operation of any motor may not be audible at more than 50 feet from the source (Section 9.08.050[c]); loading and unloading activities are generally prohibited from 10:00 PM to 8:00 AM (Section 9.08.050[e]); and commercial activities may not be plainly audible at any residence between 10:00 PM to 8:00 AM (Section 9.08.050[k]). The City Manager has responsibility to enforce these noise regulations, with the assistance of the Sheriff's Department if necessary (Section 9.08.070).

Section 9.08.050 of the WHMC sets limits on when construction activities can occur. Construction activities are not permitted between the hours of 7:00 PM and 8:00 AM on weekdays and Saturdays, or at any time on Sundays or City holidays. Pursuant to Section 9.08.050 of the WHMC, the loading, unloading, opening, closing or other handling of boxes, containers, building materials, solid waste and recycling containers or similar objects is not permitted between the hours of 10:00 PM and 8:00 AM in such manner as to cause unreasonable noise disturbance, excluding normal handling of solid waste and recycling containers by a franchised collector.

Some land uses are more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. For example, residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, museums, cultural facilities, parks, and outdoor recreation areas are more sensitive to noise than commercial and industrial land uses. The project site is adjacent to a multi-family residential building, which is considered a noise-sensitive receptor.

The most common sources of noise in the project site vicinity are transportation-related, such as automobiles, trucks, buses and motorcycles. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and because of its proximity to areas sensitive to noise exposure. On August 4, 2017, Rincon Consultants, Inc. performed two 15-minute weekday noise measurements using an ANSI Type II integrating sound level meter. Both measurements were taken during rush hour, between approximately 7:00 AM and 9:00 AM. The noise monitoring results are summarized in Table 10. Figure 16 shows the locations of the noise measurements.

Table 10 Noise Measurement Results

Site	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source (Sunset Boulevard)	Leq[15] (dBA)[1]
1	Project site frontage on Miller Drive	7:19 AM – 7:34 AM	75 feet	66.7
2	North of project site on Miller Place	7:47 AM – 8:02 AM	320 feet	56.2

See Figure 16 for a map of Noise Measurement Locations.

[1] The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement, the Leq was over a 15-minute period (Leq [15]).

Source: Rincon Consultants, field measurements conducted on August 4, 2017, using ANSI Type II Integrating sound level meter. See Appendix D.

a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

c. *Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?*

d. *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

The proposed project could generate temporary noise increases during construction and long-term increases associated with project operation; however, as discussed below, both construction-related and operational noise would be less than significant.

Construction Noise

Noise levels from construction of the proposed project would result from construction of the structure and traffic noise from construction vehicles. Nearby noise-sensitive land uses, including the residences immediately west and north of the project site, would be exposed to temporary construction noise during development of the proposed project. Noise impacts are a function of the type of activity being undertaken and the distance to the receptor location. Additionally, this is an urban area where some construction noise is expected. Construction activity is expected to occur over a period of approximately 16 months. Table 11 shows typical noise levels at construction sites.

Figure 16 Noise Measurement Locations

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Table 11 Typical Noise Levels at Construction Sites

Equipment On-Site	Typical Level (dBA) 25 Feet from the Source	Typical Level (dBA) 50 Feet from the Source	Typical Level (dBA) 100 Feet from the Source
Air Compressor	87	81	75
Backhoe	86	80	74
Concrete Mixer	91	85	79
Crane, mobile	89	83	77
Dozer	91	85	79
Jack Hammer	94	88	82
Paver	95	89	83
Saw	82	76	70
Truck	94	88	82

Noise levels assume a noise attenuation rate of 6dBA per doubling of distance.

Source: Federal Transit Administration (FTA), May 2006

The distance to the nearest sensitive receptor to the project site, a multi-family residence located adjacent to the east, is approximately 25 feet. Typical construction noise levels at 25 feet from the source range from about 86 to 95 dBA. Such levels would exceed ambient noise and would be audible on adjacent properties, including residences immediately west and north of the project site. However, as discussed above, pursuant to Section 9.08.050 of the WHMC, construction is prohibited between the hours of 7:00 PM and 8:00 AM on weekdays and Saturdays; or at any time on Sundays or City holidays. Therefore, construction would not occur during recognized sleep hours for residences. In addition, Mitigation Measure 3.9-2 from the West Hollywood 2035 General Plan FEIR (2010) applies to all new construction in the City and would be a Condition of Approval for the proposed project:

3.9-2 The City shall require construction contractors to implement the following measures during construction activities through contract provisions and/or conditions of approval as appropriate:

- Construction equipment shall be properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (i.e., mufflers, silencers, wraps, etc.). Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power equipment.
- Construction operations and related activities associated with the proposed project shall comply with the operational hours outlined in the WHMC Noise Ordinance, or mitigate noise at sensitive land uses to below WHMC standards. Construction equipment should not be idled for extended periods of time in the vicinity of noise-sensitive receptors.
- Locate fixed and/or stationary equipment as far as possible from noise-sensitive receptors (e.g., generators, compressors, rock crushers, cement mixers). Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on powered construction equipment.

- Where feasible, temporary barriers shall be placed as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Acoustical barriers shall be constructed of material having a minimum surface weight of 2 pounds per square foot or greater, and a demonstrated STC rating of 25 or greater as defined by American Society for Testing and Materials (ASTM) Test Method E90. Placement, orientation, size, and density of acoustical barriers shall be specified by a qualified acoustical consultant.
- Music from a construction site shall not be audible at offsite locations.

The City of West Hollywood's plan check process also includes the requirement to implement a Construction Period Mitigation Plan (CPMP). All developers in West Hollywood are required to prepare a CPMP to address issues such as truck routing, dust control, construction worker parking, hours of operation, noise, and materials storage. The CPMP must describe the construction schedule and phasing and specific noise mitigation measures. Because construction activity would be required to comply with timing restrictions and with the conditions of approval listed above, and would be required to develop a CPMP, noise levels would not exceed ambient noise levels and impacts related to temporary construction noise would be less than significant.

Operational Noise

The proposed project includes the construction of a three-story structure with office and restaurant space and a four-level below grade subterranean parking garage. Existing uses near the project site may periodically be subject to noises associated with the operation of the project, including noise that is typical of office and restaurant developments, such as conversations, delivery trucks, and noise associated with rooftop ventilation and heating systems. The closest sensitive receptors are the residences located immediately west and north of the project site.

Rooftop ventilation and heating systems would be on-site noise generators. Noise levels from commercial heating, ventilation and air conditioning (HVAC) equipment are typically 60-70 dBA Leq at a distance of 15 feet from the source (Illington & Rodkin 2009). Rooftop HVAC systems on the three-story project would be approximately 50 feet from the nearest adjacent residence and would be located at a higher elevation than the adjacent building. Based on a 6 dBA noise attenuation per doubling of distance, noise levels from the HVAC systems at the nearest noise-sensitive receptors would be below the 60 dBA threshold established in the Safety and Noise chapter in the City's 2035 General Plan. In addition, for receptors below level of roof, the roof would obstruct line-of-sight, further reducing noise beyond typical attenuation over distance. Therefore, operational noise impacts from HVAC equipment would be less than significant.

Operation of the proposed office and restaurant space would involve delivery trucks and trash hauling trucks going to and from the project site. An individual delivery truck can generate noise of up to 85 dBA, which could be disruptive if it were to occur at night or in the early morning hours. However, pursuant to Section 9.08.050 of the WHMC, commercial deliveries that would cause unreasonable noise disturbance are not permitted between the hours of 10:00 PM and 8:00 AM, except for normal handling of solid waste and recycling containers by a franchised collector. The project would include an uncovered loading zone on the west side of the proposed building, adjacent to residences. However, noise generated by daytime deliveries and trash pickups would not adversely affect nearby sensitive receptors due to their relatively low frequency, and the lower noise level sensitivity of receptors during the day when deliveries would occur. Moreover, delivery and trash haul noise would be similar to what already occurs in the area due to deliveries and trash pick-up at the project site and nearby properties.

The proposed project would involve a total of 138 parking spaces provided in four levels of subterranean parking. Sources of noise would include general vehicular movement and periodic instantaneous sounds, such as car honking, doors slamming, and car alarms. As noise associated with parking areas would be enclosed within a subterranean parking garage, parking lot noise would not be audible at adjacent uses.

In addition to on-site operational noise, the project would generate vehicle trips that increase roadway noise near the project site. The Technical Memorandum prepared by KOA Corporation (see Appendix E) estimates that the project would generate 1,164 weekday daily trips, including 108 AM peak hour trips and 94 PM peak hour trips. In the vicinity of the project site, these vehicle trips would be distributed on Miller Drive, Sunset Boulevard, and La Cienega Boulevard. Because the Technical Memorandum does not quantify the distribution of new trips on nearby roadways, this analysis makes a conservative assumption that all new vehicle trips would occur on each roadway. Table 12 shows the estimated net increase in peak-hour roadway traffic volumes on the segment of La Cienega Boulevard south of its intersection with Sunset Boulevard and Miller Drive. This road segment was selected for analysis because it is adjacent to noise-sensitive receptors, including residences. It is assumed that the project would not substantially increase vehicle trips on the residential portion of Miller Drive north of the project's driveway because drivers would primarily access the site via Sunset Boulevard or La Cienega Boulevard.

Table 12 Increase in Existing Area Roadway Traffic Volume with Project during AM and PM Peak Hours

Roadway Segment	Existing Peak Hour Trips	Net Increase in Peak Hour Trips from Project	Percentage Increase in Trips
AM Peak Hour			
La Cienega Blvd south of Sunset Blvd	711	108	15.2%
PM Peak Hour			
La Cienega Blvd south of Sunset Blvd	1,041	94	9.0%
Source: KOA Corporation Technical Memorandum (Appendix E)			

Modeling of traffic noise indicates that, in general, a 10 percent increase in traffic volume would raise traffic noise by approximately 0.4 dBA and a 20 percent increase would raise traffic noise by about 0.8 dBA. While West Hollywood has not adopted standards for an increase in traffic noise due to a project, this screening analysis evaluates the project's effect on traffic noise based on the FTA's recommended thresholds. The FTA recommendations, listed in Table 13, are based on the idea that the allowable increase in exposure to traffic noise depends on existing noise levels; as the existing noise level rises, the allowable increase in noise exposure decreases.

Table 13 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (dBA Ldn or Leq)	Significant Noise Exposure Increase (dBA Ldn or Leq)
45-50	7
50-55	5
55-60	3
60-65	2
65-74	1
75+	0

Source: FTA 2006.

The noise measurement conducted at Site 1 along the frontage of the project site by Sunset Boulevard, was found to be 66.7 dBA Leq (as shown in Table 10). Because the ambient noise level next to Sunset Boulevard was recorded to be in the range of 65-74 dBA Leq, it can be reasonably assumed the ambient noise level adjacent to La Cienega Boulevard is in the same range as both arterial commercial corridors. As shown in Table 13, the maximum noise exposure increase for that noise exposure range is 1 dBA Leq. As the traffic generated by the project would increase ambient noise levels by less than 1 dBA Leq, the project would have a less than substantial permanent increase in ambient noise level. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S. The City has not adopted any thresholds or regulations addressing vibration. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. The vibration thresholds established by the Federal Transit Administration (FTA) are 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). The threshold for the proposed project is 72 VdB for residences during hours when people normally sleep, as these are the only sensitive receptors in the vicinity of the project site. In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

According to the West Hollywood cultural resources database, designated historic resources and potentially historic resources are located in the vicinity of the project site. The closest historic buildings to the project site are the Piazza del Sol building located at 8439 Sunset Boulevard and the El Palacio building located at 8491 Fountain Avenue, both approximately 530 feet east and south, respectively, of the project site. The proposed project would involve standard construction activities that are anticipated to temporarily increase groundborne vibration on the project site. Certain types of construction equipment generate substantial levels of vibration, which could result in significant impacts to nearby historic structures. Table 14 provides vibration levels associated with construction equipment of potential concern. Construction of the proposed project would utilize construction equipment typical of commercial development in urbanized area and would not utilize pile drivers, which have particularly high levels of vibration impact.

Table 14 Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 ft (in/sec)	Approximately VdB at 25 ft	Approximately VdB at 50 ft	Approximate VdB at 530 ft
Large Bulldozer	0.089	87	81	60.5
Loaded Truck	0.076	86	80	59.5
Jack Hammer	0.035	79	73	52.5

Source: FTA, May 2006

As shown in Table 14, vibration levels would reach less than 61 VdB at the closet historic structures, Piazza del Sol building and El Palacio building, both located approximately 530 feet away from the project site, which is less than the FTA threshold of 100 VdB for fragile buildings and 95 VdB for extremely fragile historic buildings. Therefore, the project would have a less than significant with respect to vibration.

Vibration from construction activities could also have an impact on nearby noise-sensitive receptors, such as residences, located approximately 50 feet to the west and north of the project site. As shown in Table 14, construction-caused vibration levels could temporarily and intermittently reach up to 81 VdB at these sensitive receptors, which would exceed the groundborne velocity threshold level of 72 VdB established by the Federal Railway Administration for residences where people normally sleep.

However, as discussed earlier in this section, pursuant to Section 9.08.050 of the WHMC, construction is prohibited between the hours of 7:00 PM and 8:00 AM on weekdays and Saturdays; or at any time on Sundays or City holidays. Therefore, construction would not occur during recognized sleep hours for residences. In addition, the vibration levels would not approach 100 Vdb, which is the threshold where minor damage can occur in fragile buildings. As construction activity would be required to comply with these timing restrictions, impacts related to temporary construction noise would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. *For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?*

No airport or airstrip is located within or adjacent to the City of West Hollywood. The nearest airport is Santa Monica Airport, located over six miles southwest of the project site. Therefore, no impact related to aircraft noise would occur.

NO IMPACT

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13 Population and Housing

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

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project would replace a 31-unit multi-family residential building with an infill commercial development. Implementation of the project would not directly generate population growth. However, the project would involve commercial uses, which would generate additional employment opportunities. Table 15 shows the potential increase in job opportunities as a result of the proposed project.

Table 15 Employment Increase Resulting from Proposed Project

Commercial Land Use	Amount	Employment Density	Total
Office	11,520 sf	319 sf/employee	37
Restaurant	9,775 sf	424 sf/employee	24
Total New Employees			61

sf = square feet
Source: Southern California Association of Governments (SCAG) Employment Density Study 2001, Table II-B, Los Angeles County, http://www.mwcog.org/file.aspx?A=QTTlTR24POOOUIw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D

As shown in Table 15, the proposed project would add approximately 61 jobs. This may indirectly contribute to economic growth. The additional population would likely contribute to the local economy as demand for general goods increases, which in turn could result in economic growth for various sectors. The latest South California Association of Governments (SCAG) growth forecast indicates that citywide employment was 29,800 in 2012 and will grow to 34,600 in 2020, 36,300 in 2035 and 37,300 in 2040 (SCAG 2016). This is an increase of 7,500 jobs by 2040. The addition of 61 jobs would be within SCAG's forecasted job growth for the City. The proposed project would not induce economic expansion to the extent that significant environmental impacts directly associated with the project's contribution would occur. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

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

The project site is currently developed with a three-story, 16,240 square-foot multi-family residential building. The ground floor level is a covered parking area and the upper two floors contain 31 residential units. All existing structures would be demolished in order to accommodate the proposed project, displacing existing residents. Pursuant to Section 17.52.020 of the WHMC, the owner of the existing apartment complex would be required to pay tenant relocation fees. According to the California Department of Finance, the City has a vacancy rate of approximately 8.4 percent which translates to over 2,000 vacant residential units. These vacant units could provide new housing opportunities for the displaced residents (California Department of Finance 2017). Therefore, impacts related to the displacement of housing units and people would be less than significant.

LESS THAN SIGNIFICANT IMPACT

14 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1	Fire protection?	☐	☐	■	☐
2	Police protection?	☐	☐	■	☐
3	Schools?	☐	☐	☐	■
4	Parks?	☐	☐	☐	■
5	Other public facilities?	☐	☐	■	☐

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

The Los Angeles County Fire Department (LACFD) provides fire protection and emergency medical services for the City of West Hollywood, which is within LACFD's Battalion 1 service area. The LACFD operates six fire stations within the Battalion 1 area, with two fire stations (#7 and #8) located within West Hollywood. The closest fire station to the project site is Fire Station #7, located at 864 N. San Vicente Blvd approximately 0.7 miles southwest of the project site. As identified in Section 14.04.010 of the WHMC, the West Hollywood has adopted the 2017 Los Angeles County Title 32 (Fire Code), an amended California Fire Code (2016 edition) and an amended International Fire Code (2015 Edition). The City's Fire Code is based on the Lose Angeles County Fire Code supplemented by the other fire codes identified. The Fire Code contains regulations related to construction, maintenance, and the design of buildings and land uses. The proposed project would be required to adhere to all Fire Code requirements.

The proposed project would replace a multi-family residential building with a three-story structure with office and restaurant space. The project is infill development within the existing service area of the LACFD. In addition, as described under Section 13, *Population and Housing*, the proposed project would be within the growth projections contained in the City's 2035 General Plan. Therefore, the proposed project would not place an unanticipated burden on fire protection services. The project would not affect response times or service ratios such that new or expanded fire facilities would be needed (City of West Hollywood 2010). Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Law enforcement services in West Hollywood are provided by contract with the Los Angeles County Sheriff's Department (LACSD). Protection services include emergency and non-emergency police response, routine police patrols, investigative services, traffic enforcement, traffic investigation, and parking code enforcement. The LACSD has established the West Hollywood Sheriff's Department and operates two stations: the headquarters for West Hollywood, located at 780 N. San Vicente Boulevard, and a sub-station at Universal City Walk. LACSD has mutual aid agreements with the City of Los Angeles and the City of Beverly Hills police departments.

The proposed project would replace a multi-family residential building with an infill commercial development. The reduction of residential uses on the project site would incrementally decrease demand for police protection services compared to existing uses. According to the City's General Plan FEIR, the City has a ratio of 3.6 sworn officers per 1,000 residents, which exceeds the average for cities in the Western United States of 1.7 officers per 1,000 residents (City of West Hollywood 2010). The proposed project would not reduce the ratio of officers to residents. Therefore, the proposed project would not affect service ratios such that new or expanded police facilities are needed. In addition, the proposed project would be within the growth projections contained in the City's General Plan and would not place an unanticipated burden on police protection services. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The Los Angeles Unified School District (LAUSD) provides public school services to West Hollywood residents for grades kindergarten through 12. Only two public schools, West Hollywood Elementary, at 970 North Hammond Street, and West Hollywood Community Day School, at 1049 North Fairfax Avenue, are within the City boundaries.

The project would replace a 31-unit, multi-family residential building with office and restaurant space. Therefore, the project would decrease the demand for public school services, reducing the potential number of students that may need school services. Nevertheless, the project applicant would be required to pay standard commercial school fees to offset any impacts. With payment of school impact fees, the project would have no impact related to schools.

NO IMPACT

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

West Hollywood has six developed parks in the City, amounting to 15.31 acres of parkland (City of West Hollywood 2010). These include, Formosa Park, Havenhurst Park, Kings Road Park, Plummer Park, West Hollywood Park, and William S. Hart Park, which is located 0.25 miles to the northeast of the project site.

The project would replace a 31-unit, multi-family residential building with office and restaurant space and, therefore, would reduce the demand for parks and recreation compared to the existing residential building. Therefore, project implementation would not require the development of new park facilities. The project would have no impact related to parks.

NO IMPACT

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

As discussed in Section 13, *Population and Housing*, the project would not add substantial population to West Hollywood. Therefore, the project would not substantially increase demand for public facilities and resources. Impacts to stormwater, wastewater, and water facilities are discussed in Section 18, *Utilities and Service Systems*. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	□	□	□	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	□	□	□	■

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As described in Section 13, *Population and Housing,* the proposed project would not involve the construction of housing and would not generate population growth. Therefore, the proposed project would not increase demand for recreational facilities. There would be no impact to recreational facilities.

NO IMPACT

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16 Transportation/Traffic

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

The analysis in this section is based primarily on the Technical Memorandum prepared by KOA Corporation in September 2017 for the project site. The Technical Memorandum is included as Appendix E of this Initial Study.

As mentioned in the Project Site Background and Existing Setting, the City of West Hollywood certified a previous EIR in 2011 for a development on the project site and an adjacent lot. KOA Corporation completed a Traffic Study for the EIR in 2009. The following 11 key intersections were analyzed in the Traffic Study:

- Holloway Drive/Horn Avenue & Sunset Boulevard
- Sunset Plaza Drive & Sunset Boulevard
- Alta Loma Road & Sunset Boulevard
- La Cienega Boulevard & Sunset Boulevard
- Kings Road & Sunset Boulevard
- Sweetzer Avenue & Sunset Boulevard
- La Cienega Boulevard & Fountain Avenue
- Olive Drive & Fountain Avenue
- La Cienega Boulevard & Holloway Drive
- Croft Avenue/Holloway Drive & Santa Monica Boulevard
- La Cienega Boulevard & Santa Monica Boulevard

In addition to the 11 study intersection, the following three residential street segments were analyzed:

- Larrabee Street between Harratt Street and Betty Way
- Palm Avenue between Nellas Street and Harratt Street
- Hancock Avenue between Holloway Drive and West Knoll Drive

The trip generation rates estimates for the previous project were prepared using trip generation rates from the Institute of Transportation Engineer's, Trip Generation, 7th Edition. The estimated project trip generation took into account the trips generated by the existing apartments and applies them in the form of "trip credits." The 2009 Traffic Study found the project would generate 910 weekday daily trips, 74 AM peak hour, 102 midday peak hour, and 74 PM peak hour trips.

Based on information in the 2009 Traffic Study, the 2011 EIR found that the project would have two significant but mitigable impacts. Project construction activities and the associated truck trips and worker trips were found to potentially temporarily interrupt the local roadway system. However, with implementation of Mitigation Measure T-1, which requires the implementation of a Construction Staging and Traffic Management Plan, the 2011 EIR concluded that impacts would be less significant.

The 2011 EIR also found that the 2011 project-generated traffic would exceed City of West Hollywood significance thresholds at one intersection, Sunset Boulevard and La Cienega Boulevard/Miller Drive, during all analyzed peak periods. However, the restriping of the northbound approach on La Cienega Boulevard from an exclusive left-turn lane and an exclusive right-turn lane to a shared left/through/right-turn lane and an exclusive right-turn lane, as required by Mitigation Measure T-2 in the 2011 EIR, was found to reduce impacts to a less than significant level. All other impacts were found to be less than significant.

The 2017 KOA Technical Memorandum (Appendix E) provides an update to the traffic impact study completed in 2009. The impacted intersection at Sunset Boulevard and La Cienega Boulevard/Miller Drive was analyzed with the current (modified) roadway conditions for determination of traffic impacts caused by the proposed Project.

Traffic Study Methodology

The northbound approach of the study intersection has been restriped since 2009, to provide dual left-turn lanes, one through lane, and one exclusive right-turn lane. The eastbound approach has been restriped as well to provide for an exclusive right-turn lane. These improvements were part of the mitigation measures associated with the Sunset-La Cienega development (formerly the Sunset Millennium Project).

The current lane configuration does not match with the mitigation measure recommended in the 2009 study. However, this configuration would provide more capacity (more than what the 2009 mitigation measure would have provided) to accommodate the heavy turn movements at the northbound approach and at the overlapping eastbound right-turn movement. The new approach lane configurations have been incorporated into the existing conditions analysis as identified in the 2017 KOA Technical Memorandum.

New manual intersection turning movement counts were collected on Thursday, August 31, 2017 during the timeframes of 7:00 AM to 10:00 AM and from 4:00 PM to 7:00 PM at the analyzed intersection, Sunset Boulevard and La Cienega Boulevard/Miller Drive.

The City of West Hollywood provided for the study intersection the signing and striping as-built plan, the traffic signal timing plan, and a list of cumulative/planned (related) projects. The related projects list and associated trip generation for the related projects is shown in Attachment D of the 2017 KOA Traffic Memorandum (appendix E of this IS-MND). The included projects are all located within an approximate 1.5-mile radius from the project site. As shown in the attachment, there are approximately 39 related projects in the City of West Hollywood and nine related projects in the City of Los Angeles which would generate an estimated 61,110 daily total trips throughout the study area. These projects were considered to potentially contribute measurable traffic volumes to the study intersection during the future analysis period.

The study intersection new lane configuration and signal timing plan was input into the Synchro operations analysis software for determination of existing traffic conditions and future traffic conditions with and without the proposed project. For future conditions, the year 2020 was selected for analysis based on the anticipated completion date of the project. The annual growth rate of one percent was utilized for traffic volumes increases at the study intersections. A growth factor of 1.0303 was used to define the future baseline scenario. Level-of-Service Methodology

Level of service (LOS) is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from A to F, with LOS A indicating no congestion, and LOS F indicating unacceptable congestion and delay. The Highway Capacity Manual (HCM) is a standard reference published by the Transportation Research Board (TRB) and the City of West Hollywood designated tool for signalized intersections. The HCM method takes into account existing signal cycle lengths, minimum green times, vehicle volumes, pedestrian and bike movements, user defined saturation flow rates, storage bay lengths, and other variables if operations and timing. The resulting intersection average delay per approaching vehicle in seconds then defines a level of service value for that particular peak-hour period.

Impact Thresholds

The City of West Hollywood has established specific thresholds for project-related increases in delay at signalized study intersections, when intersecting roadways are both commercial corridors. Table 16 shows the increases in peak-hour delay that are considered significant impacts.

Table 16 West Hollywood Peak-Hour Delay Thresholds

Level of Service	Final Delay	Project Related Delay Increase
D	35 – 55 seconds	12 seconds or greater
E and F	55 seconds or more	8 seconds or greater

Note: Final delay is the delay at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.

a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?*

b. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

The proposed project would include 9,775 square feet of high-quality sit-down restaurant and 11,520 square feet of office use. The project would replace the 31-unit multi-family residence on-site. The change in land use would impact the amount of traffic on nearby roadways. Traffic volumes generated by the proposed project were estimated based on trip rates established by *Trip Generation (9th Edition)*, published by the Institute of Transportation Engineers (ITE), unless otherwise noted. Trip rates and traffic generation for the project are provided in Table 17.

Table 17 Project Trip Generation

			AM Peak Hour			PM Peak Hour		
Land Use	Size (sf)	Average Weekday	In	Out	Total	In	Out	Total
Proposed Project								
Office	11,520	127	16	2	18	3	14	17
Quality Restaurant	9,775	879	4	4	8	49	24	73
Subtotal		1,006	20	6	26	52	38	90
Existing Use								
Apartment	31 units	(206)	(3)	(13)	(16)	(12)	(7)	(19)
Total Net Difference in Trips		800	17	(7)	10	40	31	71

sf = square feet, ( ) denotes subtraction

Source: KOA Corporation Technical Memorandum (Appendix E)

As shown in Table 17, the proposed project would generate a net increase of 800 weekday daily trips, including 10 AM peak hour trips and 71 PM peak hour trips. For comparison, the 2009 project was estimated to generate 906 weekday daily trips, including 74 weekday AM peak hour trips and 74 weekday PM peak hour trips. Therefore, the proposed project would generate 106 fewer daily trips, 64 fewer AM peak hour trips, and 3 fewer PM peak hour trips.

Three scenarios were analyzed to determine the project's traffic impacts to the LOS of the intersection of Sunset Boulevard and La Cienega Boulevard/Miller Drive during the weekday AM and PM Peak periods. These include existing conditions, future (2020) conditions without the project, and future (2020) conditions with the project. The year 2020 was selected for analysis based on the anticipated completion date of the project. The intersection of Sunset Boulevard and La Cienega Boulevard/Miller Drive was selected because this was the only location that was previously identified to have a potential significant impact. Table 18 shows the impacts to LOS for existing, future conditions without the project, and future conditions with the project.

Table 18 Intersection Impact Summary for Sunset Boulevard and La Cienega Boulevard/Miller Drive

Peak Period	Existing		Future Without Project		Future With Project		Change in Delay	Significant Impact?
	Delay	LOS	Delay	LOS	Delay	LOS		
AM	19.7	B	23.9	C	23.9	C	0.0	No
PM	26.5	C	40.8	D	43.1	D	2.3	No

Source: KOA Corporation Technical Memorandum (Appendix E)

As shown in Table 18, under existing conditions the intersection operates at acceptable LOS C or better during both AM and PM peak hours. The future (2020) without project scenario, which includes the addition of related project trips and the applied growth rate , was found to degrade the intersection to LOS D during PM peak hour. Under future with project conditions, the intersection would continue to operate at LOS D during PM peak hour; therefore, the project would have a less than significant impact to the traffic on the intersection of Sunset Boulevard and La Cienega Boulevard/Miller Drive.

Site Access and Circulation

Vehicular access to the subterranean parking garage would be provided via a ramp from Miller Drive on the southwestern corner of the site. The ramp would serve both inbound and outbound traffic for the proposed project. Vehicles would be able to turn right and left when exiting the site. The project meets all requirements with respect to parking space size, driveways, drive aisles, access ramps, ramp slopes, and parking area slopes. The proposed project would provide adequate maneuverability and visibility and impacts would be less than significant (KOA 2017).

Parking

The project would provide a total of 138 on-site parking spaces, six of which would be compliant with the ADA. Ten bicycle parking spaces would also be provided. Parking level 1 (P1) would contain valet parking spaces, two elevators, and two fully automated automobile lifts to lower parking levels. Parking levels 2 – 4 (P2 – P4) would be fully automated and accessed through the lifts on level P1. The project would be consistent with all WHMC and SSP vehicular and bicycle parking requirements. Therefore, impacts would be less than significant.

Construction Traffic

Construction activities would require the use of haul equipment and delivery trucks during demolition and construction. During construction, it is estimated that the project would export 24,600 cubic yards of earth material from the project site. Assuming approximately 16 cubic yards per truck trip, the project would require approximately 1,538 round-trip hauling trips. Assuming hauling would occur over approximately 120 days, there would be approximately 13 round-trip hauling trips to and from the site per day. These trips would be spread throughout the construction work hours and would not significantly affect traffic operations.

Additionally, construction worker traffic would temporarily add trips to the roadway infrastructure and require parking. Additional trips generated by the truck deliveries and construction employees could affect traffic flow in the study area. Construction activity could impact traffic along Sunset Boulevard and La Cienega Drive, pedestrian traffic flow near the project site could be altered as a result of construction, and the availability of parking, especially on-street parking, could be impacted if on-site parking for construction employees were not provided.

The City of West Hollywood's plan check process includes the requirement for implementing a "Construction Mitigation Plan." Portions of this plan that relate to traffic include:

- Describe how much of the public street, alleyway, or sidewalk is proposed to be used in conjunction with construction.
- Describe anticipated construction-related truck routes, number of truck trips, hours of hauling and parking locations.
- Provide a construction-period parking plan which shall minimize use of public streets for parking.
- Describe where workers will park, efforts to carpool to the job site.

The developer would also be required to ensure that employees can either park on-site or at another off-site location. Off-site parking in the adjacent residential neighborhoods is prohibited. These City requirements would reduce impacts related to traffic and pedestrian flow and temporary parking impacts during construction. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No airport or airstrip is located within or adjacent to the City of West Hollywood. The nearest airport is Santa Monica Airport, located over six miles southwest of the project site. The proposed project would not affect air traffic patterns. No impact would occur.

NO IMPACT

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

The project would comply with CBC standards and would not include any design features that would increase hazards. In addition, the proposed project is a fairly typical commercial development and would not result in vehicles or equipment, such as farm equipment or tractors, that would be incompatible with the existing land uses surrounding the area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project result in inadequate emergency access?

The proposed project would be required to conform to traffic and safety regulations that specify adequate emergency access measures, such as those contained in the City's Fire Code and CBC. The project would involve commercial development that would comply with the WHMC design standards and would not result in any new structures that would hinder emergency access or result in road closures. Adherence to existing state and federal regulations would reduce potential impacts related to emergency access to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

The roads in the near vicinity of the project site do not include designated bicycle lanes. The project would not modify this. However, the project would include ten bicycle parking spaces. Therefore, the project would have a less than significant impact on bicycle facilities.

The pedestrian network near the project site consists of crosswalks, pedestrian crossings, and sidewalks. Sidewalks are available on all streets in the near vicinity of the project site and all intersections have a crosswalk on at least one approach. The proposed project would not modify or alter access to the existing pedestrian facilities. Therefore, impacts would be less than significant.

The Los Angeles County Metropolitan Transportation Authority (Metro) provides existing public transit service in the vicinity of the project. One bus route serves the surrounding area, the Metro Line 2-302, which has a stop less than 100 feet southeast of the project. The transit facilities in the study area consist of one bus stop with a bench and shelter. The project would not interfere with the existing bus stop. Therefore, impacts to public transit facilities would be less than significant.

The project would have no impact with respect to adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, and would not otherwise substantially reduce the performance or safety of such facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	■	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Cod Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe.	☐	■	☐	☐

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

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

Tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: 1) included or determined to be eligible for inclusion in the California Register of Historic Resources (CRHR) or 2) included in a local register of historical resources. Tribal cultural resources are also resources determined by the lead agency (i.e., City of West Hollywood), in its discretion and supported by substantial evidence, to be significant. In making this determination, the lead agency is required to consider the significance of the resource to a California Native American tribe.

The CRHR includes resources listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP). Pursuant to Public Resources Code, Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Demolition, replacement, substantial alteration, and relocation of historic properties are actions that would change the significance of an historic resource (California Code of Regulations, Title 14, 15064.5).

As required under AB 52, the City prepared and mailed consultation request letters to tribes with traditional lands or cultural places located in the vicinity of the site as provided by the Native American Heritage Commission. The City received one request for consultation from Gabrieleño Band of Mission Indians-Kizh Nation, who expressed concern over the project's location which would be within their ancestral territory. A representative from the City spoke with the Chairperson of the Gabrieleno Band of Mission Indians – Kizh Nation, Andrew Salas, on October 2, 2017. Mr. Salas also emailed suggested mitigation measures to be incorporated to the project to City staff. These suggested mitigation measures have been incorporated below.

The project site has been previously graded and disturbed during construction of the existing structure. The project site is in an urban area and no remains or resources have been found on or near the project site during previous construction activities. Therefore, no tribal cultural resources are anticipated to be discovered during construction. However, new ground disturbance associated with the subterranean parking garage would be below the level of past disturbance. As a result, there is the possibility of encountering undisturbed unanticipated tribal cultural resources. The following mitigation measures are required to protect tribal cultural resources in the event they are discovered, including tribal cultural resources associated with the Gabrieleño Band of Mission Indians-Kizh Nation. In addition, Mitigation Measure CR-3 in Section 5, *Cultural Resources*, would be required to reduce impacts associated with discovery of Native American remains or funerary objects.

Mitigation Measures

The following mitigation measures would be required to avoid or reduce the project's potentially significant impacts to tribal cultural resources.

TCR-1 **Retain A Native American Monitor.** The project applicant shall be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians-Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, weed abatement, boring, grading, excavation, drilling, and trenching, within the project area. The monitor(s) must be approved by the Tribal Representatives and will be present on-site during the construction phases that involve any ground disturbing activities. The Native American Monitor(s) will complete monitoring logs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The monitor(s) shall possess Hazardous Waste Operations and Emergency Response (HAZWOPER) certification if the site has hazardous concerns. In addition, the monitor(s) will be required to provide insurance certificates, including liability insurance, for any archaeological resource(s) encountered during grading and excavation activities pertinent to the provisions outlined in the California Environmental Quality Act, California Public Resources Code Division 13, Section 21083.2 (a) through (k). The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for archeological resources.

TCR-2 **Unanticipated Discovery of Tribal Cultural Resources.** All archaeological resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist and Native Monitor. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. If a resource is determined by the Qualified Archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or has a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the applicant and the City to develop a formal treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be donated to a local school or historical society in the area for educational purposes.

TCR-3 **Professional Standards:** Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Tribal Cultural Resources in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

Implementation of Mitigation Measures TCR-1, TCR-2, TCR-3, and CR-3 (see Section 5, *Cultural Resources*) would ensure the protection of tribal cultural resources that may be present on the site during construction activities. This measure would reduce the potentially significant impact to tribal cultural resources to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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18 Utilities and Service Systems

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

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

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

e. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The sewage collection system within West Hollywood consists of City-owned local sewers and County-owned trunk sewer links. Within the City, there are 39 miles of gravity-driven piping that provides sewer service to every parcel in the City. None of the regional trunk sewers are at or near capacity (City of West Hollywood 2010). Wastewater from the City is carried to the Hyperion Treatment Plant (HTP) in Playa Del Rey. This wastewater treatment plant provides full secondary treatment (Los Angeles Bureau of Sanitation 2016). The HTP has a dry-weather flow capacity of 450 million gallons per day (MGD) for full secondary treatment and an 850 MGD wet-weather capacity. On average, 275 million gallons of wastewater enters the HTP on a dry weather day (Los Angeles Bureau of Sanitation 2016). Therefore, the current available capacity of the HTP is approximately 175 MGD.

The project would replace a 31-unit, multi-family residential building with office and restaurant space. Table 19 shows the estimated wastewater generated by the proposed project. The project would generate approximately 7,243 gallons of wastewater per day. This increase would be less than 0.1 percent of the existing unused capacity of the HTP. Therefore, the proposed project would not adversely affect the City's wastewater treatment system or result in the construction of new treatment facilities. In addition, the City requires developers to pay a wastewater mitigation fee to offset any net increases in wastewater flow from new construction and finance any needed improvements to the wastewater conveyance system. Impacts would be less than significant.

Table 19 Estimated Wastewater Generation

Land Use	Quantity	Generation Factor	Daily Generation (gpd)
Proposed Uses			
Office	11,520	200 gallons/1,000 sf/day	2,304
Commercial (Restaurant)	9,775	1,000 gallons/1,000 sf/day	9,775
Total			12,079
Existing Uses			
Residential-Multi Unit	31 dwelling units	156 gallons/dwelling unit/day	(4,836)
Net Wastewater Generation			7,243

gpd = gallons per day

sf = square feet

( ) denotes subtraction

Source: Los Angeles County Sanitation Districts 2016

LESS THAN SIGNIFICANT IMPACT

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

Storm drain infrastructure in West Hollywood is owned and operated by the City of West Hollywood or the County of Los Angeles. West Hollywood is a co-permittee under the Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach

(Order No. R4- 2012-0175, NPDES Permit No. CAS004001, 2012). Under the NPDES permit, the proposed project would be required to prepare a Standard Urban Stormwater Mitigation Plan (SUSMP) and incorporate stormwater mitigation measures into design plans for City review and approval. The proposed project also would comply with Chapter 15.56 and Section 19.20.190 of the WHMC, which provide measures to minimize stormwater runoff and contamination of runoff.

The project site is almost entirely covered with approximately 14,472 square feet of impervious surfaces. The proposed project would incorporate landscaped areas around the site, including trees, shrubs, grasses, and a rooftop deck garden, decreasing the amount of impervious surfaces on the site by approximately 1,402 square feet. The project would be designed in order for 55 percent of the front yard area to have permeable surfaces and 50 percent of the required side yards to have permeable surfaces. The project would also meet the non-permeable surfaces requirements of Section 19.20.190D of the WHMC. The decrease in impervious surface area on the project site would incrementally increase ground water recharge and decrease the flow rate of surface water runoff entering stormwater drains. The project would also include a rooftop deck garden, which would help capture and treat stormwater runoff.

Adherence to applicable regulations and the decrease in impervious surfaces at the project site would result in less than significant impacts.

LESS THAN SIGNIFICANT IMPACT

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

Water service for the project would be provided by the LADWP. Primary sources of water for the LADWP service area include water purchased from the Metropolitan Water District of Southern California (MWD) (which imports water from Northern California through the State Water Project's California Aqueduct and from the Colorado River through the Colorado River Aqueduct), the Los Angeles Aqueduct (which brings water directly from the eastern Sierra Nevada Mountains), and local groundwater (LADWP 2015; City of West Hollywood 2010).

The LADWP addresses issues of water supply in the 2015 Urban Water Management Plan (UWMP). The 2015 UWMP projected water service supply and demand from 2020 through to 2040 for normal, single dry year, and multiple dry year conditions. In each of the three hydrological conditions, the projected water demand was calculated taking into account growth in billing data, water conservation efforts, and demographics. The 2015 UWMP identifies a water demand forecast of 709,500 acre-feet per year (AFY) for LADWP's service area in 2040 that can be reduced to 565,600 AFY with the successful implementation of water recycling and conservation program (LADWP 2015).

Water is currently used at the development for general and sanitary purposes. Assuming that water use is 120 percent of wastewater generation, the existing multi-family development on-site uses approximately 5,803 gallons of water per day (4,836 X 1.2), which equates to 6.5 AFY. Development of the project would increase demand for potable water. The proposed project would use approximately 8,692 gallons of water per day (7,243 X 1.2), which equates to 9.74 AFY. This would result in a net increase of approximately 2,889 gallons, which equates to 3.24 AFY.

The projected net water demand of approximately 3.24 AFY is less than 0.1 percent of the projected water supply/demand for the LADWPs service territory (approximately 565,600 AFY). The UWMP projections utilize SCAG 2016 RTP population forecasts to estimate future demand through 2040. The 2015 UWMP states the LADWP service territory can reliably meet the projected water demand under each of the hydrological conditions through 2040 (LADWP 2015). As the proposed project would fall within 2040 SCAG and 2035 General Plan growth forecasts for West Hollywood, the project would have sufficient water supplies available to serve the project from existing entitlements and resources. No new or expanded entitlements would be needed to serve the project. The project would not result in a substantial physical deterioration of public water facilities. Therefore, impacts would be less than significant.

In January 2014, California Governor Brown declared a drought State of Emergency and called on Californians to voluntarily reduce water consumption by 20 percent. In the past two years, the City of West Hollywood has intensified efforts to use less water and to promote conservation. The City has launched a water conservation campaign aimed at encouraging residents and businesses to make adjustments in their daily routines in order to conserve water (City of West Hollywood 2017b). These efforts would further decrease projected water demand and project impacts on water supplies.

LESS THAN SIGNIFICANT IMPACT

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

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

The City of West Hollywood contracts with Athens Services, a private company to collect, transport, and dispose of solid waste for all residential and commercial uses (City of West Hollywood 2010). Solid waste from West Hollywood is collected by Athens Services and taken to their recycling facility, the City of Industry Materials Recovery Facility (MRF) (Athens Services 2017). Food waste is processed and delivered to their compost facility, American Organics, in Victorville. Waste that cannot be recycled is disposed at the following facilities on a regular basis: Sunshine Canyon Landfill, Simi Valley Landfill, and City of Commerce's Waste to Energy Incinerator. Table 20 summarizes the permitted daily throughput, estimated average waste quantities disposed, and remaining capacity for these facilities.

Table 20 Solid Waste Disposal Facilities

Facility	Permitted Daily Throughput (ton/day)	Average Daily Waste Quantities Disposed (tons/day)	Estimated Remaining Daily Capacity (tons/day)
City of Industry MRF[1]	5,000	796	4,204
Sunshine Canyon City/County Landfill[2]	12,100	8,048	4,052
Simi Valley Landfill and Recycling Center[3]	9,250	Not Available	–
Commerce Refuse-to-Energy Facility[4]	1,000	425	575

Sources:

[1] Los Angeles County Department of Public Works (LACDPW) 2013.

[2] LACDPW 2014a.

[3] LACDPW 2014b.

[4] LACDPW 2014c.

As shown in Table 21, the proposed project would generate an estimated 3 pounds, or 0.0015 tons, less solid waste per day than the existing building on-site. The landfills listed in Table 20 have adequate capacity to dispose of waste generated by the proposed project. Therefore, impacts would be less than significant.

Table 21 Estimated Project Solid Waste Generation

Land Use	Size	Generation Factor	Total (lbs/day)	Total (tons/day)
Proposed Project				
Office	11,520	0.006 lbs / sf / day	69.12	0.035
Commercial (Restaurant)	9,775	5 lbs / 1,000 sf / day	48.9	0.024
Subtotal			118.02	0.059
Existing Uses				
Residential-Multi Unit	31 units	4 lbs / dwelling unit / day	(124.0)	(0.062)
Total Net Solid Waste Generation			– 5.98	– 0.003
Total Solid Waste Sent to Landfill (assuming 50% diversion rate)			– 2.99	– 0.0015

sf = square feet

lbs = pounds

( ) denotes subtraction

Source: CalRecycle Waste Generation Rates 2016

LESS THAN SIGNIFICANT IMPACT

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19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	■	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a. Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As noted under Section 4, Biological Resources, implementation of the proposed project may have potentially significant impacts on biological resources. There are multiple landscaping trees on properties surrounding the site and on the adjacent hillside parcel to the north, including a coast live oak (Quercus agrifolia) at the top of the cliff, which may be disturbed during construction activities. Therefore, nesting birds and nests could be disrupted. Mitigation Measure BIO-1 would reduce these potential impacts to a less than significant level.

As discussed in Section 5, *Cultural Resources*, ground-disturbing activities associated with construction of the project could result in significant impacts to archaeological, paleontological, and human remains. Mitigation Measures CR-1, CR-2, and CR-3 would reduce these potential impacts to a less than significant level.

As discussed in Section 17, *Tribal Cultural Resources*, project ground-disturbing activities could also potentially result in adverse effects on unanticipated tribal cultural resources. Mitigation Measure TCR-1 through TCR-3 would reduce these potential impacts to less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

There are several planned or pending projects in the immediate vicinity of the project site (see related project list in project traffic study included in Appendix E). Among these are the 8430 Sunset Boulevard project, which includes 125 condominium units and 35,000 square feet of commercial space, and the 8490/8500 Sunset project, which includes 280 hotel rooms, 30,000 square feet of retail space, 19- condominium units, and 78,500 square feet of commercial space. Cumulative impacts with some of the resource areas are addressed in the individual resource sections above (air quality, greenhouse gases, noise, water supply, waster generation, and solid waste) and would be less than significant. Some of the other resource areas were determined to have no impact in comparison to existing conditions and therefore would not contribute to cumulative impacts, such as Agricultural and Forestry Resources, Mineral Resources, and Recreation. As such, cumulative impacts in these issue areas would also be less than significant (not cumulatively considerable). As described in Section 16, *Transportation,* the traffic analysis took into account cumulative planned and pending projects in the study area and impacts were found to be less than significant. Therefore, implementation of the project would not make substantial contribution to any cumulative impacts and would result in less than significant cumulative environmental impacts.

LESS THAN SIGNIFICANT IMPACT

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

Effects to human beings are generally associated with air quality, noise, traffic safety, geology/soils and hazards/hazardous materials. As discussed in this Initial Study, implementation of the project would result in less than significant environmental impacts with respect to the issue areas with mitigation incorporated. The geotechnical recommendations and mitigation measure discussed in Section 6, *Geology and Soils*, would reduce the risks of seismically induced liquefaction, lateral spreading, and seismic settlement to a less than significant. Mitigation Measures GEO-1 and GEO-2 would reduce health and safety risks to human beings, and would result in less than significant impacts. The project would not cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to the City of Palo Alto. Laurie Yelton is the project planner from the City of Palo Alto. Persons involved in data gathering analysis, project management, and quality control include the following.

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Appendix A

Air Quality Modeling Results

Sunset Boulevard Commercial Project

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	11.52	1000sqft	0.34	11,520.00	0
Enclosed Parking with Elevator	54.08	1000sqft	0.00	54,080.00	0
High Turnover (Sit Down Restaurant)	9.78	1000sqft	0.00	9,775.00	0

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.2 **Precipitation Freq (Days)** 31

Climate Zone 11 **Operational Year** 2020

Utility Company Los Angeles Department of Water & Power

CO2 Intensity (lb/MWhr) 1227.89 **CH4 Intensity (lb/MWhr)** 0.029 **N2O Intensity (lb/MWhr)** 0.006

1.3 User Entered Comments & Non-Default Data

Sunset Boulevard Commercial Project - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use - Lot acerage is 0.34

Construction Phase - Construction times based on construction schedule 7/31/17.

Trips and VMT -

Demolition -

Grading - 24,600 cubic yards over 0.34 acres

Architectural Coating -

Vehicle Trips - Traffic generation rates provided by City.

Area Mitigation - SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Water And Wastewater - Water rates from Table 15 converted from gpd and multiplied by 120 percent.

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD rule 403

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	5.00	75.00
tblConstructionPhase	NumDays	100.00	160.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	NumDays	1.00	30.00
tblConstructionPhase	PhaseEndDate	6/20/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	6/6/2018	3/29/2019

Sunset Boulevard Commercial Project - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseEndDate	1/12/2018	1/19/2018
tblConstructionPhase	PhaseEndDate	1/17/2018	8/17/2018
tblConstructionPhase	PhaseEndDate	6/13/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	1/15/2018	3/2/2018
tblConstructionPhase	PhaseStartDate	6/14/2018	12/22/2018
tblConstructionPhase	PhaseStartDate	1/18/2018	8/18/2018
tblConstructionPhase	PhaseStartDate	1/16/2018	3/4/2018
tblConstructionPhase	PhaseStartDate	6/7/2018	3/30/2019
tblConstructionPhase	PhaseStartDate	1/13/2018	1/20/2018
tblGrading	AcresOfGrading	0.00	0.34
tblGrading	AcresOfGrading	15.00	0.00
tblGrading	MaterialExported	0.00	24,600.00
tblLandUse	BuildingSpaceSquareFeet	9,780.00	9,775.00
tblLandUse	LandUseSquareFeet	9,780.00	9,775.00
tblLandUse	LotAcreage	0.26	0.34
tblLandUse	LotAcreage	1.24	0.00
tblLandUse	LotAcreage	0.22	0.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblVehicleTrips	ST_TR	2.46	2.43
tblVehicleTrips	ST_TR	158.37	94.30
tblVehicleTrips	SU_TR	1.05	2.43
tblVehicleTrips	SU_TR	131.84	94.30
tblVehicleTrips	WD_TR	11.03	11.02
tblVehicleTrips	WD_TR	127.15	89.90
tblWater	IndoorWaterUseRate	2,047,492.78	1,009,152.00
tblWater	IndoorWaterUseRate	2,968,559.71	2,713,410.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.5213	17.4719	11.9600	0.0331	1.3385	0.8739	1.9931	0.5700	0.8164	1.1947	0.0000	3,439.5500	3,439.5500	0.4249	0.0000	3,449.2100
2019	4.3343	13.1906	11.4973	0.0221	0.6741	0.7471	1.4212	0.1782	0.6980	0.8762	0.0000	2,206.0992	2,206.0992	0.4190	0.0000	2,216.5732
Maximum	**4.5213**	**17.4719**	**11.9600**	**0.0331**	**1.3385**	**0.8739**	**1.9931**	**0.5700**	**0.8164**	**1.1947**	**0.0000**	**3,439.5500**	**3,439.5500**	**0.4249**	**0.0000**	**3,449.2100**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.5213	17.4719	11.9600	0.0331	0.9101	0.8739	1.5647	0.3403	0.8164	0.9946	0.0000	3,439.5500	3,439.5500	0.4249	0.0000	3,449.2100
2019	4.3343	13.1906	11.4973	0.0221	0.6741	0.7471	1.4212	0.1782	0.6980	0.8762	0.0000	2,206.0992	2,206.0992	0.4190	0.0000	2,216.5732
Maximum	**4.5213**	**17.4719**	**11.9600**	**0.0331**	**0.9101**	**0.8739**	**1.5647**	**0.3403**	**0.8164**	**0.9946**	**0.0000**	**3,439.5500**	**3,439.5500**	**0.4249**	**0.0000**	**3,449.2100**

	ROG	NOx	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	21.29	0.00	12.55	30.70	0.00	9.66	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4997	7.0000e-005	7.7500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0165	0.0165	4.0000e-005		0.0176
Energy	0.0703	0.6388	0.5366	3.8300e-003		0.0486	0.0486		0.0486	0.0486		766.5531	766.5531	0.0147	0.0141	771.1083
Mobile	1.5552	7.3568	15.1779	0.0457	3.5421	0.0485	3.5906	0.9478	0.0455	0.9933		4,653.9285	4,653.9285	0.2817		4,660.9718
Total	**2.1252**	**7.9956**	**15.7223**	**0.0496**	**3.5421**	**0.0971**	**3.6392**	**0.9478**	**0.0941**	**1.0419**		**5,420.4981**	**5,420.4981**	**0.2965**	**0.0141**	**5,432.0978**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4727	7.0000e-005	7.7500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0165	0.0165	4.0000e-005		0.0176
Energy	0.0687	0.6243	0.5244	3.7500e-003		0.0475	0.0475		0.0475	0.0475		749.2062	749.2062	0.0144	0.0137	753.6583
Mobile	1.5552	7.3568	15.1779	0.0457	3.5421	0.0485	3.5906	0.9478	0.0455	0.9933		4,653.9285	4,653.9285	0.2817		4,660.9718
Total	**2.0966**	**7.9812**	**15.7101**	**0.0495**	**3.5421**	**0.0960**	**3.6381**	**0.9478**	**0.0930**	**1.0408**		**5,403.1512**	**5,403.1512**	**0.2961**	**0.0137**	**5,414.6478**

	ROG	NOx	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	1.35	0.18	0.08	0.16	0.00	1.13	0.03	0.00	1.17	0.11	0.00	0.32	0.32	0.11	2.21	0.32

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	1/1/2018	1/19/2018	5	15	
2	Site Preparation	Site Preparation	1/20/2018	3/2/2018	5	30	
3	Grading	Grading	3/4/2018	8/17/2018	5	120	
4	Building Construction	Building Construction	8/18/2018	3/29/2019	5	160	
5	Paving	Paving	3/30/2019	4/5/2019	5	5	
6	Architectural Coating	Architectural Coating	12/22/2018	4/5/2019	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.34

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,943; Non-Residential Outdoor: 10,648; Striped Parking Area: 3,245 (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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	74.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	3,075.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	31.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0657	0.0000	1.0657	0.1614	0.0000	0.1614			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.0657**	**0.6228**	**1.6885**	**0.1614**	**0.5943**	**0.7557**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0440	1.5402	0.3051	3.8500e-003	0.0862	5.9500e-003	0.0922	0.0236	5.7000e-003	0.0293		415.0992	415.0992	0.0302		415.8553
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0586	0.0423	0.4541	1.1500e-003	0.1118	8.9000e-004	0.1127	0.0296	8.2000e-004	0.0305		114.0679	114.0679	3.8900e-003		114.1652
Total	**0.1026**	**1.5825**	**0.7591**	**5.0000e-003**	**0.1980**	**6.8400e-003**	**0.2048**	**0.0533**	**6.5200e-003**	**0.0598**		**529.1671**	**529.1671**	**0.0341**		**530.0205**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4796	0.0000	0.4796	0.0726	0.0000	0.0726			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.4796**	**0.6228**	**1.1023**	**0.0726**	**0.5943**	**0.6669**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0440	1.5402	0.3051	3.8500e-003	0.0862	5.9500e-003	0.0922	0.0236	5.7000e-003	0.0293		415.0992	415.0992	0.0302		415.8553
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0586	0.0423	0.4541	1.1500e-003	0.1118	8.9000e-004	0.1127	0.0296	8.2000e-004	0.0305		114.0679	114.0679	3.8900e-003		114.1652
Total	**0.1026**	**1.5825**	**0.7591**	**5.0000e-003**	**0.1980**	**6.8400e-003**	**0.2048**	**0.0533**	**6.5200e-003**	**0.0598**		**529.1671**	**529.1671**	**0.0341**		**530.0205**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.0000**	**0.4180**	**0.4180**	**0.0000**	**0.3846**	**0.3846**		**982.7113**	**982.7113**	**0.3059**		**990.3596**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		57.0340	57.0340	1.9500e-003		57.0826
Total	**0.0293**	**0.0212**	**0.2271**	**5.7000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**57.0340**	**57.0340**	**1.9500e-003**		**57.0826**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.0000**	**0.4180**	**0.4180**	**0.0000**	**0.3846**	**0.3846**	**0.0000**	**982.7113**	**982.7113**	**0.3059**		**990.3596**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		57.0340	57.0340	1.9500e-003		57.0826
Total	**0.0293**	**0.0212**	**0.2271**	**5.7000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**57.0340**	**57.0340**	**1.9500e-003**		**57.0826**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7790	0.0000	0.7790	0.4176	0.0000	0.4176			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.7790**	**0.6228**	**1.4017**	**0.4176**	**0.5943**	**1.0119**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2288	8.0001	1.5845	0.0200	0.4478	0.0309	0.4787	0.1227	0.0296	0.1523		2,156.1318	2,156.1318	0.1571		2,160.0591
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0586	0.0423	0.4541	1.1500e-003	0.1118	8.9000e-004	0.1127	0.0296	8.2000e-004	0.0305		114.0679	114.0679	3.8900e-003		114.1652
Total	**0.2873**	**8.0424**	**2.0386**	**0.0212**	**0.5596**	**0.0318**	**0.5914**	**0.1524**	**0.0304**	**0.1828**		**2,270.1997**	**2,270.1997**	**0.1610**		**2,274.2243**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3505	0.0000	0.3505	0.1879	0.0000	0.1879			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.3505**	**0.6228**	**0.9733**	**0.1879**	**0.5943**	**0.7822**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2288	8.0001	1.5845	0.0200	0.4478	0.0309	0.4787	0.1227	0.0296	0.1523		2,156.1318	2,156.1318	0.1571		2,160.0591
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0586	0.0423	0.4541	1.1500e-003	0.1118	8.9000e-004	0.1127	0.0296	8.2000e-004	0.0305		114.0679	114.0679	3.8900e-003		114.1652
Total	**0.2873**	**8.0424**	**2.0386**	**0.0212**	**0.5596**	**0.0318**	**0.5914**	**0.1524**	**0.0304**	**0.1828**		**2,270.1997**	**2,270.1997**	**0.1610**		**2,274.2243**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	**1.0848**	**11.0316**	**7.7512**	**0.0114**		**0.7087**	**0.7087**		**0.6520**	**0.6520**		**1,146.5323**	**1,146.5323**	**0.3569**		**1,155.4555**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0533	1.4566	0.4020	3.0500e-003	0.0768	0.0108	0.0876	0.0221	0.0103	0.0324		324.9077	324.9077	0.0245		325.5190
Worker	0.1816	0.1312	1.4077	3.5500e-003	0.3465	2.7600e-003	0.3493	0.0919	2.5500e-003	0.0944		353.6106	353.6106	0.0121		353.9122
Total	**0.2349**	**1.5878**	**1.8097**	**6.6000e-003**	**0.4233**	**0.0136**	**0.4369**	**0.1140**	**0.0129**	**0.1269**		**678.5183**	**678.5183**	**0.0365**		**679.4312**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	**1.0848**	**11.0316**	**7.7512**	**0.0114**		**0.7087**	**0.7087**		**0.6520**	**0.6520**	**0.0000**	**1,146.5323**	**1,146.5323**	**0.3569**		**1,155.4555**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0533	1.4566	0.4020	3.0500e-003	0.0768	0.0108	0.0876	0.0221	0.0103	0.0324		324.9077	324.9077	0.0245		325.5190
Worker	0.1816	0.1312	1.4077	3.5500e-003	0.3465	2.7600e-003	0.3493	0.0919	2.5500e-003	0.0944		353.6106	353.6106	0.0121		353.9122
Total	**0.2349**	**1.5878**	**1.8097**	**6.6000e-003**	**0.4233**	**0.0136**	**0.4369**	**0.1140**	**0.0129**	**0.1269**		**678.5183**	**678.5183**	**0.0365**		**679.4312**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**		**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0483	1.3741	0.3697	3.0200e-003	0.0768	9.2400e-003	0.0860	0.0221	8.8400e-003	0.0310		321.9795	321.9795	0.0236		322.5687
Worker	0.1653	0.1157	1.2567	3.4400e-003	0.3465	2.7000e-003	0.3492	0.0919	2.4800e-003	0.0944		342.4433	342.4433	0.0107		342.7108
Total	**0.2136**	**1.4898**	**1.6264**	**6.4600e-003**	**0.4233**	**0.0119**	**0.4352**	**0.1140**	**0.0113**	**0.1253**		**664.4228**	**664.4228**	**0.0343**		**665.2795**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.669 6	1,127.669 6	0.3568		1,136.589 2
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**	**0.0000**	**1,127.669 6**	**1,127.669 6**	**0.3568**		**1,136.589 2**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0483	1.3741	0.3697	3.0200e-003	0.0768	9.2400e-003	0.0860	0.0221	8.8400e-003	0.0310		321.9795	321.9795	0.0236		322.5687
Worker	0.1653	0.1157	1.2567	3.4400e-003	0.3465	2.7000e-003	0.3492	0.0919	2.4800e-003	0.0944		342.4433	342.4433	0.0107		342.7108
Total	**0.2136**	**1.4898**	**1.6264**	**6.4600e-003**	**0.4233**	**0.0119**	**0.4352**	**0.1140**	**0.0113**	**0.1253**		**664.4228**	**664.4228**	**0.0343**		**665.2795**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8300**	**7.8446**	**7.1478**	**0.0113**		**0.4425**	**0.4425**		**0.4106**	**0.4106**		**1,055.1823**	**1,055.1823**	**0.3016**		**1,062.7231**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	**0.0960**	**0.0672**	**0.7297**	**2.0000e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4400e-003**	**0.0548**		**198.8380**	**198.8380**	**6.2100e-003**		**198.9933**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8300**	**7.8446**	**7.1478**	**0.0113**		**0.4425**	**0.4425**		**0.4106**	**0.4106**	**0.0000**	**1,055.1823**	**1,055.1823**	**0.3016**		**1,062.7231**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	**0.0960**	**0.0672**	**0.7297**	**2.0000e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4400e-003**	**0.0548**		**198.8380**	**198.8380**	**6.2100e-003**		**198.9933**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8327					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**3.1313**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0703	0.0508	0.5449	1.3800e-003	0.2507	1.0700e-003	0.2518	0.0642	9.9000e-004	0.0652		136.8815	136.8815	4.6700e-003		136.9983
Total	**0.0703**	**0.0508**	**0.5449**	**1.3800e-003**	**0.2507**	**1.0700e-003**	**0.2518**	**0.0642**	**9.9000e-004**	**0.0652**		**136.8815**	**136.8815**	**4.6700e-003**		**136.9983**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8327					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**3.1313**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0703	0.0508	0.5449	1.3800e-003	0.2507	1.0700e-003	0.2518	0.0642	9.9000e-004	0.0652		136.8815	136.8815	4.6700e-003		136.9983
Total	**0.0703**	**0.0508**	**0.5449**	**1.3800e-003**	**0.2507**	**1.0700e-003**	**0.2518**	**0.0642**	**9.9000e-004**	**0.0652**		**136.8815**	**136.8815**	**4.6700e-003**		**136.9983**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8327					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**3.0991**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0448	0.4865	1.3300e-003	0.2507	1.0400e-003	0.2518	0.0642	9.6000e-004	0.0652		132.5587	132.5587	4.1400e-003		132.6622
Total	**0.0640**	**0.0448**	**0.4865**	**1.3300e-003**	**0.2507**	**1.0400e-003**	**0.2518**	**0.0642**	**9.6000e-004**	**0.0652**		**132.5587**	**132.5587**	**4.1400e-003**		**132.6622**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8327					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**3.0991**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0448	0.4865	1.3300e-003	0.2507	1.0400e-003	0.2518	0.0642	9.6000e-004	0.0652		132.5587	132.5587	4.1400e-003		132.6622
Total	**0.0640**	**0.0448**	**0.4865**	**1.3300e-003**	**0.2507**	**1.0400e-003**	**0.2518**	**0.0642**	**9.6000e-004**	**0.0652**		**132.5587**	**132.5587**	**4.1400e-003**		**132.6622**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	1.5552	7.3568	15.1779	0.0457	3.5421	0.0485	3.5906	0.9478	0.0455	0.9933		4,653.9285	4,653.9285	0.2817		4,660.9718
Unmitigated	1.5552	7.3568	15.1779	0.0457	3.5421	0.0485	3.5906	0.9478	0.0455	0.9933		4,653.9285	4,653.9285	0.2817		4,660.9718

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	126.95	27.99	27.99	317,884	317,884
High Turnover (Sit Down Restaurant)	879.22	922.25	922.25	1,214,986	1,214,986
Total	1,006.17	950.25	950.25	1,532,871	1,532,871

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Enclosed Parking with Elevator	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
High Turnover (Sit Down Restaurant)	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0687	0.6243	0.5244	3.7500e-003		0.0475	0.0475		0.0475	0.0475		749.2062	749.2062	0.0144	0.0137	753.6583
NaturalGas Unmitigated	0.0703	0.6388	0.5366	3.8300e-003		0.0486	0.0486		0.0486	0.0486		766.5531	766.5531	0.0147	0.0141	771.1083

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	330.135	3.5600e-003	0.0324	0.0272	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003		38.8394	38.8394	7.4000e-004	7.1000e-004	39.0702
High Turnover (Sit Down Restaurant)	6185.57	0.0667	0.6064	0.5094	3.6400e-003		0.0461	0.0461		0.0461	0.0461		727.7137	727.7137	0.0140	0.0133	732.0381
Total		**0.0703**	**0.6388**	**0.5366**	**3.8300e-003**		**0.0486**	**0.0486**		**0.0486**	**0.0486**		**766.5531**	**766.5531**	**0.0147**	**0.0141**	**771.1083**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.298352	3.2200e-003	0.0293	0.0246	1.8000e-004		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003		35.1003	35.1003	6.7000e-004	6.4000e-004	35.3088
High Turnover (Sit Down Restaurant)	6.0699	0.0655	0.5951	0.4999	3.5700e-003		0.0452	0.0452		0.0452	0.0452		714.1059	714.1059	0.0137	0.0131	718.3495
Total		**0.0687**	**0.6243**	**0.5244**	**3.7500e-003**		**0.0475**	**0.0475**		**0.0475**	**0.0475**		**749.2062**	**749.2062**	**0.0144**	**0.0137**	**753.6583**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4727	7.0000e-005	7.7500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0165	0.0165	4.0000e-005		0.0176
Unmitigated	0.4997	7.0000e-005	7.7500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0165	0.0165	4.0000e-005		0.0176

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0582					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3000e-004	7.0000e-005	7.7500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0165	0.0165	4.0000e-005		0.0176
Total	**0.4997**	**7.0000e-005**	**7.7500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0165**	**0.0165**	**4.0000e-005**		**0.0176**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3000e-004	7.0000e-005	7.7500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0165	0.0165	4.0000e-005		0.0176
Total	**0.4727**	**7.0000e-005**	**7.7500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0165**	**0.0165**	**4.0000e-005**		**0.0176**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Geotechnical Investigation

REPORT

SOIL AND GEOLOGY INVESTIGATION

Proposed Mixed-Use Building
8497 Sunset Boulevard
West Hollywood, California

for

Karma Development, LLC.
11640 San Vincente Blvd., Suite 205
Los Angeles, California 90049

PLUS ARCHITECTS
Architect

Project No. 0142-G
October 2, 2004

PACIFIC GEOSOILS, INC.
GEOTECHNICAL ENGINEERING CONSULTANT
1612 CHICO AVE., #B, SOUTH EL MONTE, CA 91733 • TEL 626-279-5061 • FAX 626-279-5062

October 2, 2004
Project No.: 0142-G

Karma Development, LLC.
11640 San Vincente Blvd., Suite 205
Los Angeles, California 90049

Attention: Mr. Frank Damavandi

SUBJECT: SOIL AND GEOLOGY INVESTIGATION
Proposed Mixed-Use Building (SUNSET-FUTURA)
8497 Sunset Blvd.
West Hollywood, California

Gentlemen:

In accordance with our proposal dated April 18, 2003, we have conducted a soil and geology investigation for the proposed mixed-use building to be located at 8497 Sunset Blvd., West Hollywood.

Based on the findings and observations of this investigation, it is concluded that the proposed development of the subject property for the intended use is feasible from the geotechnical engineering viewpoint, provided the specific recommendations in the accompanying report are followed. The proposed building may be supported by conventional spread footings founded in rock.

The accompanying report represents relevant conclusions and recommendations for the preliminary planning and foundation designs.

We thank you for entrusting us to undertake this investigation and look forward to future association. If any questions arise concerning the interpretation of the report, please do not hesitate to call.

Respectfully submitted,

PACIFIC GEOSOILS, INC.

Paul S. Kim
RGE No. 2066
PSK/RC/jk

REGISTERED PROFESSIONAL ENGINEER
PAUL SUNGKYO KIM
No. 2066
Exp. Date 6/30/06
GEOTECHNICAL
STATE OF CALIFORNIA

Richard Crook, Jr.
CEG No. 924

ENGINEERING GEOLOGIST
RICHARD CROOK, JR
E.G. 924
Exp. 5/31/05
STATE OF CALIFORNIA

INTRODUCTION

The following report presents the results of a soil and geology investigation conducted on the property located at 8497 Sunset Blvd. in the City of West Hollywood, California. The location of the site relative to surrounding streets and landmarks is shown on the Vicinity Map, Plate 1.

The purpose of this investigation was to obtain the geotechnical engineering properties of the subsurface soils and rock at the subject site on which to base conclusions and recommendations for foundations support and other geotechnical matters pertinent to the proposed construction. Implementation of the recommendations made in this report is intended to reduce certain risks associated with construction projects. The scope of this investigation does not include the work related in any way to identify asbestos and/or hazardous waste material.

This report has been prepared for use in design of the described project. It may not contain sufficient information for other purposes. Our professional services have been performed in accordance with generally accepted engineering procedures under similar circumstances. No other warranty, expressed or implied, is made as to the professional advice included in this report.

PROPOSED DEVELOPMENT

Information concerning the proposed development was furnished by Plus Architects, the project architect.

The subject property will be developed for the construction of a mixed-use building at the location shown on the Site Plan and Geology Map, Plate 2. The mixed-use building will consist of four levels of residential over one level of residential/retail over one level of retail/parking over three levels of subterranean parking garage, total six-stories in height over three levels of subterranean parking garage.

The lower garage floor will be at approximately 30 to 38 feet below the existing level building pad. The rear side of the building will be cut into the slope, requiring the rear garage wall to be a 55-foot high retraining wall. A rear yard retaining wall ranging from 18 to 34 feet in height will also be constructed at 20 to 25 feet back from the building for the building clearance from the ascending slope. Cross sections depicting the existing and proposed grades and the proposed construction are shown on Plates 3, 4 and 5.

FIELD EXPLORATIONS AND LABORATORY TESTING

Field explorations were performed to establish the geotechnical and geologic conditions of the site. Two borings and four test pits were excavated at the locations shown on Plate 2. The excavations of the test pits and borings were logged by the Engineering Geologist and Geotechnical Engineer and relatively undisturbed soil and rock samples were obtained for laboratory testing and inspection. A detailed description of the exploration procedures and the logs of test pits are presented in the Appendix A.

Laboratory tests were performed to evaluate static soil and rock properties. A description of the test procedures and the test results are also presented in the Appendix A.

SITE LOCATION AND CONDITIONS

The subject site is located on a flat pad and south-facing slopes in the city of West Hollywood, California. The lot is nearly rectangular in shape and approximately 240 feet long in the maximum east-west direction and approximately 160 to 190 feet deep in the north-south direction. The lot is bound on the south by Sunset Boulevard and Miller Drive, on the west by apartments, on the east by commercial buildings and on the north by developed lots with residences. The subject lot is also developed and is occupied by two-story apartments with a pool and covered parking structures, concrete block retaining walls and concrete flatwork.

The southern half of the lot is a flat graded pad occupied by the above described structures. At the rear of the pad is a 60-foot high cut slope that ascends to the property line and has gradients of approximately 1.1:1 to 0.6:1 (horizontal to vertical). Beyond the property line the slope gradient decreases to approximately 2.2:1. Total relief on the lot is approximately 80 feet.

Runoff from the site slopes is by sheetflow to the retaining wall at the toe of the slope.

Vegetation on the slope consists of ornamental grasses, some native shrubs and some small to medium non-indigenous trees.

No evidence of shallow ground water, seepage or springs was observed anywhere on the site including within the test pits and borings.

GEOLOGIC AND SOIL CONDITIONS

Inspection of the test pits and borings, cut slope and site slopes, as well as review of published geologic maps indicates that the lot is underlain by artificial fill, colluvial soil, older alluvium and crystalline basement rock of Cretaceous age. Descriptions and distribution of these units are as follows:

Artificial Fill (Af) --- The fill consists of moderately compact to compact, brown, porous, silty, coarse to fine sand, containing some trash. It appears to underlie the building to a depth of four to six feet. At the west side of the lot the fill rests on older alluvium and at the east side of the lot it rests on rock. The fill on the slope at the rear is slough and wall backfill.

Colluvial Soil (Qsw) --- The colluvial soil consists of moderately dense, brown, porous, slightly silty, coarse to fine sand. This soil is only on the uppermost slopes, is one to two feet thick and rests on rock.

Older Alluvium (Qoal) --- The older alluvium consists of brown, moderately dense to dense, porous to very porous, massive to crudely layered, slightly silty, coarse to fine sand. This unit is found beneath the southwestern quarter of the lot and is a part of the alluvial fan to the west. The alluvium was 18 feet thick in boring B-2. It decreases in thickness to the north and to the east of the boring. The alluvium rests conformably on the basement rock.

Basement Rock (gd) --- The rock beneath the site consists of firm to slightly hard, gray-brown to yellow-brown, medium- to coarse-grained, hornblende, biotite, granodiorite. Generally the basement rock is moderately jointed, moderately fractured, moderately to highly weathered and competent.

Foliation within the rock is weak and does not constitute significant planes of weakness. In any case the foliation dips to the north and into the site slope.

Jointing is common in the rock exposed on the site slope and in many cases it is daylighted.

Surficial Failure

There is a surficial failure on the lower half of the eastern part of the cut slope (see Site Plan and Geologic Map, Plate 2). It is obvious that roots have invaded and opened the joints, some of which are out-dipping. This allowed entry of water, which in conjunction with the steepness of the slope, led to the failure. Any permanent cut slopes to remain after development of the site must be no steeper than 2:1.

Faulting

The subject site lies outside of the Hollywood Fault and Fault Precaution Zone FP-1 as shown on the Fault Location and Precaution Zone Map (Figure 3) prepared by Bing Yen and Associates, Inc. and contained in the West Hollywood Seismic Element dated August 2001. Therefore, a subsurface site specific fault study is not required to satisfy West Hollywood fault study requirements.

EARTHQUAKE HAZARDS

Seismicity

The subject property lies within the seismically active southern California region. As with all sites in southern California, the site is expected to experience ground shaking from both near and distant earthquake sources during the life of the proposed structure. The type and magnitude of seismic hazard affecting the site are dependent on the distance of causative faults and the intensity and magnitude of the seismic event.

Surface Rupture

The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. No faults, active or potentially active, are known to exist within the site. The probability of surface rupture at the site is, therefore, considered very low.

Ground Shaking

The site lies near the Hollywood Fault. It is our opinion that the intensity of future ground shaking at the site is not expected to be greater than any other sites in the immediate vicinity. The proposed structures shall be designed in accordance with the Earthquake Regulations of the California Building Code and the seismic design parameters provided in the another section of this report.

Soil Liquefaction

The site is located within a liquefaction zone as shown on the Beverly Hills Quadrangle of "Seismic Hazard Zones" map issued by the State of California. However, as the site is underlain by rock near the surface, it is our opinion that potential for liquefaction at the subject property is considered nil.

SLOPE STABILITY ANALYSE

Gross Stability

Gross slope stability analyses were performed to evaluate the stability of the rear ascending slope with soldier piles at the rear basement garage wall, including offsite slope with the existing house on the top of the slope. The weakest shear strength parameters of the rock material were used for the analyses. One-tenth of 3,000 p.s.i of the reinforced concrete compressive strength was used for the soldier piles. The shear strengths of the colluvium were assumed to be zero with its unit weights being applied.

The slope stability computations were carried out using a computer program "PCSTABL6". This program was developed at Purdue University. PCSTABL6 utilizes a two-dimensional limit equilibrium method to calculate the Factor of Safety (FOS). This analyses use the Modified Bishop's Circular Surface for circular gross stability. The results of slope stability analyses indicate that the lowest factors of safety with the proposed construction under static and seismic loading are in excess of 1.5 and 1.1, the minimum code values, respectively. Computer printouts of the calculations are presented in Appendix B.

Surficial Stability

Stability calculation against surficial failure for the upper portion of the existing slope at Section A-A' where colluvium is present above the cut slope is presented on Plate 6. The following assumptions have been made in the analysis:

1. The failure surface is 3 feet from the slope surface and is parallel to the slope;
2. The saturation is to extend 3 feet below the slope surface;
3. There is sufficient permeability to establish water flow and the flow lines are parallel to the slope surface.

The calculated factor-of-safety is 2.87, which exceeds a minimum accepted value of 1.5.

CONCLUSION AND RECOMMENDATIONS

General

Based on an evaluation of the site conditions and findings of this investigation, it is concluded that the development of the subject property is feasible from geotechnical engineering and geologic viewpoint provided the following recommendations are incorporated into design criteria and project specifications and are implemented during construction.

Conventional spread footings founded in rock at the proposed lower garage level will provide adequate support for the proposed building.

Expansiveness of Soil

The onsite materials at the garage subgrade will expose basement rock. These materials are considered to have no expansion potential. No special design is required against the expansion potential.

Seismic Design Parameters

Based on the results of this preliminary soil investigation and in accordance with Chapter 16, Division IV of the 2001 California Building Code, the following seismic data are applicable to the subject site.

Seismic Zone Factor, Z	0.4
Soil Profile Type	S_C
Seismic Source Type	B
Near-Source Factor, N_a	1.3
Near-Source Factor, N_v	1.6
Seismic Coefficient, C_a	0.52
Seismic Coefficient, C_v	0.90

Foundation Recommendations

Allowable Bearing Value

An allowable bearing value of 4,000 pounds per square foot is recommended for continuous footings of at least 24 inches in width and isolated pad footings of at least 3 feet square, placed at a depth of at least 18 inches into undisturbed rock. This value may be increased by 400 pounds per square foot for each additional foot in width and 500 pounds per square foot for each additional foot in depth over the minimum, to a maximum of 10,000 pounds per square foot.

The bearing value is for dead plus live load and may be increased by one-third for momentary wind or seismic loads.

Lateral Design

Resistance to lateral loading may be provided by passive earth pressure within the rock and by friction acting at the base of foundations and floor slabs. Passive earth pressure may be computed as an equivalent fluid having a density of 500 pounds per cubic foot to a maximum of 4,500 pounds per square foot for the rock.

Friction between the base of the footings and floor slabs on grade and the underlying rock may be assumed to be 0.45 times the dead load. When combining passive pressure and friction for lateral resistance, the passive component should be reduced by one-third.

Foundation Settlement

Total and differential settlement between adjacent footings is expected to be negligible if footings are founded in undisturbed rock as recommended.

Footing Reinforcement

Continuous footings should be reinforced with at least four No. 4 bars, two near the top and two near the bottom of the footings. Reinforcement of isolated footings shall be utilized as deemed necessary by the Structural Engineer for the project. This reinforcement is based on soil characteristics and is not intended to be in lieu of reinforcement necessary to satisfy structural considerations.

Slabs On Grade

Floor Slabs

Slabs on grade should be cast over undisturbed rock.

It should be recognized that minor cracks normally occur in concrete slabs due to shrinkage during curing or redistribution of stresses and thus, some cracks should be anticipated. Such cracks are not necessarily indicative of excessive vertical movements.

Slab Reinforcement

Floor slabs constructed on-grade should be a minimum thickness of 4 inches and be reinforced with at least No. 3 bars spaced 24 inches on centers, both ways. All slab reinforcement should be supported on concrete chairs or brick to ensure the desired placement near mid-depth.
The above criteria are recommended to minimize potential distress to floor slabs related to the effects of subgrade soil conditions. The Structural Engineer for the project may need to address other factors that may require modification of the above recommendations.

Moisture Barrier

A moisture barrier beneath slabs-on-grade, consisting of a waterproof vapor barrier, such as a plastic membrane of at least 10 mils in thickness, is recommended in areas where slab moisture would be detrimental. The membrane should be overlain by a minimum of 2 inches of clean sands to provide a working surface and aid in concrete curing.

It is important that the soil subgrade, which will support the concrete slab, is maintained at the "as-graded" or has a sufficient soil water content. Prior to slab construction, the water content of the soil subgrade should be measured to verify that the subgrade has not dried out significantly. It is suggested that slab areas be thoroughly moistened prior to placing of moisture barrier and pouring of concrete.

Retaining Wall

Wall Footings

Retaining wall footings may be designed for the same allowable bearing value as given in the previous section for building foundations.

Active Earth Pressures

Retaining walls should be designed to resist lateral earth pressure exerted by the retained soil plus any additional lateral forces that will be applied to the walls due to surface loads placed at or near the wall or from footings behind the walls.

Basement/retaining walls which are restrained against movement or rotation at the top should be designed for a trapezoidal lateral pressure distribution as illustrated on Plate 7.

It is recommended that the retaining walls that are free to rotate at top be designed for the following equivalent fluid pressure:

Backfill Slope Gradient (Horizontal to Vertical)	Equivalent Fluid Pressure (pcf)
Level	35
5 to 1	37
4 to 1	40
3 to 1	45
2 to 1	50
1.5 to 1	55
1 to 1	60

The lateral earth pressures assume that a permanent drainage system will be installed so that hydrostatic water pressure will not be developed against the walls. If a drainage system is not provided, the walls should be designed to resist an external hydrostatic pressure due to water in addition to the lateral earth pressure.

Wall Freeboard

The rear yard wall should be provided with at least one foot of freeboard to prevent slope drainage and erosion from flowing over the wall. A concrete paved drainage swale should be placed at the top of the wall to intercept runoff and conduct water to the street.

Wall Drainage

The retaining walls should be provided with weep holes or perforated pipe and gravel subdrain to prevent entrapment of water in the backfill.

Weep holes should consist of unmortared joints in block walls or two-inch diameter round holes in poured concrete walls. The openings should be at least 3 inches above finished grade to prevent surface water from flowing back into the holes.

In the case of using perforated pipe, any water that may accumulate in the drainage material should be collected and discharged by a 4-inch diameter, perforated PVC Schedule 40 or ABS SDR-35 pipe placed near the bottom of the drainage material. The pipe should be embedded in drainage material of at least one cubic foot per linear foot.

The pipe perforations should be placed with the holes down, and should not be greater than 1/4 inch in diameter. The subdrain should outlet at appropriate discharge locations or sump pump that will ensure all discharge will not scour or erode the surrounding soil, and the pipe will not become damaged or clogged. The outlet pipe should be a solid pipe that meets minimum specification set forth above for the subdrain pipe.

The drainage material that will be used to backfill the wall should consist of 3/4 to 1-1/2 inch clean durable, coarse aggregate. The drainage material should be separated from all adjacent soil by Mirafi 140NL, or approved equivalent. The fabric should be handled in accordance with the respective manufacturers requirements, and should be constructed such that all fabric overlaps are a minimum of 12 inches.

Wall Backfill

Prior to backfilling, the excavation between retaining walls and the temporary cut bank should be cleared of all loose materials, debris, and construction materials, etc.

Proper compaction of the backfill will be necessary to reduce settlement of the backfill. Some settlement of the backfill should be anticipated and any utilities and sidewalks supported therein should be designed to accept differential settlement, particularly at the points of entry to the structure.

All wall backfill should be placed in horizontal lifts not more than 8 inches in thickness, watered as necessary to achieve near optimum moisture conditions, and mechanically compacted to at least 90 percent of the ASTM D-1557-02 standard. Flooding or jetting of backfill materials should be avoided. Probing and testing should be performed by the project Geotechnical Engineer to verify proper compaction.

Contractors should be informed that the use of heavy compaction equipment within close proximity to retaining walls could cause excessive wall movement and/or earth pressure in excess of design values.

Waterproofing

All retaining walls within the building should be waterproofed.

Shoring

The excavation at the site is expected to be 30 to 38 feet in depth on the south, east, and west sides. The cut at the north side will be up to 55 feet for the garage wall and another 20 to 44 feet above the garage wall for the rear yard retaining wall.

Temporary shoring is required for the excavation. One method of shoring would consist of steel soldier piles, placed in drilled holes and backfilled with concrete. The soldier piles may be designed as cantilevered or laterally braced utilizing raker braces or tie-back anchors.

Design of Soldier Piles

Soldier piles should be spaced no wider than 8 feet on center. Soldier piles should have a minimum diameter of 18 inches. Structural concrete should be used for the soldier piles below the garage level and lean-mix concrete may be employed above that level. For the north side, structural concrete should be used for the soldier piles up to 25 feet above the garage level to enhance the slope stability of the back slope.

Lateral active earth pressures to be used for the shoring design are presented on Plate 8. In addition to the lateral earth pressure, the shoring shall also be designed to additionally support the surcharge loading of adjacent structures or vehicular traffic located within a distance equal to the depth of excavation.

Passive pressure given in the Lateral Design section may be doubled provided the pile spacing on centers are greater than 3 times pile diameter

The portion of soldier piles below the plane of excavation may be employed to resist the downward loads. The downward capacity may be determined using a frictional resistance of 600 pounds per square foot.

Lagging

Continuous lagging may be required between the soldier piles within the upper portion of the excavation where open joints may be exposed in the cut face. If the foliation within the rock does not dip out of the slope and the clear spacing between soldier piles does not exceed 8 feet, it may be possible to omit lagging. Generally lagging may not be necessary for the lower 35 feet above the garage level. It is recommended that the exposed rock be observed by the Engineering Geologist and Geotechnical Engineer to verify the nature of the rock and the area where lagging may be omitted.

Anchor Design

Tie-back friction anchors may be used to resist lateral loads. For design purposes, it may be assumed that the active wedge adjacent to the shoring is defined by a plane drawn at 35 degrees with the vertical through the bottom of the excavation. The anchors should extend at least 15 feet beyond the potential active wedge and to a greater length if necessary to develop the desired capacities.

The capacities of anchors should be determined by testing of the initial anchors as outlined in a following section. For design purposes, we estimate that drilled friction anchors will develop an average friction value of 600 pounds per square foot. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads. If the anchors are spaced at least 6 feet on centers, no reduction in the capacity of the anchors need be considered due to group action.

Anchor Installation

The anchors may be installed at angles of 15 to 40 degrees below the horizontal. The anchors should be filled with concrete placed by pumping from the tip out, and the concrete should extend from the tip of the anchor to the active wedge. To minimize chances of caving, we suggest that the portion of the anchor shaft within the active wedge be backfilled with sand before testing the anchor. This portion of the shaft should be filled tightly and flush with the face of the excavation. The sand backfill may contain a small amount of cement to allow the sand to be placed by pumping.

Anchor Testing

Our representative should select at least two of the initial anchors for 24-hour 200% tests, and at least five additional anchors for quick 200% tests. The purpose of the 200% tests is to verify the friction value assumed in deign. The anchors should be tested to develop twice the assumed friction value. Where satisfactory tests are not achieved on the initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

The total deflection during the 24-hour 200% tests should not exceed 12 inches during loading; the anchor deflection should not exceed 0.75 inch during the 24-hour period, measured after the 200% test load is applied. If the anchor movement after the 200% load has been applied for 12 hours is less than 0.5 inch, and the movement over the previous 4 hours has been less than 0.1 inch, the test may be terminated.

For the quick 200% tests, the 200% test load should be maintained for 30 minutes. The total deflection of the anchor during the 200% quick test should not exceed 12 inches; the deflection after the 200% tests load has been applied should not exceed 0.25 inch during the 30-minute period. Where satisfactory tests are not achieved on the initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

All of the production anchors should be pre-tested to at least 150% of the design load; the total deflection during the tests should not exceed 12 inches. The rate of creep under the 150% test should not exceed 0.1 inch over a 15-minute period for the anchor to be approved for the design loading. After a satisfactory test, each production anchor should be locked-off at the design load.

The installation of the anchors and the testing of the completed anchors should be observed by our firm.

Internal Bracing

Raker bracing may be used to internally brace the soldier piles. If used, raker bracing could be supported laterally by temporary concrete footings (deadmen) or by the permanent interior footings. For design of such temporary footings, poured with the bearing surface normal to the rakers inclined at 45 to 60 degrees with the vertical, a bearing value of 4,000 pounds per square foot may be used, provided the shallowest point of the footing is at least 1 foot below the lowest adjacent grade. To reduce the movement of the shoring, the rakers should be tightly wedged against the footings and/or shoring system.

Deflection

It is difficult to accurately predict the amount of deflection of a shored embankment. It should be realized, however, that some deflection will occur. It is recommended that the shoring be designed so that deflection not exceed one inch at the top of shoring. If greater deflection occurs during construction, additional bracing may be necessary to minimize settlement of the existing utilities within or adjacent to the site.

Monitoring

Monitoring of the movements of the shoring system and of the ground surface behind the shoring is recommended in areas where adjacent structures and/or utilities may be affected by the excavation. The monitoring may consist of survey points and/or inclinometers behind the shoring. This monitoring should be started before the actual excavation has begun and should continue until the excavation has been substaintially backfilled.

Slot Cut

Temporary cut for the backyard wall shall be made by slot-cutting in alternate A, B, and C sections with the maximum slot width of 15 feet. A stability calculation for the 44-foot high and 15-foot wide slot cut is presented on Plate 9. The slot cutting construction procedure should be as follows:

1. Starting from the proposed wall line, excavate to the bottom of backyard wall at a slope ratio not exceeding 1 horizontal to 1 vertical;

2. Make slot-cutting in Sections "A" with slot width not exceeding 15 feet and extending to the excavation lines;

3. Construct basement walls in slot "A";

4. After the wall in slot "A" is constructed, the space between the newly erected wall sections and the cut bank should be backfilled properly and approved by the Soils Engineer before the "B" slot are cut;

5. Repeat the procedures Nos. 2 to 4 for slot "B" and then "C".

Excavation

Excavation should be in accordance with all applicable requirements of the State of California Construction and General Industry Safety Order, the Occupational Safety and Health Act of 1970, the Construction Safety Act, and all other public agencies having jurisdiction. Construction specifications should clearly establish the responsibilities of the contractor for construction safety in accordance with CAL/OSHA requirements.

No excavation shall be made during unfavorable weather. It is recommended that the excavated banks be entirely covered with plastic sheets when threatened by rains. When the excavation is interrupted by rain, operations shall not be resumed until the Geotechnical Engineer indicates that conditions will permit satisfactory results.

Corrosivity

A representative sample of the rock collected at a depth of 29 feet in Boring 2 was tested for electrical resistivity, pH, sulfate and chloride concentration in order to assess corrosivity effects on underground utilities and concrete foundations. Tests were performed by Environmental Geotechnology Laboratory, Santa Fe Springs, California. Results of the tests are summarized in the following table and the EGL report is attached herein.

Analyte	Test Method (Caltrans)	Result
pH	643	7.32
Resistivity	532	5800 ohm-cm
Water Soluble Sulfate	417	0.001 %
Water Soluble Chloride	422	75 ppm

The low concentration of sulfate content indicate that the on-site soils are considered low deleterious to concrete, and that Type I Portland cement can be used for design of concrete elements.

The PH over 5 and the low concentration of water soluble chloride indicate that the on-site rocks are not considered corrosive and deleterious to ferrous metals. However, the medium electrical resistivity indicates that the on-site rocks are considered moderately corrosive to ferrous metals. Underground steel utilities should be blasted and given a highly quality protective coating. Buried steel piping should be electrically insulated from dissimilar metals, cement-mortar or concrete coated steel, and above ground steel pipe. We recommend that the proposed design be reviewed by a qualified corrosion engineer to evaluate the general corrosion potential with respect to metal construction materials at this site.

Post Construction Considerations

Site Drainage

The provision and maintenance of adequate site drainage and moisture protection of supporting soil is an important design consideration. Foundation recommendations presented herein assume proper site drainage will be established and maintained.

To enhance future site performance, positive drainage devices such as sloping sidewalks, graded swales, and/or area drains should be provided around the building to collect and direct all water away from the structure. Neither rain nor excess irrigation water should be allowed to collect or pond on the property.

Where slabs or pavement are not feasible adjacent to the buildings, the ground surface should be provided with a minimum gradient of about one percent away from the structures. All drainage should ultimately be directed to street or other designated area.
Water should be transported off the site in approved drainage devices or unobstructed swales. Unpaved drainage swales should have a gradient of at least one percent. Swales or drainage paths through lawn areas should be provided with a gradient of at least two percent. Where necessary, drainage paths could be shortened by use of area drains and collector pipes.

Planters adjacent to buildings should be avoided insofar as possible. Planting areas at grade should be provided with good positive drainage. Wherever possible, exposed soil areas should be above adjacent paved grades. Planters should not be depressed below adjacent paved grades unless provisions for drainage, such as catch basins and pipe drains are made.
Adequate drainage gradient, devices and curbing should be provided to prevent runoff from adjacent pavement or walks into planting areas.

Consideration should be given to irrigation methods that will promote uniformity of moisture in planters and beneath adjacent concrete "flat-work". Over-watering and under-watering of landscape areas must be avoided.

All roof and wall surface drainage should be collected and conducted by a non-erosive device to the streets or to a designated area.

Plan Review

In order to prevent misinterpretation of this report by other consultants, it is recommended that the Geotechnical Engineer be provided the opportunity to review the final grading and foundation plans. The Geotechnical Engineer will also determine whether any change in concept may have had any effect on the validity of the Geotechnical Engineer's recommendations, and whether those recommendations have, in fact, been implemented in the design and specifications.

If the Geotechnical Engineer is not accorded the privilege of making this recommended review, he can assume no responsibility for misinterpretation or misapplication of his recommendations or for their validity in the event changes have been made in the original design concept without this prior review.

Geotechnical Inspection

The geotechnical consultant should inspect all foundation excavations. Inspections should be made prior to installation of concrete forms and reinforcing steel to verify or modify, if necessary, conclusions and recommendations in this report.

Inspections of the finish grading, utility or other trench backfill, retaining wall backfill, or other earthwork completed for the subject project should also be performed by the geotechnical consultant.

If any of these inspections to verify site geotechnical conditions are not performed by the geotechnical consultant, liability for the safety and stability of the project is limited only to the actual portions of the project approved by the geotechnical consultant.

INVESTIGATION LIMITATIONS

The conclusions and recommendations contained in this report are based on the data obtained from the test pits and borings at the dates and locations indicated in the logs and the site plan. It is assumed that the soil and rock conditions at the other areas do not deviate significantly from those disclosed in the test pits and borings. If any variations or undesirable conditions are encountered during construction, this office should be notified so as to consider the need for modifications.

No responsibility for construction compliance with the design concepts, specifications, or recommendations is assumed unless an on-site review by a representative of this office is performed during the course of construction that pertains to the specific areas covered by the recommendations contained herein.

The report has been compiled for the exclusive use of Karma Development, LLC., or its authorized representatives. It shall not be transferred to or used by a third party, to another project, or applied to any other project on this site, other than as described herein, without the consent and/or thorough review of this office.

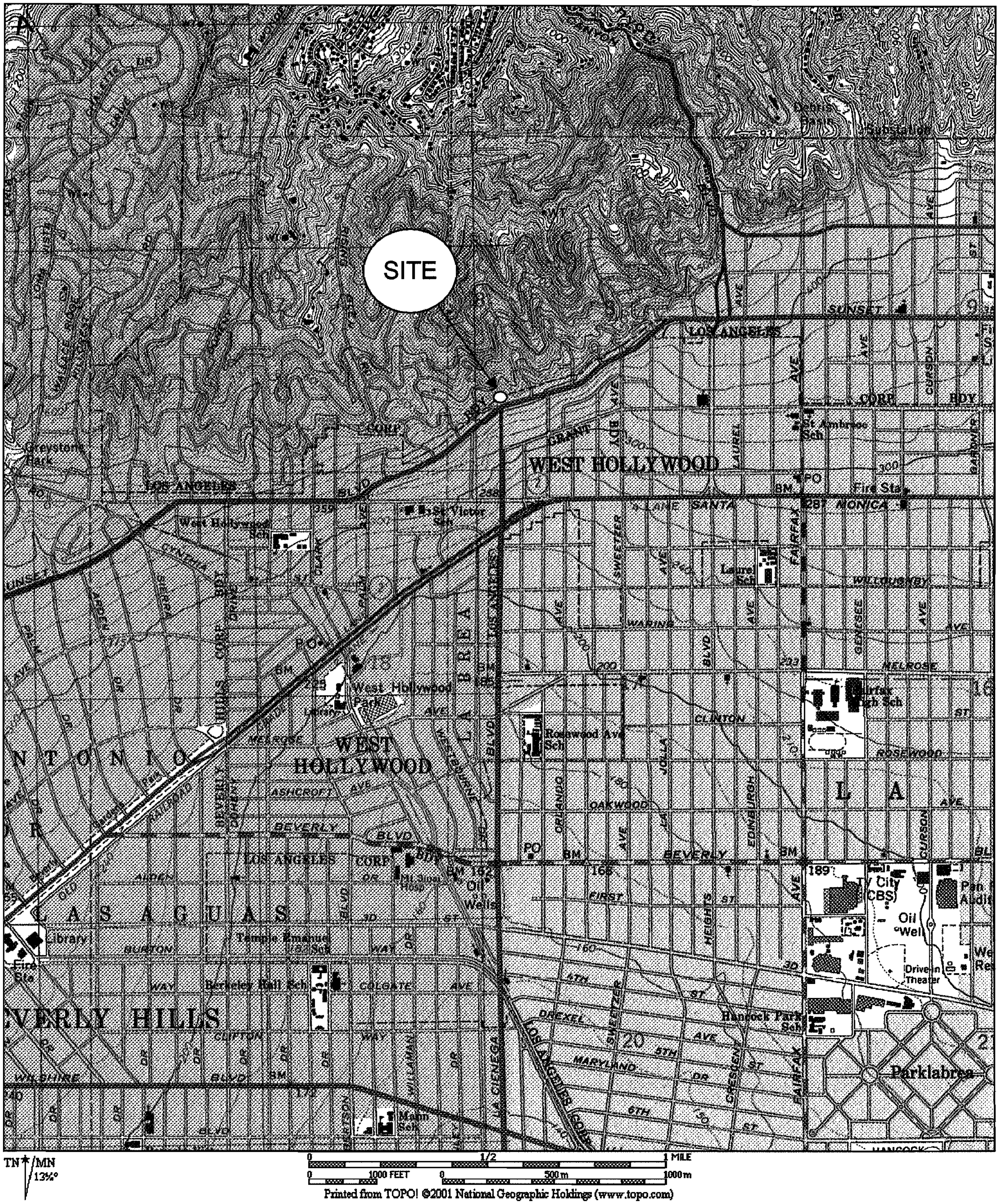
The findings of this report are valid as of the present date. However, changes in the conditions of the property can occur with the passage of time, whether they are due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside of our control. Therefore, this report is subject to review and should not be relied upon after a period of one year without such a review.

This report is issued with the understanding that it is the responsibility of the owner, or the proper representative thereof, to insure that the information and recommendations contained herein are called to the attention of all parties interested in the project and that the necessary steps are taken to see that the contractors and subcontractors carry out such recommendations in the field.

Final approval of plans and reports by all consultants, and issuance of any building and grading permits, rests with the controlling agencies. As the circumstances that control the decision process are clearly beyond the control of this facility, we cannot assume any responsibility for the success of obtaining proper authorizations, nor for the costs involved.

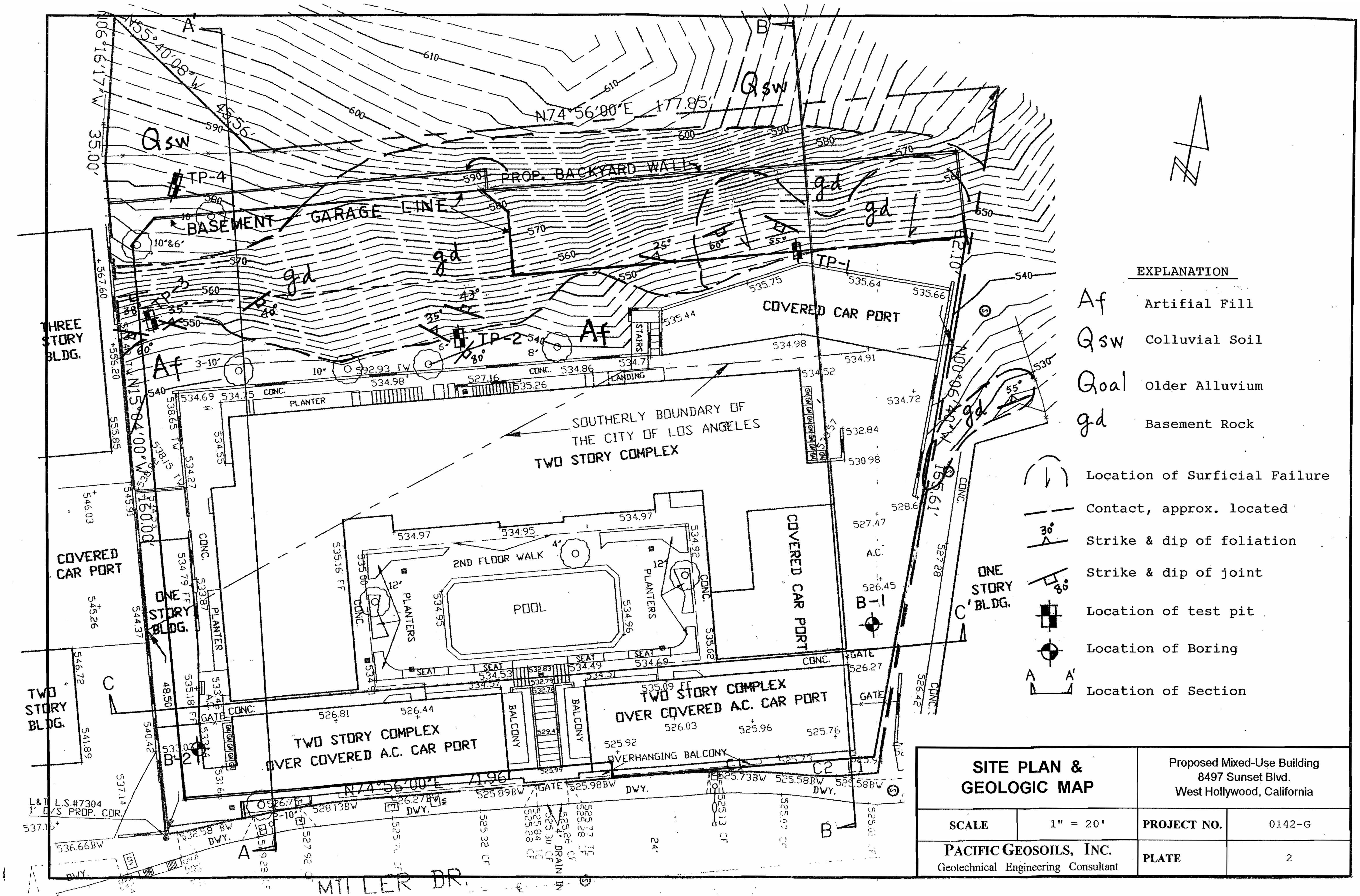
All exploratory pits and borings used for subsurface exploration were backfilled with reasonable effort to restore the areas to their original condition. As with any backfill, some consolidation and subsidence of the backfill soils may result in time, causing some depression of the pit area and possibly a potentially hazardous condition. The client and/or owner of the property are advised to periodically examine the pit areas, and if necessary, backfill any resulting depressions. Pacific Geosoils, Inc. shall not be liable for any resulting injury or damage.

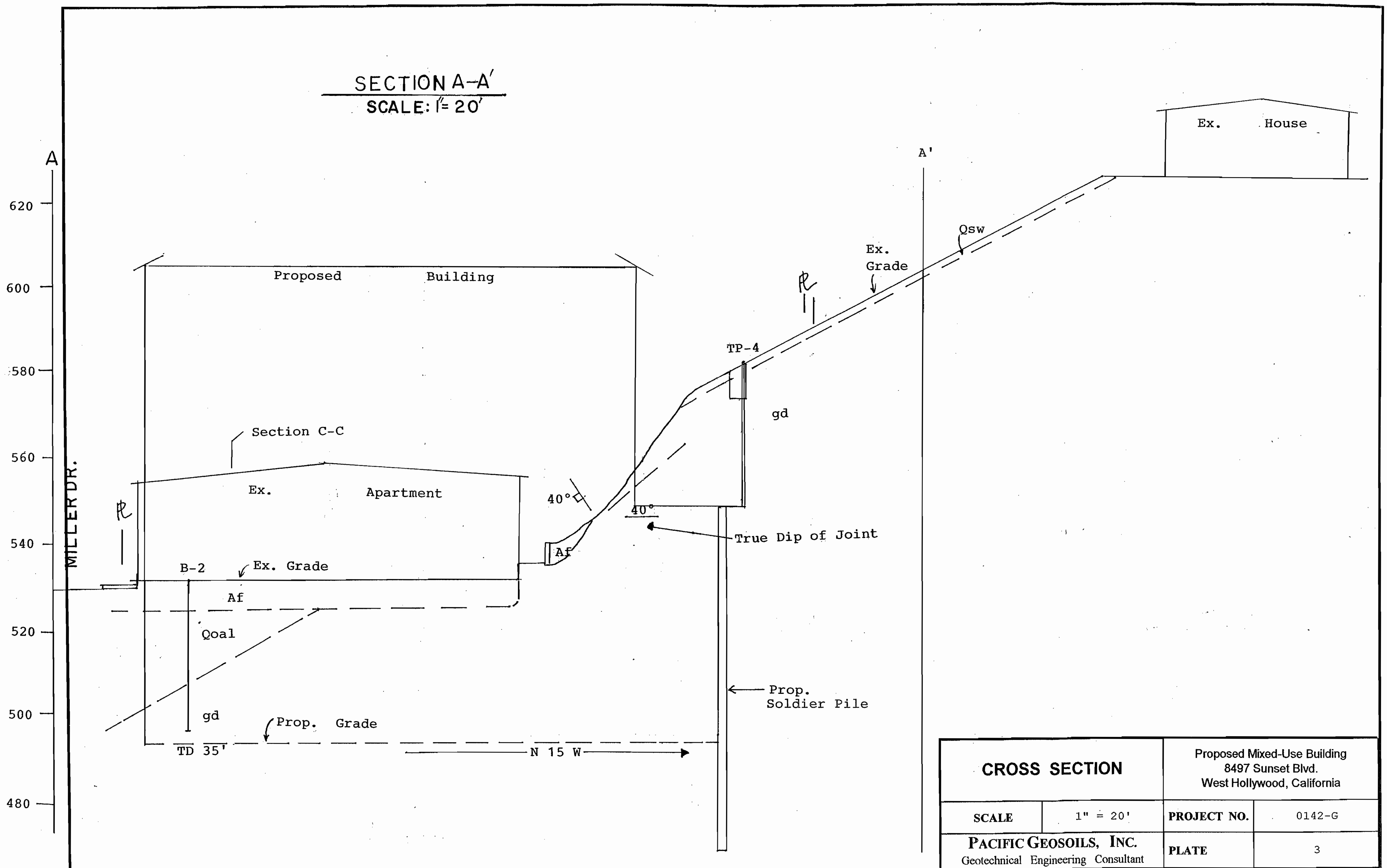
The report is subject to review by controlling public agencies having jurisdiction.



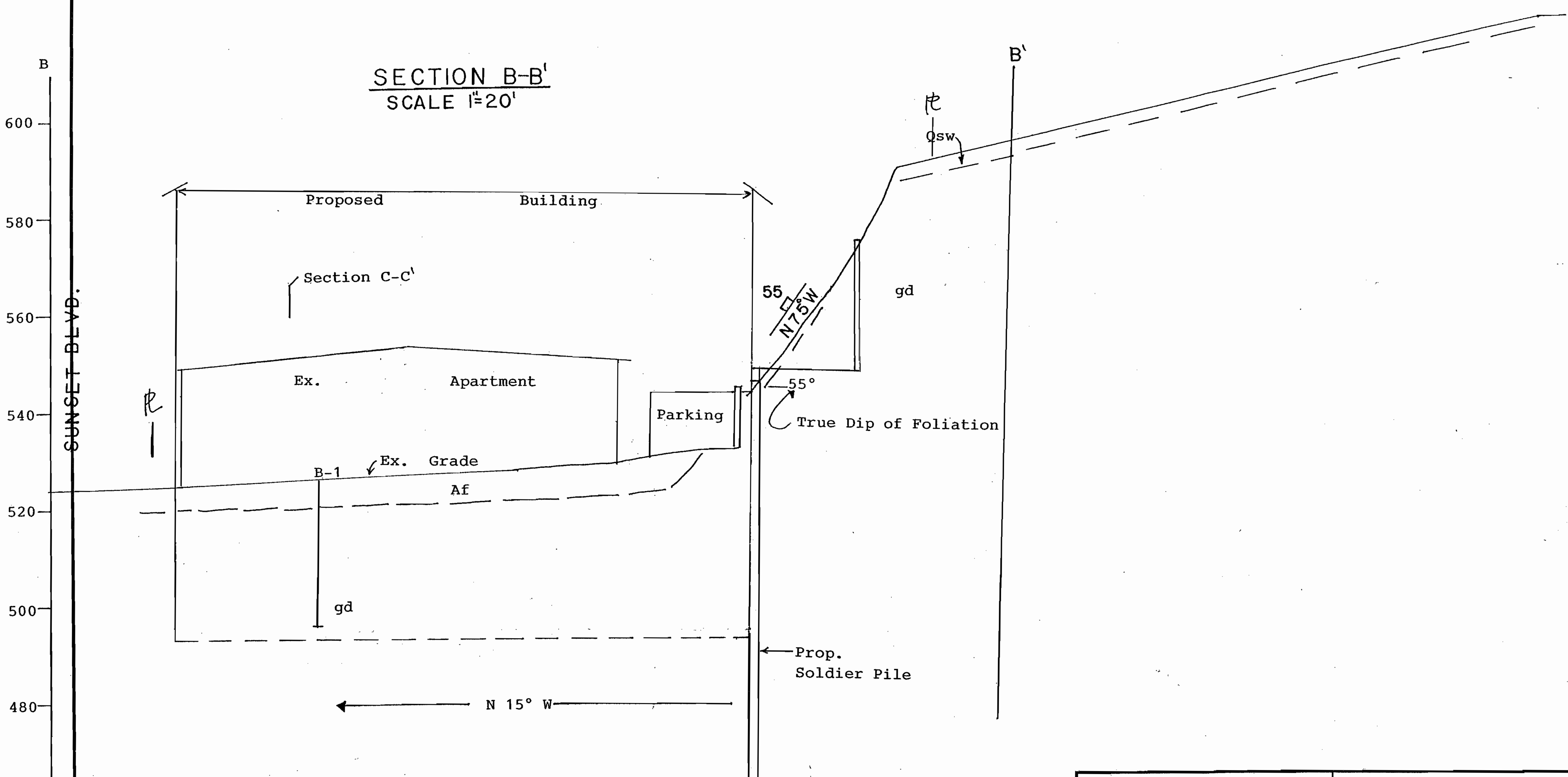
VICINITY MAP	Proposed Mixed-Use Building 8497-8499 Sunset Blvd. West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant* | **PROJECT No.** 0142-G | **PLATE** 1

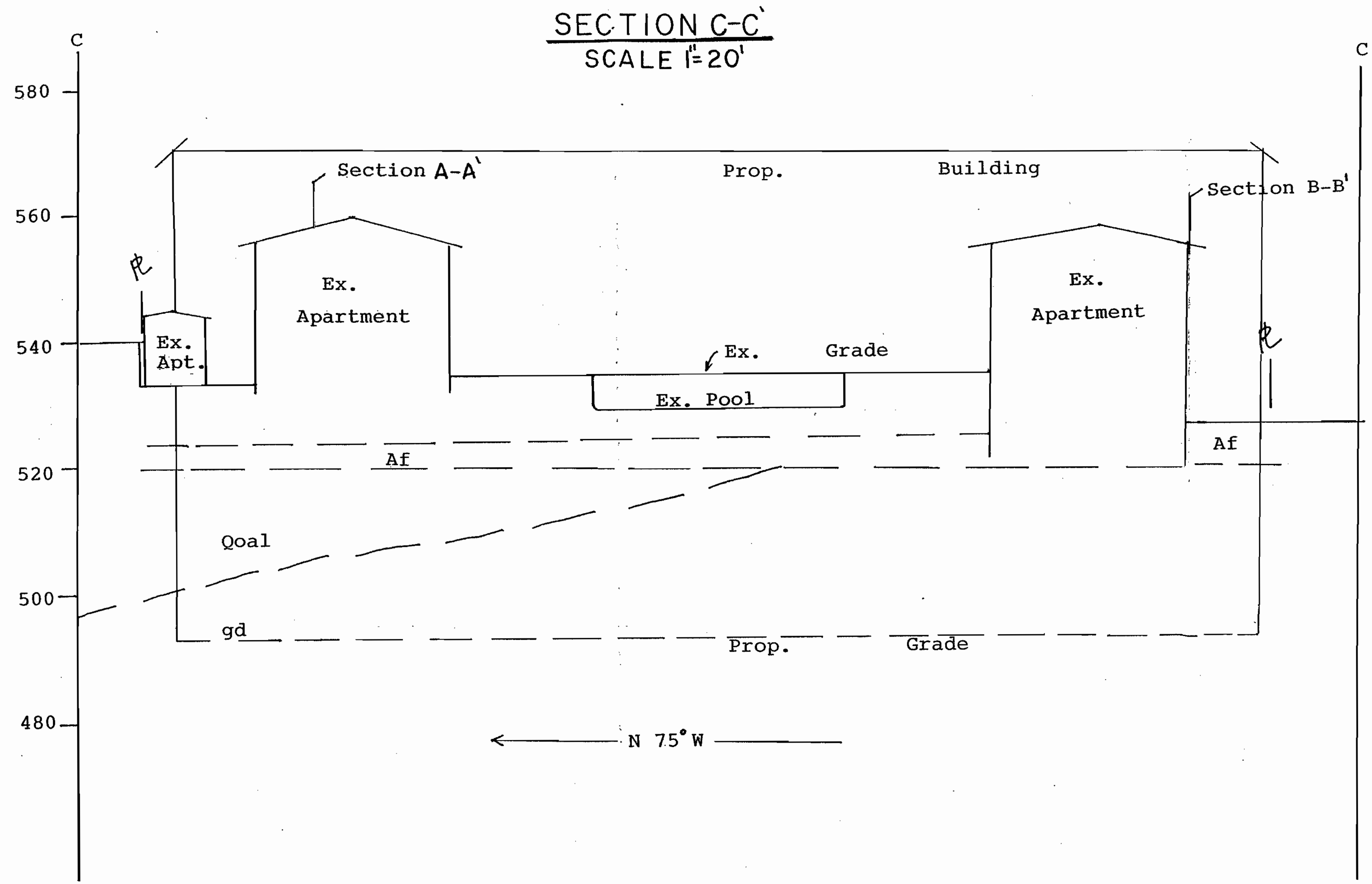

EXPLANATION
Af Artifial Fill
Qsw Colluvial Soil
Qoal Older Alluvium
gd Basement Rock
Location of Surficial Failure
Contact, approx. located
Strike & dip of foliation
Strike & dip of joint
Location of test pit
Location of Boring
Location of Section
TWO STORY COMPLEX
SOUTHERLY BOUNDARY OF THE CITY OF LOS ANGELES
POOL
COVERED CAR PORT
TWO STORY COMPLEX OVER COVERED A.C. CAR PORT
BASEMENT GARAGE LINE
PROP. BACKYARD WALL
THREE STORY BLDG.
ONE STORY BLDG.
TWO STORY BLDG.
MILLER DR.
SITE PLAN & GEOLOGIC MAP
Proposed Mixed-Use Building
8497 Sunset Blvd.
West Hollywood, California
SCALE 1" = 20'
PROJECT NO. 0142-G
PACIFIC GEOSOILS, INC.
Geotechnical Engineering Consultant
PLATE 2



CROSS SECTION		Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California	
SCALE	1" = 20'	PROJECT NO.	0142-G
PACIFIC GEOSOILS, INC. Geotechnical Engineering Consultant		PLATE	3



CROSS SECTION		Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California	
SCALE	1" = 20'	**PROJECT NO.**	0142-G
PACIFIC GEOSOILS, INC. Geotechnical Engineering Consultant		**PLATE**	4

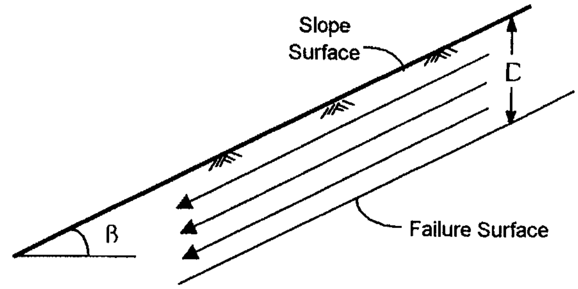


CROSS SECTION		Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California	
SCALE	1" = 20'	PROJECT NO.	0142-G
PACIFIC GEOSOILS, INC. Geotechnical Engineering Consultant		PLATE	5

SURFICIAL SLOPE STABILITY ANALYSIS

Assumption:

Infinite slope with seepage parallel to the slope surface.



Design Parameters and Material Properties:

Cohesion, C	=	350.0	pounds per square foot
Angle of Friction, ϕ	=	30.0	degrees
Saturated Unit Weight, γ_s	=	120.0	pounds per cubic foot
Unit Weight of Water, γ_w	=	62.4	pounds per cubic foot
Slope Angle, β	=	28.0	degrees
Depth of Failure Surface, D	=	3.0	feet

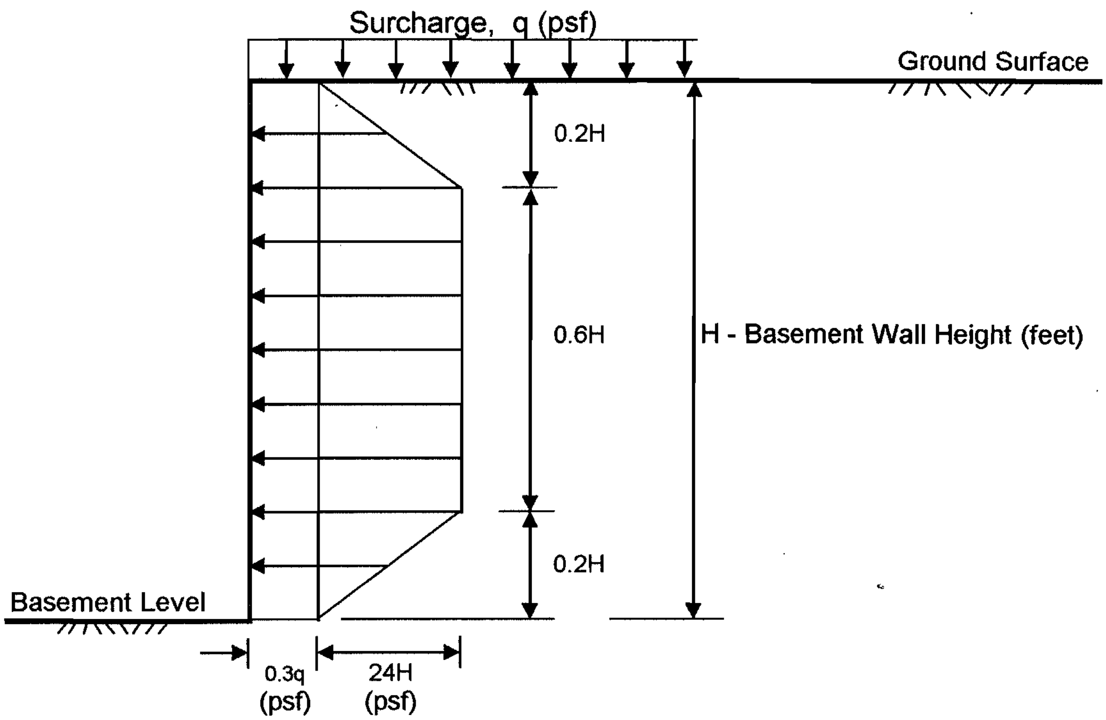
Calculations:

$$\text{Factor-of-Safety} = \frac{C+D(\gamma_s - \gamma_w)\cos^2\beta\tan\phi}{\gamma_s D \sin\beta\cos\beta}$$

$$\frac{427.77}{149.21}$$

$$= 2.87$$

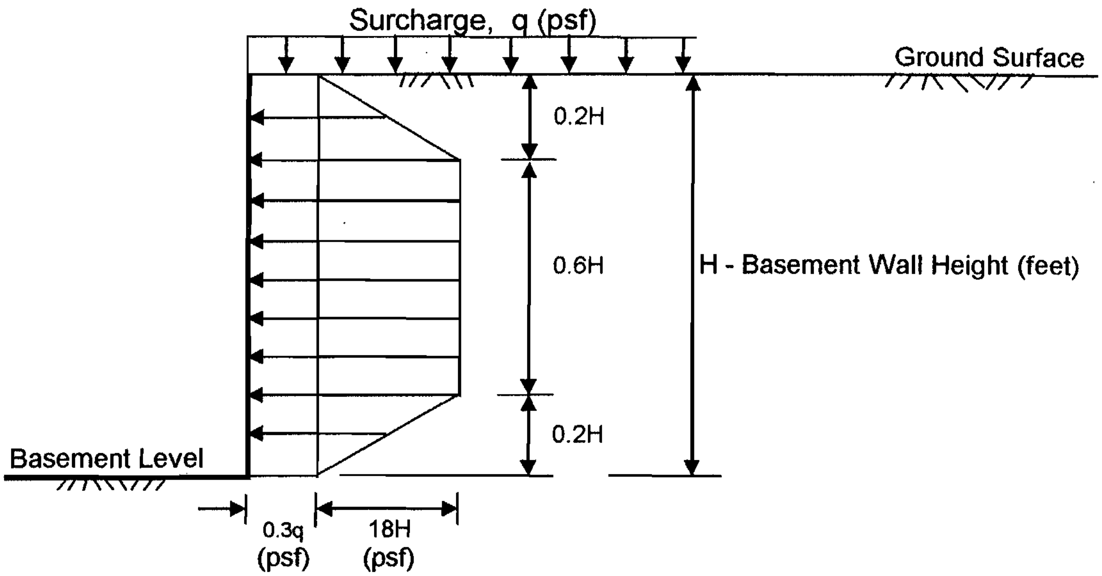
SURFICIAL SLOPE STABILITY CALCULATION	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California	
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultants*	PROJECT No. 0142-G	PLATE 6



NOTE: Surcharge loads are from adjacent buildings or vehicular traffic loads within a distance equal to the depth of retaining wall.

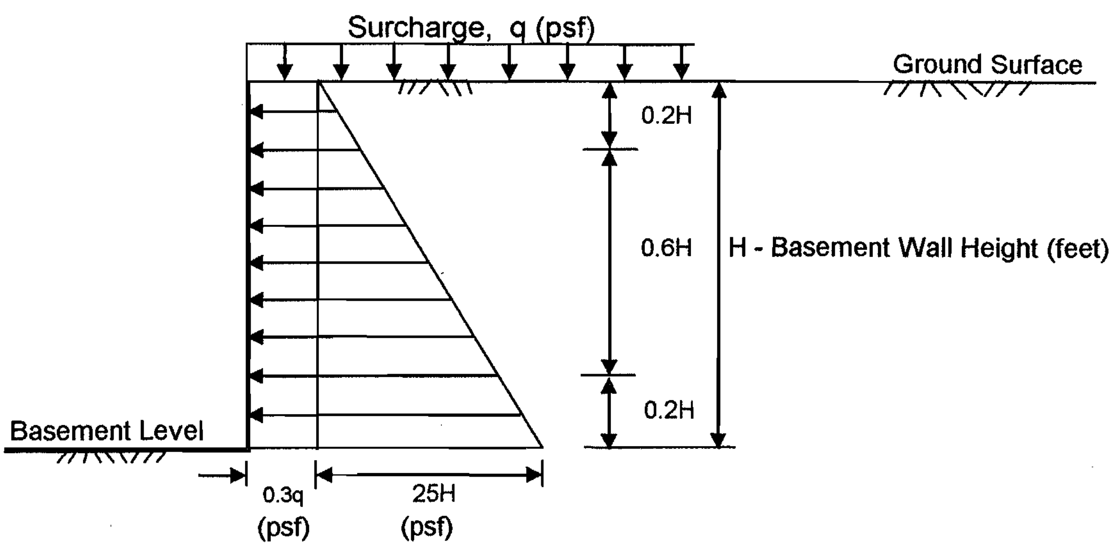
LATERAL ACTIVE PRESSURE **(Basement Wall)**	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	**PROJECT No.** 0142-G	**PLATE** 7



BRACED SHORING

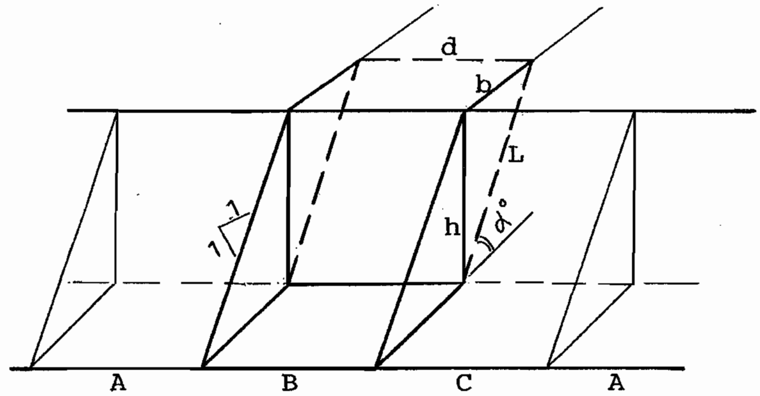
NOTE: Surcharge loads are from adjacent buildings or vehicular traffic within a distance equal to depth of retaining wall.



CANTILEVERED SHORING

LATERAL ACTIVE PRESSURE **(Temporary Shoring)**	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	**PROJECT No.** 0142-G **PLATE** 8

DETERMINATION OF FACTOR-OF-SAFETY FOR SLOT-CUT



Design Parameters and Material Properties:

Cohesion, C	=	2200.0	pounds per square foot
Angle of Friction, ϕ	=	40.0	degrees
Wet Density of Soil, γ	=	125.0	pounds per cubic foot
Vertical Height, h	=	44.0	feet
Slope Angle, β	=	28.0	degrees
Angle of Slide Plane, α	=	65.0	degrees
Length of Slide Plane, L	=	48.6	feet
Top Depth, b	=	20.5	feet
Side Area, A	=	451.6	square foot
Slot Width, d	=	15.0	feet
Surcharge Load, q	=	0.0	kips
Weight of Slide Wedge, W	=	56.5	kips
Total Weight, W+q	=	56.5	kips
Coeff. Earth Pressure, K	=	0.36	

Calculations:

$$\text{Factor-of-Safety} = \frac{d(Cb + W\cos^2\alpha\tan\phi) + 2A((h/3)\gamma K_o\tan\phi + C)}{dW\sin\alpha\cos\alpha}$$

$$= \mathbf{10.13}$$

SLOT-CUTTING CALCULATIONS	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	**PROJECT No.** 0142-G **PLATE** 9

APPENDIX A

FIELD EXPLORATION AND LABORATORY TESTING

FIELD EXPLORATIONS

The subsurface conditions at the site were explored by excavating two borings and four test pits at the locations shown on the Site Plan and Geologic Map, Plate 2. The borings were drilled by means of hollow stem and bucket augers to depths of 30 and 35 feet and the test pits were excavated by hand tools to depths of 3 to 6.5 feet below the existing ground surface. The approximate locations of the borings and test pits were determined by tape measurements from the property boundaries. The location of the borings and test pits should be considered accurate only to the degree implied by the method used.

The materials encountered during excavation of boring and test pits were logged by the Engineering Geologist and Geotechnical Engineer. The soils are classified in accordance with the Unified Soil Classification System described on Plate A-1. Undisturbed samples of soils and bedrock were extracted at selected intervals from the borings and test pits in a barrel sampler with tapered cutting shoe. The undisturbed soil and bedrock retained in 2.5-inch diameter by one-inch rings within the sampler were secured in moisture resistant bags and plastic sample cans as soon as taken to minimize the loss of field moisture while being transported to the laboratory for testing. Detailed logs of borings and test pits are presented on Plates A-2 through A-7, Log of Boring and Log of Test Pit.

The lines designating the interface between soil and bedrock materials on the logs of borings and test pits represent approximate boundaries. The transition between materials may be gradual.

LABORATORY TESTING

Moisture-Density

The field moisture content and dry density of the materials encountered were determined by performing tests on undisturbed samples to aid in the classification and correlation of the soil and rock and to obtain qualitative information relative to their strengths and compressibility. The results of the tests are shown on the Log of Boring and Log of Test Pit, Plates A-2 through A-7.

Direct Shear Tests

Direct shear tests were performed on selected undisturbed samples of the colluvial soil and rock to evaluate shear strength and supporting capacity of the foundation materials. Shear tests were made with a direct shear machine of the displacement control type at a displacement rate of approximately 0.005 inch per minute. The samples were soaked in water for at least 24 hours to approximately saturated moisture condition and then sheared under various normal stresses. The ultimate shear strength values determined from the tests are presented on Plates A-8 and A-9, Direct Shear Test.

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels and gravel - sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel - sand mixtures, little or no fines
		GRAVELS WITH FINES (Appreciable Amount of fines)	GM	Silty gravels, gravel - sand - silt mixtures
			GC	Clayey gravels, gravel - sand - clay mixtures
	SANDS (More than 50% of coarse fraction is SMALLER than No 4 sieve size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		SANDS WITH FINES (Appreciable Amount of fines)	SM	Silty sands, sand - silt mixtures
			SC	Clayey sands, sand - clay mixtures
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt	Peat, muck and other highly organic soils

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

Reference. The Unified Soil Classification System, Corps of Engineers, U. S. Army Technical Memorandum No. 3 - 357, Vol 1, March, 1953 (Revised April, 1960)

UNIFIED SOIL CLASSIFICATION SYSTEM	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	**PROJECT No.** 0142-G — **PLATE** A-1

NOTE: The data presented on this log is a simplification of actual subsurface conditions encountered and applies only at the location of this boring and the date of drilling. It is not warranted to be representative of subsurface conditions at other locations and times.

BORING NO. 1

Elevation: 526'

Depth in Feet	Blow per Foot	Field Moisture % of Dry Weight	Dry Density lbs./cu.ft.	Shear Resistance kips/sq.ft.	Confining Pressure kips/sq.ft.	Unified Classification	Soil Symbol	Description		Color	Moisture	Consistency
						SW		FILL	SAND, medium to coarse, slightly silty,	dark brown	dry	compact
5	50/6"	8.8	115.5					ROCK	GRANODIORITE, biotite, hornblende, medium- to coarse-grained, massive, slightly fractured, highly weathered	yellow brown	slightly moist	hard
10	50/9"											
15	50/6"	5.3	106.4									
20	65/8"	3.5	114.3						slightly weathered	gray brown		
25	50/2"								less weathered			very hard
30	65/4"											

End of Boring @ 30'
no water, no caving

Date Drilled: 6/5/03
Drilling Equipment: 8-inch diameter hollow stem auger
Driving Weight: 140 lbs @ 30-inch drop
Water Depth: not encountered

LOG OF BORING

Proposed Mixed-Use Building
8497 Sunset Blvd.
West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*

PROJECT No. 0142-G **PLATE** A-2

NOTE: The data presented on this log is a simplification of actual subsurface conditions encountered and applies only at the location of this boring and the date of drilling. It is not warranted to be representative of subsurface conditions at other locations and times.

BORING NO. 2

Elevation: 533'

Depth in Feet	Blow per Foot	Field Moisture % of Dry Weight	Dry Density lbs./cu.ft.	Shear Resistance kips/sq.ft.	Confining Pressure kips/sq.ft.	Unified Classification	Soil Symbol		Description	Color	Moisture	Consistency
0–6						SM		FILL	SAND, coarse to fine, silty, pebble to cobble size rock fragments, trash, porous,	brown	slightly moist	mod compact to compact
6–12						SW		OLD ALLUVIUM	SAND, coarse to fine, & sli. silty sand, massive, to crudely layered, porous to very porous, layering dips three degrees to the east	brown		mod dense to dense
10	12	4.6	117.4									
12–20						SM			moderately silty w/ trace clay			
20	12	8.3	111.4			ML			sandy silt layer dips 10 degrees east			firm
23–35								ROCK	GRANODIORITE, biotite, hornblende, medium- to coarse-grained, massive, slightly fractured, highly weathered	gray brown		slightly to mod hard
29	77	7.4	111.1									
35	100/4"											

End of Boring @ 35'
no water, no caving

Date Drilled: 6/10/03
Drilling Equipment: 24-inch diameter bucket auger
Driving Weight: 850 lbs w/ 30-inch drop @10', 450 lbs @20' & 29', 350 lbs @35'
Water Depth: not encountered

LOG OF BORING

Proposed Mixed-Use Building
8497 Sunset Blvd.
West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant* | **PROJECT No.** 0142-G | **PLATE** A-3

NOTE: The data presented on this log are a simplification of actual subsurface conditions encountered and apply only at the location of this boring and the date of drilling. It is not warranted to be representative of subsurface conditions at other locations and times.

TEST PIT NO. 1

Elevation: 545'

Depth in Feet	Blow per Foot	Field Moisture % of Dry Weight	Dry Density lbs./cu.ft.	Attitude	Unified Classification	Soil Symbol	Description	Color	Moisture	Hardness
1							**ROCK** GRANODIORITE, biotite, hornblende, medium- to coarse-grained, foliated, jointed, sli. to mod. fractured, mod. to highly weathered, numerous roots in joints	gray brown	dry	slightly to mod hard
2										
3		3.1	121.3							

End of Test Pit @ 3'

Date Excavated: 6/9/03
Excav. Equipment: hand tools
Driving Weight: 40 lbs @ 24-inch drop
Water Depth: not encountered

LOG OF TEST PIT	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	**PROJECT No.** 0142-G **PLATE** A-4

NOTE: The data presented on this log are a simplification of actual subsurface conditions encountered and apply only at the location of this boring and the date of drilling. It is not warranted to be representative of subsurface conditions at other locations and times.

TEST PIT NO. 2

Elevation: 542'

Depth in Feet	Blow per Foot	Field Moisture % of Dry Weight	Dry Density lbs./cu.ft.	Attitude	Unified Classification	Soil Symbol		Description	Color	Moisture	Consistency
1					SW		FILL	SAND, coarse to fine, gravelly, sli. silty, very porous, numerous roots	brown	dry	mod loose
2											
3											
4							ROCK	GRANODIORITE, biotite, hornblende, medium- to coarse-grained, foliated, jointed, sli. to mod. fractured, mod. to highly weathered,	gray brown to yel brn		slightly to mod hard

End of Test Pit @ 4'

Date Excavated: 6/9/03
Excav. Equipment: hand tools
Driving Weight: 40 lbs @ 24-inch drop
Water Depth: not encountered

LOG OF TEST PIT

Proposed Mixed-Use Building
8497 Sunset Blvd.
West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*

PROJECT No. 0142-G **PLATE** A-5

NOTE: The data presented on this log are a simplification of actual subsurface conditions encountered and apply only at the location of this boring and the date of drilling. It is not warranted to be representative of subsurface conditions at other locations and times.

TEST PIT NO. 3

Elevation: 552'

Depth in Feet	Blow per Foot	Field Moisture % of Dry Weight	Dry Density lbs./cu.ft.	Attitude	Unified Classification	Soil Symbol	Description			
1							ROCK GRANODIORITE, biotite, hornblende,	yellow	dry	slightly
2							medium- to coarse-grained, foliated,	brown		to mod
3		3.8	121.8				mod. jointed, mod. fractured,	to		hard
4							mod. to highly weathered,	brown		

End of Test Pit @ 4'

Date Excavated: 6/9/03
Excav. Equipment: hand tools
Driving Weight: 40 lbs @ 24-inch drop
Water Depth: not encountered

LOG OF TEST PIT

Proposed Mixed-Use Building
8497 Sunset Blvd.
West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*

PROJECT No. 0142-G **PLATE** A-6

NOTE: The data presented on this log are a simplification of actual subsurface conditions encountered and apply only at the location of this boring and the date of drilling. It is not warranted to be representative of subsurface conditions at other locations and times.

TEST PIT NO. 4

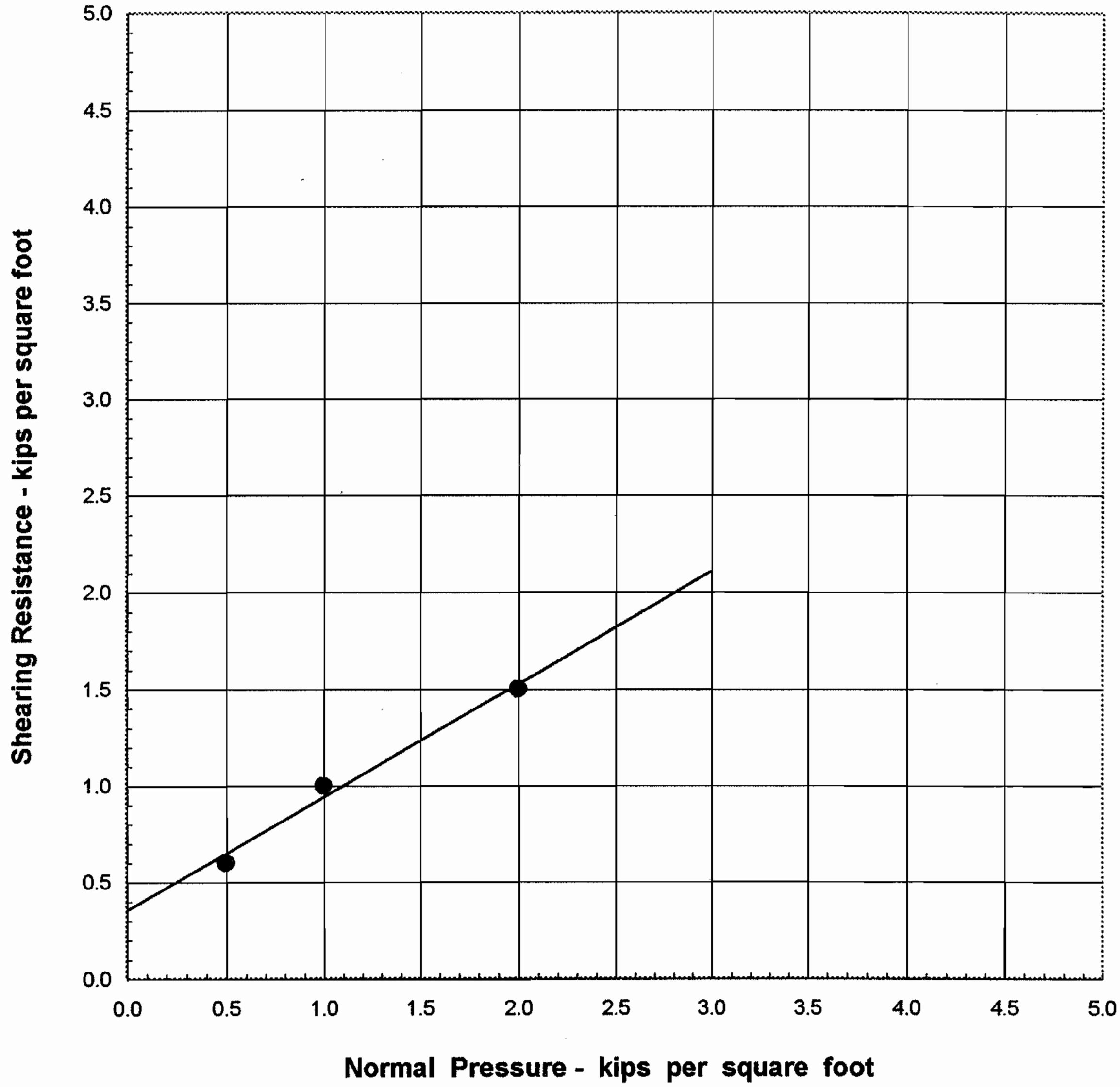
Elevation: 580'

Depth in Feet	Blow per Foot	Field Moisture % of Dry Weight	Dry Density lbs./cu.ft.	Attitude	Unified Classification	Soil Symbol		Description	Color	Moisture	Consistency
1					SM		COLLUVIUM	SAND, coarse to fine, sli. silty,	brn to	moist	mod
2		9.5	102.7					very porous, numerous roots	yel brn		dense
3							ROCK	GRANODIORITE, biotite, hornblende,	yellow		firm
4								medium- to coarse-grained, sli. foliated,	brown		to
5								sli. to mod. fractured, highly weathered			slightly
6											hard
7											

End of Test Pit @ 6.5'

Date Excavated: 6/9/03
Excav. Equipment: hand tools
Driving Weight: 40 lbs @ 24-inch drop
Water Depth: not encountered

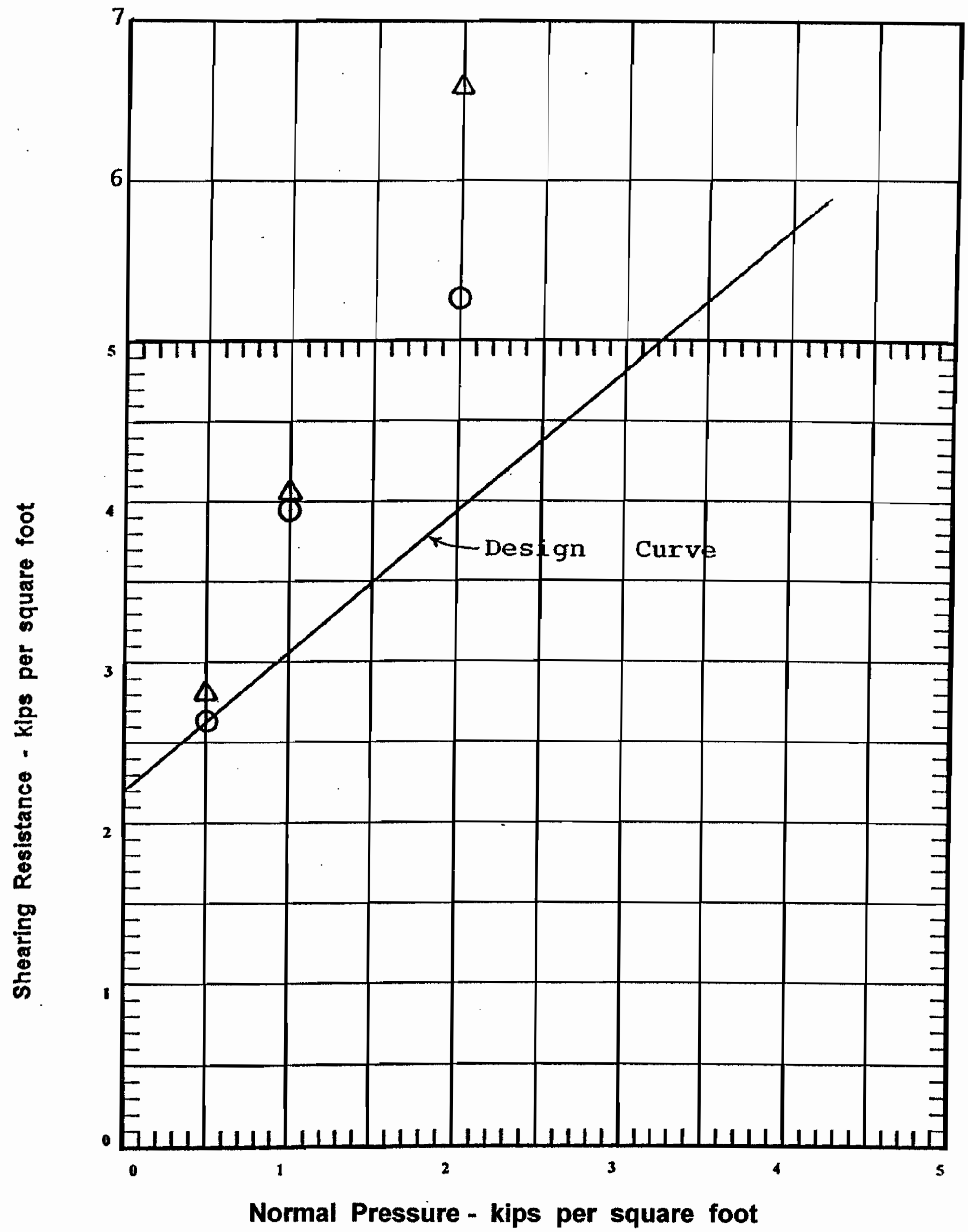
LOG OF TEST PIT	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	PROJECT No. 0142-G — PLATE A-7



Colluvium: Samples were tested under saturated and drained conditions.

	Test Pit No.	Depth (feet)	UC	Initial Water Content (% of dry wt.)	Final Water Content (% of dry wt.)	Dry Density (lbs / cu.ft.)	Cohesion (lbs / sq. ft.)	Angle of Friction (degrees)
●	4	2	SM	9.5	19.6	102.7	350	30

DIRECT SHEAR TEST DATA	Proposed Mixed-Use Building 8497 Sunset Blvd. West Hollywood, California
PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*	**PROJECT No.** 0142-G **PLATE** A-8



Rock: Samples were tested under saturated and drained conditions.

	Test Pit No.	Depth (feet)	UC	Initial Water Content (% of dry wt.)	Final Water Content (% of dry wt.)	Dry Density (lbs / cu.ft.)	Cohesion (lbs / sq. ft.)	Angle of Friction (degrees)
○	1	3		3.1	13.2	121.3	2200	40
△	3	3		3.8	13.5	121.8		

DIRECT SHEAR TEST DATA

Proposed Mixed-Use Building
8497 Sunset Blvd.
West Hollywood, California

PACIFIC GEOSOILS, INC. *Geotechnical Engineering Consultant*

PROJECT No. 0142-G **PLATE** A-9

APPENDIX B

SLOPE STABILITY ANAYSES

SECTION A – A'

(STATIC)

** PCSTABL6 **
by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer`s Method of Slices

Run Date:
Time of Run:
Run By:
Input Data Filename: run.in
Output Filename: result.out
Unit: ENGLISH
Plotted Output Filename: result.plt

PROBLEM DESCRIPTION 0142-G/8497 Sunset Blvd

BOUNDARY COORDINATES

9 Top Boundaries
12 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	0.00	93.00	152.10	93.00	1
2	152.10	93.00	152.20	148.00	3
3	152.20	148.00	154.20	148.00	3
4	154.20	148.00	158.00	148.00	1
5	158.00	148.00	158.10	180.00	1
6	158.10	180.00	158.20	182.00	2
7	158.20	182.00	242.00	227.00	2
8	242.00	227.00	245.00	227.00	2
9	245.00	227.00	340.00	227.00	1
10	158.10	180.00	245.00	227.00	1
11	152.00	70.00	152.10	93.00	3
12	154.20	148.00	154.30	70.00	1

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	125.0	125.0	2200.0	40.0	0.00	0.0	0
2	100.0	100.0	0.0	0.0	0.00	0.0	0
3	150.0	150.0	43200.0	0.0	0.00	0.0	0

BOUNDARY LOAD(S)

2 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	16.00	152.00	1000.0	0.0
2	247.00	300.00	180.0	0.0

NOTE - Intensity Is Specified As A Uniformly Distributed Force Acting On A Horizontally Projected Surface.

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 80.00 ft. and X = 152.10 ft.

Each Surface Terminates Between X = 190.00 ft. and X = 340.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 60.00 ft.

5.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 38 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	152.10	93.26
2	156.37	95.86
3	160.60	98.53
4	164.78	101.28
5	168.91	104.10
6	172.99	106.98

7	177.02	109.94
8	181.00	112.97
9	184.93	116.06
10	188.80	119.22
11	192.62	122.45
12	196.38	125.74
13	200.09	129.10
14	203.74	132.52
15	207.32	136.00
16	210.85	139.55
17	214.32	143.15
18	217.72	146.81
19	221.06	150.53
20	224.34	154.31
21	227.55	158.15
22	230.69	162.03
23	233.77	165.97
24	236.77	169.97
25	239.71	174.01
26	242.58	178.11
27	245.38	182.25
28	248.11	186.44
29	250.76	190.68
30	253.34	194.96
31	255.85	199.29
32	258.28	203.66
33	260.64	208.07
34	262.92	212.52
35	265.12	217.01
36	267.25	221.53
37	269.29	226.09
38	269.68	227.00

Circle Center At X = 3.1 ; Y = 342.8 and Radius, 290.7

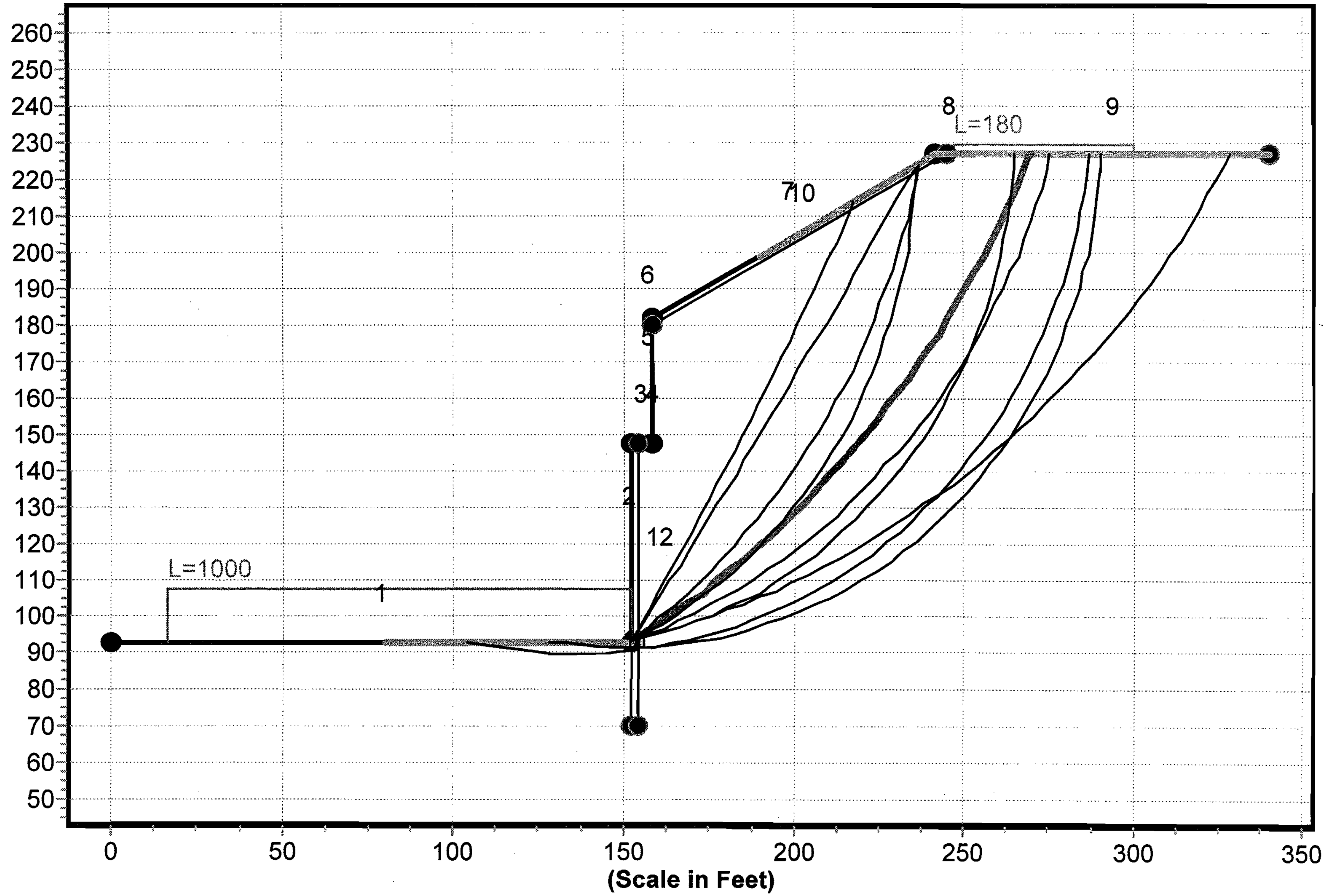
*** 1.747 ***

Individual data on the 46 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Force Norm (lbs)	Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	0.1	408.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2.0	16221.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.1	457.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	2.1	13872.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	1.6	10511.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.1	838.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.1	1047.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	2.4	25306.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	4.2	43937.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0

10	4.1	43152.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	4.1	42311.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	4.0	41416.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	4.0	40471.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	3.9	39477.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	3.9	38438.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	3.8	37355.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	3.8	36232.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	3.7	35071.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	3.6	33876.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	3.6	32649.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	3.5	31394.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	3.5	30114.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	3.4	28811.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	3.3	27489.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	3.3	26152.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	3.2	24802.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	3.1	23443.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	3.1	22079.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	3.0	20712.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	2.9	19347.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	2.3	14413.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.6	3564.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	2.4	14197.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.4	2138.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	1.6	8809.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	1.1	5726.8	0.0	0.0	0.0	0.0	0.0	0.0	199.2
37	2.7	12751.7	0.0	0.0	0.0	0.0	0.0	0.0	477.7
38	2.6	11025.5	0.0	0.0	0.0	0.0	0.0	0.0	464.5
39	2.5	9360.5	0.0	0.0	0.0	0.0	0.0	0.0	451.2
40	2.4	7759.6	0.0	0.0	0.0	0.0	0.0	0.0	437.8
41	2.4	6225.9	0.0	0.0	0.0	0.0	0.0	0.0	424.2
42	2.3	4761.9	0.0	0.0	0.0	0.0	0.0	0.0	410.4
43	2.2	3370.6	0.0	0.0	0.0	0.0	0.0	0.0	396.6
44	2.1	2054.3	0.0	0.0	0.0	0.0	0.0	0.0	382.7
45	2.0	815.8	0.0	0.0	0.0	0.0	0.0	0.0	368.6
46	0.4	22.0	0.0	0.0	0.0	0.0	0.0	0.0	69.9

Geometry and Boundary Conditions
Problem: 0142-G/8497 Sunset Blvd - FS Min = 1.747



SECTION A – A’

(SEISMIC)

** PCSTABL6 **
by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer`s Method of Slices

Run Date:
Time of Run:
Run By:
Input Data Filename: run.in
Output Filename: result.out
Unit: ENGLISH
Plotted Output Filename: result.plt

PROBLEM DESCRIPTION 0142-G/8497 Sunset Blvd

BOUNDARY COORDINATES

9 Top Boundaries
12 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	0.00	93.00	152.10	93.00	1
2	152.10	93.00	152.20	148.00	3
3	152.20	148.00	154.20	148.00	3
4	154.20	148.00	158.00	148.00	1
5	158.00	148.00	158.10	180.00	1
6	158.10	180.00	158.20	182.00	2
7	158.20	182.00	242.00	227.00	2
8	242.00	227.00	245.00	227.00	2
9	245.00	227.00	340.00	227.00	1
10	158.10	180.00	245.00	227.00	1
11	152.00	70.00	152.10	93.00	3
12	154.20	148.00	154.30	70.00	1

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	125.0	125.0	2200.0	40.0	0.00	0.0	0
2	100.0	100.0	0.0	0.0	0.00	0.0	0
3	150.0	150.0	43200.0	0.0	0.00	0.0	0

BOUNDARY LOAD(S)

2 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	16.00	152.00	1000.0	0.0
2	247.00	300.00	180.0	0.0

NOTE - Intensity Is Specified As A Uniformly Distributed
Force Acting On A Horizontally Projected Surface.

A Horizontal Earthquake Loading Coefficient
Of0.150 Has Been Assigned

A Vertical Earthquake Loading Coefficient
Of0.000 Has Been Assigned

Cavitation Pressure = 0.0 (psf)

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced
Along The Ground Surface Between X = 80.00 ft.
and X = 152.10 ft.

Each Surface Terminates Between X = 190.00 ft.
and X = 340.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 60.00 ft.

5.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 38 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	152.10	93.26
2	156.37	95.86
3	160.60	98.53
4	164.78	101.28
5	168.91	104.10
6	172.99	106.98
7	177.02	109.94
8	181.00	112.97
9	184.93	116.06
10	188.80	119.22
11	192.62	122.45
12	196.38	125.74
13	200.09	129.10
14	203.74	132.52
15	207.32	136.00
16	210.85	139.55
17	214.32	143.15
18	217.72	146.81
19	221.06	150.53
20	224.34	154.31
21	227.55	158.15
22	230.69	162.03
23	233.77	165.97
24	236.77	169.97
25	239.71	174.01
26	242.58	178.11
27	245.38	182.25
28	248.11	186.44
29	250.76	190.68
30	253.34	194.96
31	255.85	199.29
32	258.28	203.66
33	260.64	208.07
34	262.92	212.52
35	265.12	217.01
36	267.25	221.53
37	269.29	226.09
38	269.68	227.00

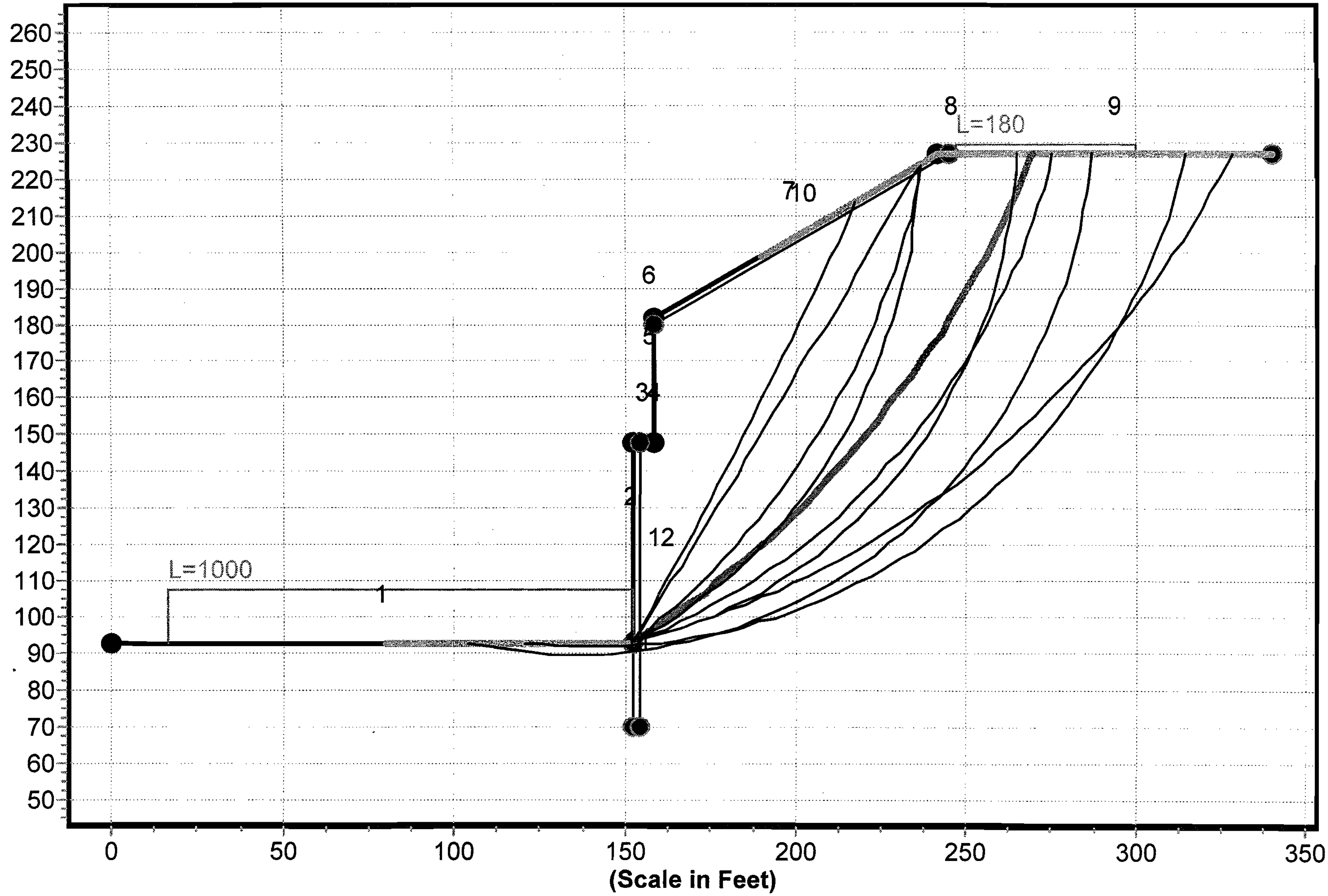
Circle Center At X = 3.1 ; Y = 342.8 and Radius, 290.7

*** 1.459 ***

Individual data on the 46 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Force Norm (lbs)	Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	0.1	408.1	0.0	0.0	0.0	0.0	61.2	0.0	0.0
2	2.0	16221.1	0.0	0.0	0.0	0.0	2433.2	0.0	0.0
3	0.1	457.6	0.0	0.0	0.0	0.0	68.6	0.0	0.0
4	2.1	13872.2	0.0	0.0	0.0	0.0	2080.8	0.0	0.0
5	1.6	10511.0	0.0	0.0	0.0	0.0	1576.6	0.0	0.0
6	0.1	838.5	0.0	0.0	0.0	0.0	125.8	0.0	0.0
7	0.1	1047.6	0.0	0.0	0.0	0.0	157.1	0.0	0.0
8	2.4	25306.7	0.0	0.0	0.0	0.0	3796.0	0.0	0.0
9	4.2	43937.5	0.0	0.0	0.0	0.0	6590.6	0.0	0.0
10	4.1	43152.3	0.0	0.0	0.0	0.0	6472.8	0.0	0.0
11	4.1	42311.2	0.0	0.0	0.0	0.0	6346.7	0.0	0.0
12	4.0	41416.8	0.0	0.0	0.0	0.0	6212.5	0.0	0.0
13	4.0	40471.4	0.0	0.0	0.0	0.0	6070.7	0.0	0.0
14	3.9	39477.6	0.0	0.0	0.0	0.0	5921.6	0.0	0.0
15	3.9	38438.0	0.0	0.0	0.0	0.0	5765.7	0.0	0.0
16	3.8	37355.3	0.0	0.0	0.0	0.0	5603.3	0.0	0.0
17	3.8	36232.3	0.0	0.0	0.0	0.0	5434.8	0.0	0.0
18	3.7	35071.7	0.0	0.0	0.0	0.0	5260.8	0.0	0.0
19	3.6	33876.6	0.0	0.0	0.0	0.0	5081.5	0.0	0.0
20	3.6	32649.9	0.0	0.0	0.0	0.0	4897.5	0.0	0.0
21	3.5	31394.8	0.0	0.0	0.0	0.0	4709.2	0.0	0.0
22	3.5	30114.2	0.0	0.0	0.0	0.0	4517.1	0.0	0.0
23	3.4	28811.4	0.0	0.0	0.0	0.0	4321.7	0.0	0.0
24	3.3	27489.6	0.0	0.0	0.0	0.0	4123.4	0.0	0.0
25	3.3	26152.1	0.0	0.0	0.0	0.0	3922.8	0.0	0.0
26	3.2	24802.3	0.0	0.0	0.0	0.0	3720.3	0.0	0.0
27	3.1	23443.4	0.0	0.0	0.0	0.0	3516.5	0.0	0.0
28	3.1	22079.1	0.0	0.0	0.0	0.0	3311.9	0.0	0.0
29	3.0	20712.6	0.0	0.0	0.0	0.0	3106.9	0.0	0.0
30	2.9	19347.5	0.0	0.0	0.0	0.0	2902.1	0.0	0.0
31	2.3	14413.5	0.0	0.0	0.0	0.0	2162.0	0.0	0.0
32	0.6	3564.5	0.0	0.0	0.0	0.0	534.7	0.0	0.0
33	2.4	14197.8	0.0	0.0	0.0	0.0	2129.7	0.0	0.0
34	0.4	2138.6	0.0	0.0	0.0	0.0	320.8	0.0	0.0
35	1.6	8809.4	0.0	0.0	0.0	0.0	1321.4	0.0	0.0
36	1.1	5726.8	0.0	0.0	0.0	0.0	859.0	0.0	199.2
37	2.7	12751.7	0.0	0.0	0.0	0.0	1912.8	0.0	477.7
38	2.6	11025.5	0.0	0.0	0.0	0.0	1653.8	0.0	464.5
39	2.5	9360.5	0.0	0.0	0.0	0.0	1404.1	0.0	451.2
40	2.4	7759.6	0.0	0.0	0.0	0.0	1163.9	0.0	437.8
41	2.4	6225.9	0.0	0.0	0.0	0.0	933.9	0.0	424.2
42	2.3	4761.9	0.0	0.0	0.0	0.0	714.3	0.0	410.4
43	2.2	3370.6	0.0	0.0	0.0	0.0	505.6	0.0	396.6
44	2.1	2054.3	0.0	0.0	0.0	0.0	308.1	0.0	382.7
45	2.0	815.8	0.0	0.0	0.0	0.0	122.4	0.0	368.6
46	0.4	22.0	0.0	0.0	0.0	0.0	3.3	0.0	69.9

Geometry and Boundary Conditions
Problem: 0142-G/8497 Sunset Blvd - FS Min = 1.459



SECTION B – B’

(STATIC)

** PCSTABL6 **
by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer`s Method of Slices

Run Date:
Time of Run:
Run By:
Input Data Filename: run.in
Output Filename: result.out
Unit: ENGLISH
Plotted Output Filename: result.plt

PROBLEM DESCRIPTION 0142-G/8497 Sunset Blvd

BOUNDARY COORDINATES

11 Top Boundaries
14 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	0.00	93.00	105.10	93.00	1
2	105.10	93.00	105.20	148.00	3
3	105.20	148.00	107.20	148.00	3
4	107.20	148.00	126.00	148.00	1
5	126.00	148.00	126.10	172.00	1
6	126.10	172.00	129.00	177.00	1
7	129.00	177.00	134.00	186.00	1
8	134.00	186.00	135.00	190.00	2
9	135.00	190.00	268.00	220.00	2
10	268.00	220.00	278.00	220.00	2
11	278.00	220.00	320.00	220.00	1
12	134.00	186.00	278.00	220.00	1
13	105.00	70.00	105.10	93.00	3
14	107.20	148.00	107.30	70.00	1

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	125.0	125.0	2200.0	40.0	0.00	0.0	0
2	100.0	100.0	0.0	0.0	0.00	0.0	0
3	150.0	150.0	43200.0	0.0	0.00	0.0	0

BOUNDARY LOAD(S)

1 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	0.00	105.10	1000.0	0.0

NOTE - Intensity Is Specified As A Uniformly Distributed Force Acting On A Horizontally Projected Surface.

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 30.00 ft.
and X = 105.10 ft.

Each Surface Terminates Between X = 150.00 ft.
and X = 310.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 60.00 ft.

5.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 34 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	105.10	93.27
2	109.82	94.93
3	114.48	96.73
4	119.09	98.67
5	123.64	100.75
6	128.12	102.97

7	132.53	105.33
8	136.86	107.82
9	141.12	110.44
10	145.29	113.19
11	149.38	116.07
12	153.38	119.08
13	157.28	122.20
14	161.09	125.45
15	164.79	128.81
16	168.39	132.28
17	171.88	135.86
18	175.26	139.54
19	178.52	143.33
20	181.67	147.21
21	184.69	151.20
22	187.60	155.27
23	190.37	159.43
24	193.02	163.67
25	195.53	167.99
26	197.91	172.39
27	200.16	176.85
28	202.27	181.39
29	204.23	185.99
30	206.06	190.64
31	207.74	195.35
32	209.27	200.11
33	210.66	204.91
34	211.25	207.20

Circle Center At X = 53.6 ; Y = 247.6 and Radius, 162.7

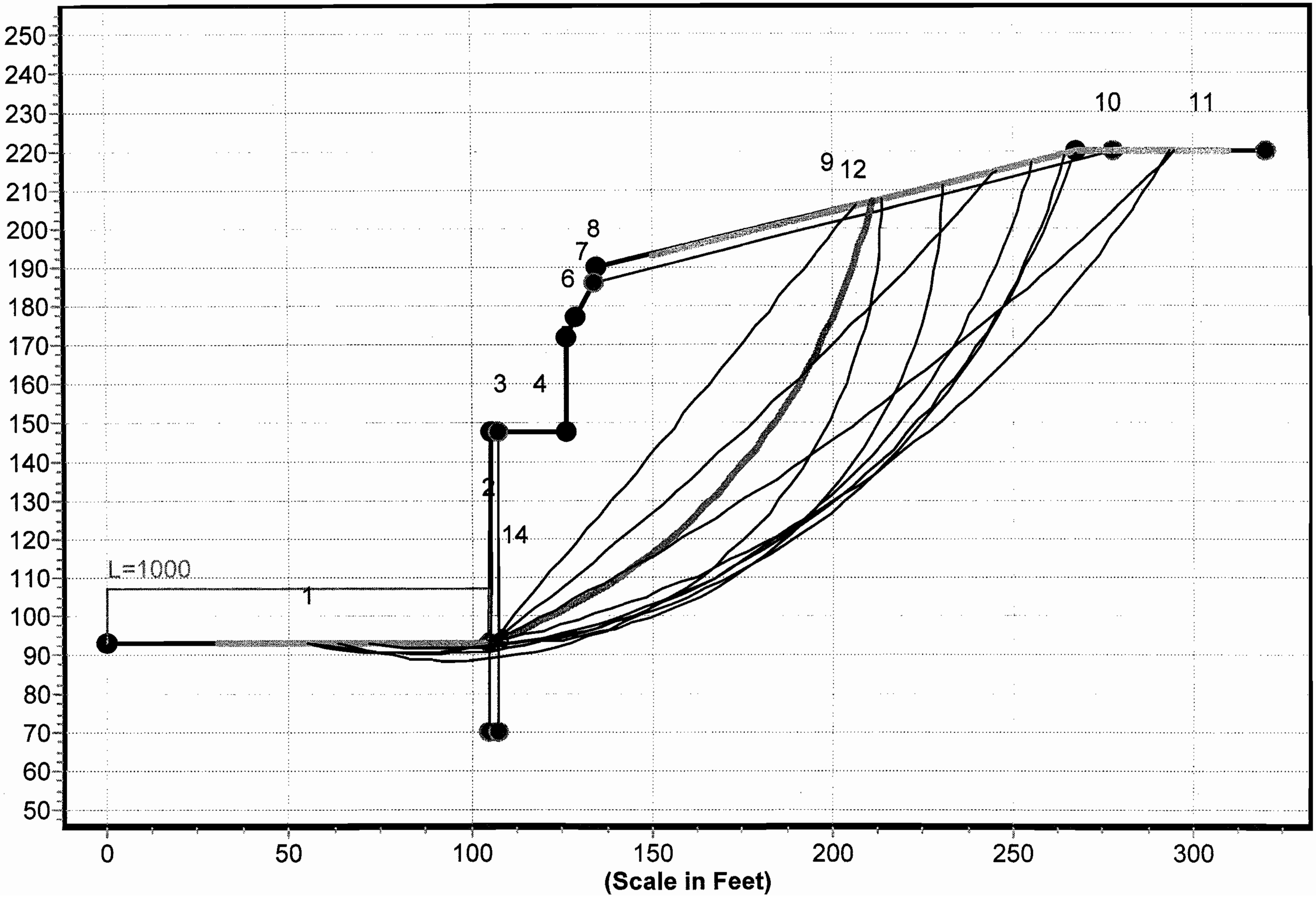
*** 2.097 ***

Individual data on the 42 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Force Norm (lbs)	Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	0.1	408.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2.0	16302.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.1	466.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	2.5	17056.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	4.7	30424.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	4.6	28973.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	4.5	27441.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	2.4	13779.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.1	725.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	2.0	17974.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.9	8055.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	3.5	33415.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.5	14530.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.0	10145.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	1.9	19129.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

16	4.3	43111.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	4.2	41373.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	4.1	39557.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	4.0	37673.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	3.9	35730.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	3.8	33737.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	3.7	31705.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	3.6	29645.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	3.5	27567.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	3.4	25482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	3.3	23400.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	3.1	21333.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	3.0	19292.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	2.9	17288.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	2.8	15331.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	2.6	13433.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	2.5	11604.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	2.4	9855.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	2.2	8196.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	2.1	6636.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	2.0	5186.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	1.8	3854.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	1.7	2651.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	1.5	1583.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	1.1	598.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.3	64.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.6	63.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Geometry and Boundary Conditions
Problem: 0142-G/8497 Sunset Blvd - FS Min = 2.097



SECTION B – B’

(SEISMIC)

** PCSTABL6 **
by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer`s Method of Slices

Run Date:
Time of Run:
Run By:
Input Data Filename: run.in
Output Filename: result.out
Unit: ENGLISH
Plotted Output Filename: result.plt

PROBLEM DESCRIPTION 0142-G/8497 Sunset Blvd

BOUNDARY COORDINATES

11 Top Boundaries
14 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	0.00	93.00	105.10	93.00	1
2	105.10	93.00	105.20	148.00	3
3	105.20	148.00	107.20	148.00	3
4	107.20	148.00	126.00	148.00	1
5	126.00	148.00	126.10	172.00	1
6	126.10	172.00	129.00	177.00	1
7	129.00	177.00	134.00	186.00	1
8	134.00	186.00	135.00	190.00	2
9	135.00	190.00	268.00	220.00	2
10	268.00	220.00	278.00	220.00	2
11	278.00	220.00	320.00	220.00	1
12	134.00	186.00	278.00	220.00	1
13	105.00	70.00	105.10	93.00	3
14	107.20	148.00	107.30	70.00	1

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	125.0	125.0	2200.0	40.0	0.00	0.0	0
2	100.0	100.0	0.0	0.0	0.00	0.0	0
3	150.0	150.0	43200.0	0.0	0.00	0.0	0

BOUNDARY LOAD(S)

1 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	0.00	105.10	1000.0	0.0

NOTE - Intensity Is Specified As A Uniformly Distributed
Force Acting On A Horizontally Projected Surface.

A Horizontal Earthquake Loading Coefficient
Of0.150 Has Been Assigned

A Vertical Earthquake Loading Coefficient
Of0.000 Has Been Assigned

Cavitation Pressure = 0.0 (psf)

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced
Along The Ground Surface Between X = 30.00 ft.
and X = 105.10 ft.

Each Surface Terminates Between X = 150.00 ft.
and X = 310.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 60.00 ft.

5.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 39 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	105.10	93.27
2	109.19	96.16
3	113.25	99.06
4	117.31	101.99
5	121.34	104.94
6	125.36	107.91
7	129.37	110.91
8	133.36	113.93
9	137.33	116.96
10	141.28	120.03
11	145.21	123.11
12	149.13	126.21
13	153.04	129.34
14	156.92	132.49
15	160.79	135.66
16	164.64	138.85
17	168.47	142.06
18	172.28	145.30
19	176.08	148.55
20	179.85	151.83
21	183.61	155.12
22	187.35	158.44
23	191.08	161.78
24	194.78	165.14
25	198.47	168.52
26	202.13	171.92
27	205.78	175.34
28	209.41	178.78
29	213.02	182.24
30	216.61	185.72
31	220.18	189.22
32	223.73	192.74
33	227.26	196.27
34	230.78	199.83
35	234.27	203.41
36	237.74	207.01
37	241.19	210.63
38	244.62	214.26
39	245.18	214.85

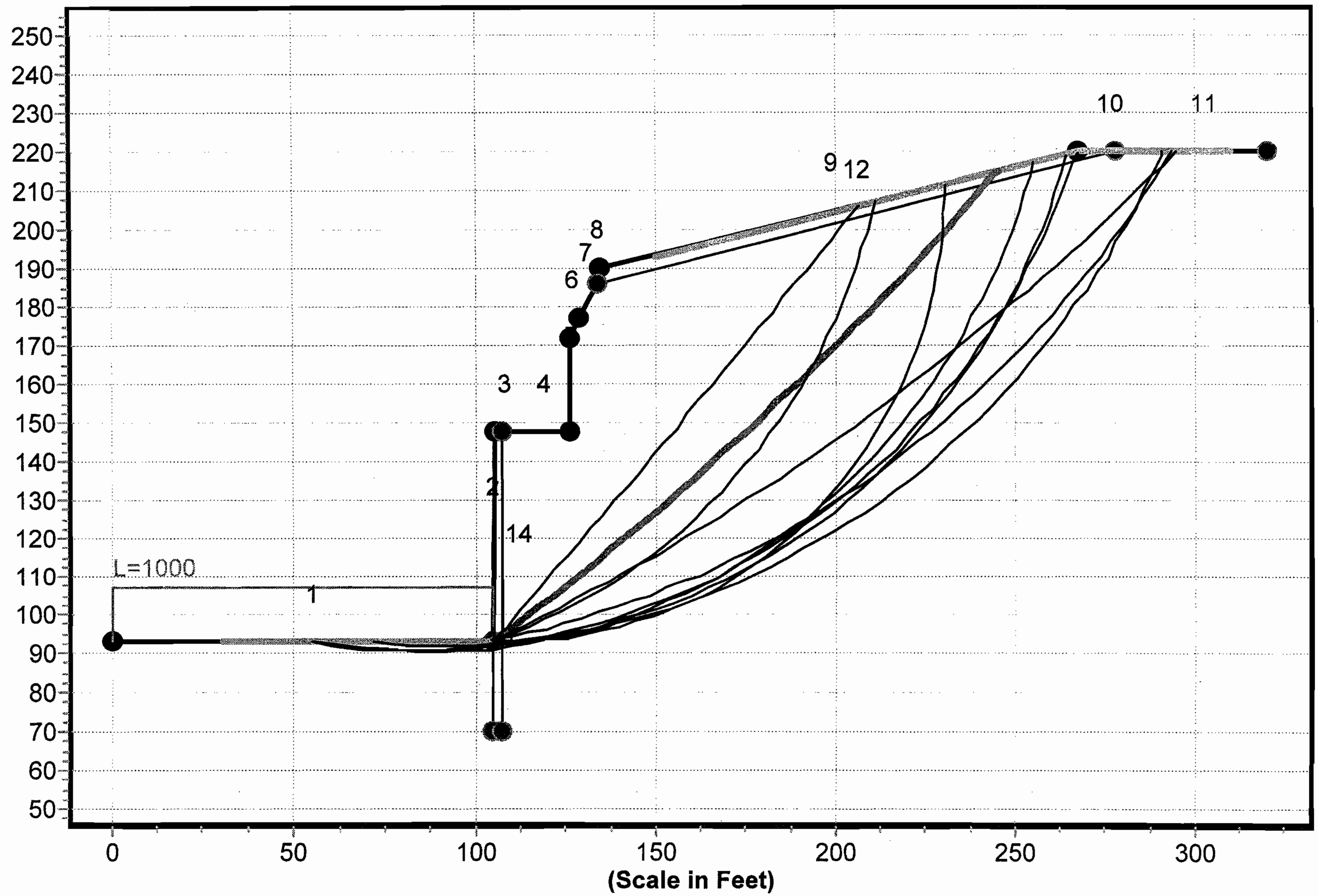
Circle Center At X = -412.8 ; Y = 831.4 and Radius, 901.7

*** 1.711 ***

Individual data on the 47 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Force Norm (lbs)	Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	0.1	407.9	0.0	0.0	0.0	0.0	61.2	0.0	0.0
2	2.0	16185.4	0.0	0.0	0.0	0.0	2427.8	0.0	0.0
3	0.1	453.8	0.0	0.0	0.0	0.0	68.1	0.0	0.0
4	1.9	12588.2	0.0	0.0	0.0	0.0	1888.2	0.0	0.0
5	4.1	25631.0	0.0	0.0	0.0	0.0	3844.6	0.0	0.0
6	4.1	24051.4	0.0	0.0	0.0	0.0	3607.7	0.0	0.0
7	4.0	22471.6	0.0	0.0	0.0	0.0	3370.7	0.0	0.0
8	4.0	20891.8	0.0	0.0	0.0	0.0	3133.8	0.0	0.0
9	0.6	3165.5	0.0	0.0	0.0	0.0	474.8	0.0	0.0
10	0.1	644.7	0.0	0.0	0.0	0.0	96.7	0.0	0.0
11	2.9	23545.2	0.0	0.0	0.0	0.0	3531.8	0.0	0.0
12	0.4	3063.2	0.0	0.0	0.0	0.0	459.5	0.0	0.0
13	4.0	34305.2	0.0	0.0	0.0	0.0	5145.8	0.0	0.0
14	0.6	5743.0	0.0	0.0	0.0	0.0	861.5	0.0	0.0
15	1.0	9102.7	0.0	0.0	0.0	0.0	1365.4	0.0	0.0
16	2.3	21345.9	0.0	0.0	0.0	0.0	3201.9	0.0	0.0
17	4.0	35446.8	0.0	0.0	0.0	0.0	5317.0	0.0	0.0
18	3.9	34224.4	0.0	0.0	0.0	0.0	5133.7	0.0	0.0
19	3.9	32997.4	0.0	0.0	0.0	0.0	4949.6	0.0	0.0
20	3.9	31766.6	0.0	0.0	0.0	0.0	4765.0	0.0	0.0
21	3.9	30531.9	0.0	0.0	0.0	0.0	4579.8	0.0	0.0
22	3.9	29293.8	0.0	0.0	0.0	0.0	4394.1	0.0	0.0
23	3.8	28052.6	0.0	0.0	0.0	0.0	4207.9	0.0	0.0
24	3.8	26808.5	0.0	0.0	0.0	0.0	4021.3	0.0	0.0
25	3.8	25561.9	0.0	0.0	0.0	0.0	3834.3	0.0	0.0
26	3.8	24313.1	0.0	0.0	0.0	0.0	3647.0	0.0	0.0
27	3.8	23062.4	0.0	0.0	0.0	0.0	3459.4	0.0	0.0
28	3.8	21810.1	0.0	0.0	0.0	0.0	3271.5	0.0	0.0
29	3.7	20556.6	0.0	0.0	0.0	0.0	3083.5	0.0	0.0
30	3.7	19302.0	0.0	0.0	0.0	0.0	2895.3	0.0	0.0
31	3.7	18047.0	0.0	0.0	0.0	0.0	2707.0	0.0	0.0
32	3.7	16791.4	0.0	0.0	0.0	0.0	2518.7	0.0	0.0
33	3.7	15536.0	0.0	0.0	0.0	0.0	2330.4	0.0	0.0
34	3.6	14280.9	0.0	0.0	0.0	0.0	2142.1	0.0	0.0
35	3.6	13026.4	0.0	0.0	0.0	0.0	1954.0	0.0	0.0
36	3.6	11772.9	0.0	0.0	0.0	0.0	1765.9	0.0	0.0
37	3.6	10520.7	0.0	0.0	0.0	0.0	1578.1	0.0	0.0
38	3.6	9270.1	0.0	0.0	0.0	0.0	1390.5	0.0	0.0
39	3.6	8021.4	0.0	0.0	0.0	0.0	1203.2	0.0	0.0
40	3.5	6775.0	0.0	0.0	0.0	0.0	1016.3	0.0	0.0
41	3.5	5531.2	0.0	0.0	0.0	0.0	829.7	0.0	0.0
42	3.5	4290.3	0.0	0.0	0.0	0.0	643.5	0.0	0.0
43	3.5	3052.7	0.0	0.0	0.0	0.0	457.9	0.0	0.0
44	3.5	1818.6	0.0	0.0	0.0	0.0	272.8	0.0	0.0
45	0.8	254.7	0.0	0.0	0.0	0.0	38.2	0.0	0.0
46	2.6	403.4	0.0	0.0	0.0	0.0	60.5	0.0	0.0
47	0.6	12.8	0.0	0.0	0.0	0.0	1.9	0.0	0.0

Geometry and Boundary Conditions
Problem: 0142-G/8497 Sunset Blvd - FS Min = 1.711



Environmental Geotechnology Laboratory, Inc.

October 28, 2004

Pacific Geosoils, Inc.
1612 Chino Ave, Unit B
South El Monte, CA 91733

Attn: Mr. Paul Kim

RE: LABORATORY TEST RESULTS/REPORT
Project Name: 8497 Sunset Blvd., West Hollywood, CA
Project No.: 0142-G
EGL Job No.: 04-038-005

Dear Mr. Paul Kim:

We have completed the testing program conducted on samples from the above project. The tests were performed in accordance with testing procedures as follows:

TEST	METHOD
Corrosion	CT 417, 422, 532, 643

Enclosed is the Summary of Test Results.

We appreciate the opportunity to provide testing services to Pacific Geosoils, Inc. Should you have any questions, please call the undersigned.

Sincerely yours,
Environmental Geotechnology Laboratory, Inc.

HK

Hank Jong, PE, GE
Manager

Enclosure

11823 Slauson Avenue, Unit 18, Santa Fe Springs, CA 90670 • Tel.: (562) 945-0689, Fax: (562) 945-0364
E-MAIL: MAIL@EGLAB.COM • WEBSITE: EGLAB.COM

SUMMARY OF CORROSION TEST RESULTS

PROJECT NAME: 8497 Sunset Boulevard, West Hollywood

EGL JOB NO.: 04-038-005

PROJECT NO.: 0142-G

CLIENT: Hu Associates

DATE: 10-28-04

SUMMARIZED BY: VW

BORING NO	SAMPLE NO	DEPTH (ft)	pH CALTRANS 643	CHLORIDE CONTENT CALTRANS 422 (ppm)	SULFATE CONTENT CALTRANS 417 (% by weight)	MINIMUM RESISTIVITY CALTRANS 532 (ohm-cm)
B-2	N/A	29	7.32	75	0.001	5800

Appendix C

Greenhouse Gas Emissions Modeling Results

Sunset Boulevard Commercial Project

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	11.52	1000sqft	0.34	11,520.00	0
Enclosed Parking with Elevator	54.08	1000sqft	0.00	54,080.00	0
High Turnover (Sit Down Restaurant)	9.78	1000sqft	0.00	9,775.00	0

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.2 **Precipitation Freq (Days)** 31

Climate Zone 11 **Operational Year** 2020

Utility Company Los Angeles Department of Water & Power

CO2 Intensity (lb/MWhr) 1227.89 **CH4 Intensity (lb/MWhr)** 0.029 **N2O Intensity (lb/MWhr)** 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acerage is 0.34

Construction Phase - Construction times based on construction schedule 7/31/17.

Trips and VMT -

Demolition -

Grading - 24,600 cubic yards over 0.34 acres

Architectural Coating -

Vehicle Trips - Traffic generation rates provided by City.

Area Mitigation - SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Water And Wastewater - Water rates from Table 15 converted from gpd and multiplied by 120 percent.

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD rule 403

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	5.00	75.00
tblConstructionPhase	NumDays	100.00	160.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	NumDays	1.00	30.00
tblConstructionPhase	PhaseEndDate	6/20/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	6/6/2018	3/29/2019

Sunset Boulevard Commercial Project - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseEndDate	1/12/2018	1/19/2018
tblConstructionPhase	PhaseEndDate	1/17/2018	8/17/2018
tblConstructionPhase	PhaseEndDate	6/13/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	1/15/2018	3/2/2018
tblConstructionPhase	PhaseStartDate	6/14/2018	12/22/2018
tblConstructionPhase	PhaseStartDate	1/18/2018	8/18/2018
tblConstructionPhase	PhaseStartDate	1/16/2018	3/4/2018
tblConstructionPhase	PhaseStartDate	6/7/2018	3/30/2019
tblConstructionPhase	PhaseStartDate	1/13/2018	1/20/2018
tblGrading	AcresOfGrading	0.00	0.34
tblGrading	AcresOfGrading	15.00	0.00
tblGrading	MaterialExported	0.00	24,600.00
tblLandUse	BuildingSpaceSquareFeet	9,780.00	9,775.00
tblLandUse	LandUseSquareFeet	9,780.00	9,775.00
tblLandUse	LotAcreage	0.26	0.34
tblLandUse	LotAcreage	1.24	0.00
tblLandUse	LotAcreage	0.22	0.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblVehicleTrips	ST_TR	2.46	2.43
tblVehicleTrips	ST_TR	158.37	94.30
tblVehicleTrips	SU_TR	1.05	2.43
tblVehicleTrips	SU_TR	131.84	94.30
tblVehicleTrips	WD_TR	11.03	11.02
tblVehicleTrips	WD_TR	127.15	89.90
tblWater	IndoorWaterUseRate	2,047,492.78	1,009,152.00
tblWater	IndoorWaterUseRate	2,968,559.71	2,713,410.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1735	1.9000	1.1839	3.1700e-003	0.1107	0.0854	0.1961	0.0415	0.0801	0.1216	0.0000	295.4488	295.4488	0.0440	0.0000	296.5479
2019	0.1482	0.4475	0.3945	7.6000e-004	0.0223	0.0253	0.0476	5.8900e-003	0.0237	0.0296	0.0000	68.2346	68.2346	0.0129	0.0000	68.5573
Maximum	**0.1735**	**1.9000**	**1.1839**	**3.1700e-003**	**0.1107**	**0.0854**	**0.1961**	**0.0415**	**0.0801**	**0.1216**	**0.0000**	**295.4488**	**295.4488**	**0.0440**	**0.0000**	**296.5479**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1735	1.9000	1.1839	3.1700e-003	0.0806	0.0854	0.1660	0.0270	0.0801	0.1071	0.0000	295.4486	295.4486	0.0440	0.0000	296.5477
2019	0.1482	0.4475	0.3945	7.6000e-004	0.0223	0.0253	0.0476	5.8900e-003	0.0237	0.0296	0.0000	68.2346	68.2346	0.0129	0.0000	68.5572
Maximum	**0.1735**	**1.9000**	**1.1839**	**3.1700e-003**	**0.0806**	**0.0854**	**0.1660**	**0.0270**	**0.0801**	**0.1071**	**0.0000**	**295.4486**	**295.4486**	**0.0440**	**0.0000**	**296.5477**

	ROG	NOx	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**	**22.63**	**0.00**	**12.35**	**30.52**	**0.00**	**9.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2018**	**3-31-2018**	0.4298	0.4298
2	**4-1-2018**	**6-30-2018**	0.6077	0.6077
3	**7-1-2018**	**9-30-2018**	0.5391	0.5391
4	**10-1-2018**	**12-31-2018**	0.4768	0.4768
5	**1-1-2019**	**3-31-2019**	0.5607	0.5607
6	**4-1-2019**	**6-30-2019**	0.0247	0.0247
		Highest	0.6077	0.6077

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0912	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8700e-003	1.8700e-003	1.0000e-005	0.0000	2.0000e-003
Energy	0.0128	0.1166	0.0979	7.0000e-004		8.8600e-003	8.8600e-003		8.8600e-003	8.8600e-003	0.0000	659.2374	659.2374	0.0150	4.9300e-003	661.0810
Mobile	0.2574	1.2724	2.5779	7.8100e-003	0.5825	8.0900e-003	0.5905	0.1561	7.5900e-003	0.1637	0.0000	721.4078	721.4078	0.0425	0.0000	722.4714
Waste						0.0000	0.0000		0.0000	0.0000	25.7981	0.0000	25.7981	1.5246	0.0000	63.9138
Water						0.0000	0.0000		0.0000	0.0000	1.1810	35.9345	37.1155	0.1222	3.0400e-003	41.0750
Total	**0.3614**	**1.3890**	**2.6768**	**8.5100e-003**	**0.5825**	**0.0170**	**0.5994**	**0.1561**	**0.0165**	**0.1725**	**26.9791**	**1,416.5815**	**1,443.5606**	**1.7043**	**7.9700e-003**	**1,488.5432**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0862	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8700e-003	1.8700e-003	1.0000e-005	0.0000	2.0000e-003
Energy	0.0125	0.1139	0.0957	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003	0.0000	636.8379	636.8379	0.0145	4.7800e-003	638.6245
Mobile	0.2574	1.2724	2.5779	7.8100e-003	0.5825	8.0900e-003	0.5905	0.1561	7.5900e-003	0.1637	0.0000	721.4078	721.4078	0.0425	0.0000	722.4714
Waste						0.0000	0.0000		0.0000	0.0000	25.7981	0.0000	25.7981	1.5246	0.0000	63.9138
Water						0.0000	0.0000		0.0000	0.0000	1.1810	35.9345	37.1155	0.1222	3.0400e-003	41.0750
Total	**0.3561**	**1.3863**	**2.6746**	**8.4900e-003**	**0.5825**	**0.0168**	**0.5992**	**0.1561**	**0.0163**	**0.1723**	**26.9791**	**1,394.1821**	**1,421.1612**	**1.7038**	**7.8200e-003**	**1,466.0867**

	ROG	NOx	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	**1.45**	**0.19**	**0.08**	**0.24**	**0.00**	**1.18**	**0.03**	**0.00**	**1.22**	**0.12**	**0.00**	**1.58**	**1.55**	**0.03**	**1.88**	**1.51**

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	1/1/2018	1/19/2018	5	15	
2	Site Preparation	Site Preparation	1/20/2018	3/2/2018	5	30	
3	Grading	Grading	3/4/2018	8/17/2018	5	120	
4	Building Construction	Building Construction	8/18/2018	3/29/2019	5	160	
5	Paving	Paving	3/30/2019	4/5/2019	5	5	
6	Architectural Coating	Architectural Coating	12/22/2018	4/5/2019	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.34

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,943; Non-Residential Outdoor: 10,648; Striped Parking Area: 3,245 (Architectural Coating – sqft)

OffRoad Equipment

Sunset Boulevard Commercial Project - South Coast AQMD Air District, Annual

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	74.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	3,075.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	31.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9900e-003	0.0000	7.9900e-003	1.2100e-003	0.0000	1.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9800e-003	0.0707	0.0583	9.0000e-005		4.6700e-003	4.6700e-003		4.4600e-003	4.4600e-003	0.0000	7.9561	7.9561	1.5300e-003	0.0000	7.9945
Total	**7.9800e-003**	**0.0707**	**0.0583**	**9.0000e-005**	**7.9900e-003**	**4.6700e-003**	**0.0127**	**1.2100e-003**	**4.4600e-003**	**5.6700e-003**	**0.0000**	**7.9561**	**7.9561**	**1.5300e-003**	**0.0000**	**7.9945**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0118	2.1900e-003	3.0000e-005	6.4000e-004	4.0000e-005	6.8000e-004	1.7000e-004	4.0000e-005	2.2000e-004	0.0000	2.8542	2.8542	2.0000e-004	0.0000	2.8592
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.3000e-004	3.5000e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7894	0.7894	3.0000e-005	0.0000	0.7901
Total	**7.2000e-004**	**0.0121**	**5.6900e-003**	**4.0000e-005**	**1.4600e-003**	**5.0000e-005**	**1.5100e-003**	**3.9000e-004**	**5.0000e-005**	**4.4000e-004**	**0.0000**	**3.6436**	**3.6436**	**2.3000e-004**	**0.0000**	**3.6493**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-003	0.0000	3.6000e-003	5.4000e-004	0.0000	5.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9800e-003	0.0707	0.0583	9.0000e-005		4.6700e-003	4.6700e-003		4.4600e-003	4.4600e-003	0.0000	7.9561	7.9561	1.5300e-003	0.0000	7.9945
Total	**7.9800e-003**	**0.0707**	**0.0583**	**9.0000e-005**	**3.6000e-003**	**4.6700e-003**	**8.2700e-003**	**5.4000e-004**	**4.4600e-003**	**5.0000e-003**	**0.0000**	**7.9561**	**7.9561**	**1.5300e-003**	**0.0000**	**7.9945**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0118	2.1900e-003	3.0000e-005	6.4000e-004	4.0000e-005	6.8000e-004	1.7000e-004	4.0000e-005	2.2000e-004	0.0000	2.8542	2.8542	2.0000e-004	0.0000	2.8592
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.3000e-004	3.5000e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7894	0.7894	3.0000e-005	0.0000	0.7901
Total	**7.2000e-004**	**0.0121**	**5.6900e-003**	**4.0000e-005**	**1.4600e-003**	**5.0000e-005**	**1.5100e-003**	**3.9000e-004**	**5.0000e-005**	**4.4000e-004**	**0.0000**	**3.6436**	**3.6436**	**2.3000e-004**	**0.0000**	**3.6493**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.1464	0.0638	1.5000e-004		6.2700e-003	6.2700e-003		5.7700e-003	5.7700e-003	0.0000	13.3725	13.3725	4.1600e-003	0.0000	13.4766
Total	**0.0118**	**0.1464**	**0.0638**	**1.5000e-004**	**0.0000**	**6.2700e-003**	**6.2700e-003**	**0.0000**	**5.7700e-003**	**5.7700e-003**	**0.0000**	**13.3725**	**13.3725**	**4.1600e-003**	**0.0000**	**13.4766**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.3000e-004	3.5000e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7894	0.7894	3.0000e-005	0.0000	0.7901
Total	**4.0000e-004**	**3.3000e-004**	**3.5000e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7894**	**0.7894**	**3.0000e-005**	**0.0000**	**0.7901**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.1464	0.0638	1.5000e-004		6.2700e-003	6.2700e-003		5.7700e-003	5.7700e-003	0.0000	13.3725	13.3725	4.1600e-003	0.0000	13.4766
Total	**0.0118**	**0.1464**	**0.0638**	**1.5000e-004**	**0.0000**	**6.2700e-003**	**6.2700e-003**	**0.0000**	**5.7700e-003**	**5.7700e-003**	**0.0000**	**13.3725**	**13.3725**	**4.1600e-003**	**0.0000**	**13.4766**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.3000e-004	3.5000e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7894	0.7894	3.0000e-005	0.0000	0.7901
Total	**4.0000e-004**	**3.3000e-004**	**3.5000e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7894**	**0.7894**	**3.0000e-005**	**0.0000**	**0.7901**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0467	0.0000	0.0467	0.0251	0.0000	0.0251	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0639	0.5658	0.4666	7.2000e-004		0.0374	0.0374		0.0357	0.0357	0.0000	63.6490	63.6490	0.0123	0.0000	63.9557
Total	**0.0639**	**0.5658**	**0.4666**	**7.2000e-004**	**0.0467**	**0.0374**	**0.0841**	**0.0251**	**0.0357**	**0.0607**	**0.0000**	**63.6490**	**63.6490**	**0.0123**	**0.0000**	**63.9557**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0135	0.4887	0.0909	1.2100e-003	0.0264	1.8300e-003	0.0283	7.2600e-003	1.7600e-003	9.0100e-003	0.0000	118.6039	118.6039	8.3400e-003	0.0000	118.8124
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1900e-003	2.6100e-003	0.0280	7.0000e-005	6.5800e-003	5.0000e-005	6.6400e-003	1.7500e-003	5.0000e-005	1.8000e-003	0.0000	6.3150	6.3150	2.2000e-004	0.0000	6.3204
Total	**0.0167**	**0.4913**	**0.1189**	**1.2800e-003**	**0.0330**	**1.8800e-003**	**0.0349**	**9.0100e-003**	**1.8100e-003**	**0.0108**	**0.0000**	**124.9189**	**124.9189**	**8.5600e-003**	**0.0000**	**125.1328**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0210	0.0000	0.0210	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0639	0.5658	0.4666	7.2000e-004		0.0374	0.0374		0.0357	0.0357	0.0000	63.6489	63.6489	0.0123	0.0000	63.9557
Total	**0.0639**	**0.5658**	**0.4666**	**7.2000e-004**	**0.0210**	**0.0374**	**0.0584**	**0.0113**	**0.0357**	**0.0469**	**0.0000**	**63.6489**	**63.6489**	**0.0123**	**0.0000**	**63.9557**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0135	0.4887	0.0909	1.2100e-003	0.0264	1.8300e-003	0.0283	7.2600e-003	1.7600e-003	9.0100e-003	0.0000	118.6039	118.6039	8.3400e-003	0.0000	118.8124
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1900e-003	2.6100e-003	0.0280	7.0000e-005	6.5800e-003	5.0000e-005	6.6400e-003	1.7500e-003	5.0000e-005	1.8000e-003	0.0000	6.3150	6.3150	2.2000e-004	0.0000	6.3204
Total	**0.0167**	**0.4913**	**0.1189**	**1.2800e-003**	**0.0330**	**1.8800e-003**	**0.0349**	**9.0100e-003**	**1.8100e-003**	**0.0108**	**0.0000**	**124.9189**	**124.9189**	**8.5600e-003**	**0.0000**	**125.1328**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0521	0.5295	0.3721	5.5000e-004		0.0340	0.0340		0.0313	0.0313	0.0000	49.9256	49.9256	0.0155	0.0000	50.3142
Total	**0.0521**	**0.5295**	**0.3721**	**5.5000e-004**		**0.0340**	**0.0340**		**0.0313**	**0.0313**	**0.0000**	**49.9256**	**49.9256**	**0.0155**	**0.0000**	**50.3142**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-003	0.0712	0.0184	1.5000e-004	3.6300e-003	5.1000e-004	4.1400e-003	1.0500e-003	4.9000e-004	1.5400e-003	0.0000	14.3875	14.3875	1.0200e-003	0.0000	14.4131
Worker	7.9100e-003	6.4700e-003	0.0695	1.7000e-004	0.0163	1.3000e-004	0.0165	4.3400e-003	1.2000e-004	4.4600e-003	0.0000	15.6612	15.6612	5.3000e-004	0.0000	15.6746
Total	**0.0104**	**0.0777**	**0.0878**	**3.2000e-004**	**0.0200**	**6.4000e-004**	**0.0206**	**5.3900e-003**	**6.1000e-004**	**6.0000e-003**	**0.0000**	**30.0488**	**30.0488**	**1.5500e-003**	**0.0000**	**30.0877**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0521	0.5295	0.3721	5.5000e-004		0.0340	0.0340		0.0313	0.0313	0.0000	49.9255	49.9255	0.0155	0.0000	50.3141
Total	**0.0521**	**0.5295**	**0.3721**	**5.5000e-004**		**0.0340**	**0.0340**		**0.0313**	**0.0313**	**0.0000**	**49.9255**	**49.9255**	**0.0155**	**0.0000**	**50.3141**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-003	0.0712	0.0184	1.5000e-004	3.6300e-003	5.1000e-004	4.1400e-003	1.0500e-003	4.9000e-004	1.5400e-003	0.0000	14.3875	14.3875	1.0200e-003	0.0000	14.4131
Worker	7.9100e-003	6.4700e-003	0.0695	1.7000e-004	0.0163	1.3000e-004	0.0165	4.3400e-003	1.2000e-004	4.4600e-003	0.0000	15.6612	15.6612	5.3000e-004	0.0000	15.6746
Total	**0.0104**	**0.0777**	**0.0878**	**3.2000e-004**	**0.0200**	**6.4000e-004**	**0.0206**	**5.3900e-003**	**6.1000e-004**	**6.0000e-003**	**0.0000**	**30.0488**	**30.0488**	**1.5500e-003**	**0.0000**	**30.0877**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0306	0.3143	0.2414	3.6000e-004		0.0194	0.0194		0.0178	0.0178	0.0000	32.7362	32.7362	0.0104	0.0000	32.9951
Total	**0.0306**	**0.3143**	**0.2414**	**3.6000e-004**		**0.0194**	**0.0194**		**0.0178**	**0.0178**	**0.0000**	**32.7362**	**32.7362**	**0.0104**	**0.0000**	**32.9951**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5100e-003	0.0448	0.0112	1.0000e-004	2.4200e-003	2.9000e-004	2.7100e-003	7.0000e-004	2.8000e-004	9.8000e-004	0.0000	9.5067	9.5067	6.6000e-004	0.0000	9.5232
Worker	4.7900e-003	3.8100e-003	0.0414	1.1000e-004	0.0109	9.0000e-005	0.0110	2.8900e-003	8.0000e-005	2.9700e-003	0.0000	10.1114	10.1114	3.2000e-004	0.0000	10.1193
Total	**6.3000e-003**	**0.0486**	**0.0526**	**2.1000e-004**	**0.0133**	**3.8000e-004**	**0.0137**	**3.5900e-003**	**3.6000e-004**	**3.9500e-003**	**0.0000**	**19.6181**	**19.6181**	**9.8000e-004**	**0.0000**	**19.6425**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0306	0.3143	0.2414	3.6000e-004		0.0194	0.0194		0.0178	0.0178	0.0000	32.7361	32.7361	0.0104	0.0000	32.9950
Total	**0.0306**	**0.3143**	**0.2414**	**3.6000e-004**		**0.0194**	**0.0194**		**0.0178**	**0.0178**	**0.0000**	**32.7361**	**32.7361**	**0.0104**	**0.0000**	**32.9950**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5100e-003	0.0448	0.0112	1.0000e-004	2.4200e-003	2.9000e-004	2.7100e-003	7.0000e-004	2.8000e-004	9.8000e-004	0.0000	9.5067	9.5067	6.6000e-004	0.0000	9.5232
Worker	4.7900e-003	3.8100e-003	0.0414	1.1000e-004	0.0109	9.0000e-005	0.0110	2.8900e-003	8.0000e-005	2.9700e-003	0.0000	10.1114	10.1114	3.2000e-004	0.0000	10.1193
Total	**6.3000e-003**	**0.0486**	**0.0526**	**2.1000e-004**	**0.0133**	**3.8000e-004**	**0.0137**	**3.5900e-003**	**3.6000e-004**	**3.9500e-003**	**0.0000**	**19.6181**	**19.6181**	**9.8000e-004**	**0.0000**	**19.6425**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.8800e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.2000e-004**	**1.7000e-004**	**1.8800e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.8800e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.2000e-004**	**1.7000e-004**	**1.8800e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	8.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7678
Total	**9.4000e-003**	**6.0200e-003**	**5.5600e-003**	**1.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.7660**	**0.7660**	**7.0000e-005**	**0.0000**	**0.7678**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.6000e-004	1.6800e-003	0.0000	7.4000e-004	0.0000	7.4000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.3789	0.3789	1.0000e-005	0.0000	0.3792
Total	**1.9000e-004**	**1.6000e-004**	**1.6800e-003**	**0.0000**	**7.4000e-004**	**0.0000**	**7.4000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.3789**	**0.3789**	**1.0000e-005**	**0.0000**	**0.3792**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	8.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7678
Total	**9.4000e-003**	**6.0200e-003**	**5.5600e-003**	**1.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.7660**	**0.7660**	**7.0000e-005**	**0.0000**	**0.7678**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.6000e-004	1.6800e-003	0.0000	7.4000e-004	0.0000	7.4000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.3789	0.3789	1.0000e-005	0.0000	0.3792
Total	**1.9000e-004**	**1.6000e-004**	**1.6800e-003**	**0.0000**	**7.4000e-004**	**0.0000**	**7.4000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.3789**	**0.3789**	**1.0000e-005**	**0.0000**	**0.3792**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1900e-003	0.0633	0.0635	1.0000e-004		4.4400e-003	4.4400e-003		4.4400e-003	4.4400e-003	0.0000	8.8087	8.8087	7.4000e-004	0.0000	8.8273
Total	**0.1069**	**0.0633**	**0.0635**	**1.0000e-004**		**4.4400e-003**	**4.4400e-003**		**4.4400e-003**	**4.4400e-003**	**0.0000**	**8.8087**	**8.8087**	**7.4000e-004**	**0.0000**	**8.8273**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-003	1.5900e-003	0.0173	5.0000e-005	8.4800e-003	4.0000e-005	8.5200e-003	2.1700e-003	3.0000e-005	2.2100e-003	0.0000	4.2199	4.2199	1.3000e-004	0.0000	4.2232
Total	**2.0000e-003**	**1.5900e-003**	**0.0173**	**5.0000e-005**	**8.4800e-003**	**4.0000e-005**	**8.5200e-003**	**2.1700e-003**	**3.0000e-005**	**2.2100e-003**	**0.0000**	**4.2199**	**4.2199**	**1.3000e-004**	**0.0000**	**4.2232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1900e-003	0.0633	0.0635	1.0000e-004		4.4400e-003	4.4400e-003		4.4400e-003	4.4400e-003	0.0000	8.8087	8.8087	7.4000e-004	0.0000	8.8273
Total	**0.1069**	**0.0633**	**0.0635**	**1.0000e-004**		**4.4400e-003**	**4.4400e-003**		**4.4400e-003**	**4.4400e-003**	**0.0000**	**8.8087**	**8.8087**	**7.4000e-004**	**0.0000**	**8.8273**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-003	1.5900e-003	0.0173	5.0000e-005	8.4800e-003	4.0000e-005	8.5200e-003	2.1700e-003	3.0000e-005	2.2100e-003	0.0000	4.2199	4.2199	1.3000e-004	0.0000	4.2232
Total	**2.0000e-003**	**1.5900e-003**	**0.0173**	**5.0000e-005**	**8.4800e-003**	**4.0000e-005**	**8.5200e-003**	**2.1700e-003**	**3.0000e-005**	**2.2100e-003**	**0.0000**	**4.2199**	**4.2199**	**1.3000e-004**	**0.0000**	**4.2232**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2574	1.2724	2.5779	7.8100e-003	0.5825	8.0900e-003	0.5905	0.1561	7.5900e-003	0.1637	0.0000	721.4078	721.4078	0.0425	0.0000	722.4714
Unmitigated	0.2574	1.2724	2.5779	7.8100e-003	0.5825	8.0900e-003	0.5905	0.1561	7.5900e-003	0.1637	0.0000	721.4078	721.4078	0.0425	0.0000	722.4714

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	126.95	27.99	27.99	317,884	317,884
High Turnover (Sit Down Restaurant)	879.22	922.25	922.25	1,214,986	1,214,986
Total	1,006.17	950.25	950.25	1,532,871	1,532,871

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Enclosed Parking with Elevator	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
High Turnover (Sit Down Restaurant)	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	512.7984	512.7984	0.0121	2.5100e-003	513.8479
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	532.3259	532.3259	0.0126	2.6000e-003	533.4154
NaturalGas Mitigated	0.0125	0.1139	0.0957	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003	0.0000	124.0395	124.0395	2.3800e-003	2.2700e-003	124.7766
NaturalGas Unmitigated	0.0128	0.1166	0.0979	7.0000e-004		8.8600e-003	8.8600e-003		8.8600e-003	8.8600e-003	0.0000	126.9115	126.9115	2.4300e-003	2.3300e-003	127.6656

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	120499	6.5000e-004	5.9100e-003	4.9600e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	6.4303	6.4303	1.2000e-004	1.2000e-004	6.4685
High Turnover (Sit Down Restaurant)	2.25773e+006	0.0122	0.1107	0.0930	6.6000e-004		8.4100e-003	8.4100e-003		8.4100e-003	8.4100e-003	0.0000	120.4812	120.4812	2.3100e-003	2.2100e-003	121.1971
Total		**0.0128**	**0.1166**	**0.0979**	**7.0000e-004**		**8.8600e-003**	**8.8600e-003**		**8.8600e-003**	**8.8600e-003**	**0.0000**	**126.9115**	**126.9115**	**2.4300e-003**	**2.3300e-003**	**127.6656**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	108899	5.9000e-004	5.3400e-003	4.4800e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8112	5.8112	1.1000e-004	1.1000e-004	5.8458
High Turnover (Sit Down Restaurant)	2.21551e+006	0.0120	0.1086	0.0912	6.5000e-004		8.2500e-003	8.2500e-003		8.2500e-003	8.2500e-003	0.0000	118.2282	118.2282	2.2700e-003	2.1700e-003	118.9308
Total		**0.0125**	**0.1139**	**0.0957**	**6.8000e-004**		**8.6600e-003**	**8.6600e-003**		**8.6600e-003**	**8.6600e-003**	**0.0000**	**124.0395**	**124.0395**	**2.3800e-003**	**2.2800e-003**	**124.7766**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	364499	203.0120	4.7900e-003	9.9000e-004	203.4275
General Office Building	153446	85.4637	2.0200e-003	4.2000e-004	85.6387
High Turnover (Sit Down Restaurant)	437822	243.8502	5.7600e-003	1.1900e-003	244.3492
Total		**532.3259**	**0.0126**	**2.6000e-003**	**533.4154**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	343300	191.2048	4.5200e-003	9.3000e-004	191.5961
General Office Building	147894	82.3711	1.9500e-003	4.0000e-004	82.5397
High Turnover (Sit Down Restaurant)	429514	239.2225	5.6500e-003	1.1700e-003	239.7121
Total		**512.7985**	**0.0121**	**2.5000e-003**	**513.8479**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0862	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8700e-003	1.8700e-003	1.0000e-005	0.0000	2.0000e-003
Unmitigated	0.0912	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8700e-003	1.8700e-003	1.0000e-005	0.0000	2.0000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8700e-003	1.8700e-003	1.0000e-005	0.0000	2.0000e-003
Total	**0.0912**	**1.0000e-005**	**9.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8700e-003**	**1.8700e-003**	**1.0000e-005**	**0.0000**	**2.0000e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.6900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8700e-003	1.8700e-003	1.0000e-005	0.0000	2.0000e-003
Total	**0.0862**	**1.0000e-005**	**9.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8700e-003**	**1.8700e-003**	**1.0000e-005**	**0.0000**	**2.0000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.1155	0.1222	3.0400e-003	41.0750
Unmitigated	37.1155	0.1222	3.0400e-003	41.0750

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.00915 / 1.25491	15.4039	0.0332	8.5000e-004	16.4883
High Turnover (Sit Down Restaurant)	2.71341 / 0.189483	21.7115	0.0889	2.1900e-003	24.5867
Total		**37.1155**	**0.1222**	**3.0400e-003**	**41.0750**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.00915 / 1.25491	15.4039	0.0332	8.5000e-004	16.4883
High Turnover (Sit Down Restaurant)	2.71341 / 0.189483	21.7115	0.0889	2.1900e-003	24.5867
Total		**37.1155**	**0.1222**	**3.0400e-003**	**41.0750**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.7981	1.5246	0.0000	63.9138
Unmitigated	25.7981	1.5246	0.0000	63.9138

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10.71	2.1740	0.1285	0.0000	5.3861
High Turnover (Sit Down Restaurant)	116.38	23.6241	1.3961	0.0000	58.5277
Total		**25.7981**	**1.5246**	**0.0000**	**63.9138**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10.71	2.1740	0.1285	0.0000	5.3861
High Turnover (Sit Down Restaurant)	116.38	23.6241	1.3961	0.0000	58.5277
Total		**25.7981**	**1.5246**	**0.0000**	**63.9138**

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

Greenhouse Gas Emission Worksheet
N20 Mobile Emissions

From CalEEMod Vehicle Fleet Mix Output:

Annual VMT: 1,532,871

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	60.5%	0.04	0.0241924	0.04	0.024192
Light Truck < 3750 lbs	3.8%	0.05	0.0019102	0.06	0.002292
Light Truck 3751-5750 lbs	18.5%	0.05	0.0092575	0.06	0.011109
Med Truck 5751-8500 lbs	10.9%	0.12	0.0130216	0.2	0.021703
Lite-Heavy Truck 8501-10,000 lbs	1.5%	0.12	0.0018598	0.2	0.0031
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.0004483	0.125	0.000623
Med-Heavy Truck 14,001-33,000 lbs	1.2%	0.06	0.0007361	0.05	0.000613
Heavy-Heavy Truck 33,001-60,000 lbs	2.0%	0.06	0.0012094	0.05	0.001008
Other Bus	0.2%	0.06	0.000125	0.05	0.000104
Urban Bus	0.2%	0.06	9.426E-05	0.05	7.86E-05
Motorcycle	0.5%	0.09	0.0004827	0.01	5.36E-05
School Bus	0.1%	0.06	0.0000372	0.05	0.000031
Motor Home	0.1%	0.09	7.065E-05	0.125	9.81E-05
Total	**100.0%**		**0.0534449**		**0.065005**

Total Emissions (metric tons) =
Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4	21	GWP
N2O	310	GWP
1 ton (short, US) =	0.90718474	metric ton

Annual Mobile Emissions:

	Total Emissions		Total CO2e units	
N20 Emissions:	0.0996	metric tons N2O	**30.89**	metric tons CO2e
		Project Total:	***30.89***	***metric tons CO2e***

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

Appendix D

Noise Measurement Data Sheets

AMBIENT NOISE SURVEY DATA SHEET

Project: 17-04610, 8499 Sunset Blvd.
Date: 8/4/2017
Operator: Jenny Pezda

Job Number: 17-04610

	Station 1	Station 2
Station:	1	2
Begin:	7:19	7:47
Measurement No.	1	1
Finish:	7:34	8:02
Wind:	6 mph	6 mph
Direction:		
Temperature:	85°F	85°F
Cloud Cover Class – Daytime ☐ 1 - Overcast >80%	☐	☐
☐ 2 - Light 20-80%	☑	☑
☐ 3 - Sunny <20%	☐	☐
Nighttime ☐ 4 - Clear <50%	☐	☐
☐ 5 - Overcast >50%	☐	☐
Primary Noise Source:	West bound cars on Sunset Blvd.	Construction noise on house behind measurement location
Distance:		
Secondary Noise Sources:	Cars along Miller Dr.	Cars along Miller Dr.
Notes:		light construction / housework being done on house behind noise measurement location.
Traffic *LDA/T*:	328 Westbound, 107 eastbound	3
MDT:	15	6
HDT:	6	6
Leq:	66.7	56.2
Lmin:	55	48.7
Lmax:	79.4	71.7
Peak:		
L(10):		
L(33):		
L(50):		
L(90):		
Calibration Start:	94 dB	94 dB
Calibration End:	94 dB	94 dB
Response: ☐ Slow ☐ Fast ☐ Peak ☐ Impulse	☑ Fast	☑ Fast
Weighting: ☐ A ☐ B ☐ C ☐ Linear	☑ A	☑ A
Octave Filter: ☐ NA ☐ ____ Hz		

Note: Provide Sketch of Location on Back.

- Freq Weight : A
- Time Weight : FAST
- Level Range : 40-100
- Max dB : 79.4 - 2017/08/04 07:19:16
- Level Range : 40-100
- SEL : 96.2
- Leq : 66.7
-

No.s	Date Time	(dB)
1	2017/08/04 07:14:55	66.3
2	2017/08/04 07:14:58	64.5
3	2017/08/04 07:15:01	64.6
4	2017/08/04 07:15:04	64.0
5	2017/08/04 07:15:07	64.8
6	2017/08/04 07:15:10	64.6
7	2017/08/04 07:15:13	62.7
8	2017/08/04 07:15:16	63.9
9	2017/08/04 07:15:19	60.3
10	2017/08/04 07:15:22	59.3
11	2017/08/04 07:15:25	58.0
12	2017/08/04 07:15:28	59.4
13	2017/08/04 07:15:31	58.7
14	2017/08/04 07:15:34	59.3
15	2017/08/04 07:15:37	63.1
16	2017/08/04 07:15:40	65.0
17	2017/08/04 07:15:43	68.5
18	2017/08/04 07:15:46	69.6
19	2017/08/04 07:15:49	66.2
20	2017/08/04 07:15:52	64.8
21	2017/08/04 07:15:55	64.3
22	2017/08/04 07:15:58	67.5
23	2017/08/04 07:16:01	62.2
24	2017/08/04 07:16:04	63.7
25	2017/08/04 07:16:07	59.9
26	2017/08/04 07:16:10	57.3
27	2017/08/04 07:16:13	59.0
28	2017/08/04 07:16:16	63.8
29	2017/08/04 07:16:19	66.1
30	2017/08/04 07:16:22	66.9
31	2017/08/04 07:16:25	71.2
32	2017/08/04 07:16:28	66.1
33	2017/08/04 07:16:31	66.8
34	2017/08/04 07:16:34	66.9
35	2017/08/04 07:16:37	64.8
36	2017/08/04 07:16:40	62.3
37	2017/08/04 07:16:43	64.0
38	2017/08/04 07:16:46	64.4
39	2017/08/04 07:16:49	63.3
40	2017/08/04 07:16:52	63.4
41	2017/08/04 07:16:55	63.9
42	2017/08/04 07:16:58	64.7
43	2017/08/04 07:17:01	64.3
44	2017/08/04 07:17:04	63.4
45	2017/08/04 07:17:07	63.5
46	2017/08/04 07:17:10	64.6
47	2017/08/04 07:17:13	64.9
48	2017/08/04 07:17:16	67.5
49	2017/08/04 07:17:19	67.5
50	2017/08/04 07:17:22	66.5
51	2017/08/04 07:17:25	67.2
52	2017/08/04 07:17:28	74.1
53	2017/08/04 07:17:31	70.7
54	2017/08/04 07:17:34	67.8
55	2017/08/04 07:17:37	65.1
56	2017/08/04 07:17:40	66.0
57	2017/08/04 07:17:43	70.0
58	2017/08/04 07:17:46	64.0
59	2017/08/04 07:17:49	63.3
60	2017/08/04 07:17:52	61.1
61	2017/08/04 07:17:55	65.6
62	2017/08/04 07:17:58	65.0
63	2017/08/04 07:18:01	61.2
64	2017/08/04 07:18:04	62.8
65	2017/08/04 07:18:07	60.2
66	2017/08/04 07:18:10	63.4
67	2017/08/04 07:18:13	63.5
68	2017/08/04 07:18:16	66.0
69	2017/08/04 07:18:19	66.0
70	2017/08/04 07:18:22	65.0
71	2017/08/04 07:18:25	61.5
72	2017/08/04 07:18:28	61.4
73	2017/08/04 07:18:31	67.2
74	2017/08/04 07:18:34	69.8
75	2017/08/04 07:18:37	71.8
76	2017/08/04 07:18:40	69.3
77	2017/08/04 07:18:43	69.8
78	2017/08/04 07:18:46	68.7
79	2017/08/04 07:18:49	68.3
80	2017/08/04 07:18:52	68.4
81	2017/08/04 07:18:55	67.7
82	2017/08/04 07:18:58	67.8
83	2017/08/04 07:19:01	66.9
84	2017/08/04 07:19:04	66.1
85	2017/08/04 07:19:07	68.4

86	2017/08/04	07:19:10	68.0
87	2017/08/04	07:19:13	70.5
88	2017/08/04	07:19:16	71.6
89	2017/08/04	07:19:19	70.9
90	2017/08/04	07:19:22	68.2
91	2017/08/04	07:19:25	64.9
92	2017/08/04	07:19:28	64.0
93	2017/08/04	07:19:31	66.5
94	2017/08/04	07:19:34	66.9
95	2017/08/04	07:19:37	67.4
96	2017/08/04	07:19:40	73.3
97	2017/08/04	07:19:43	65.7
98	2017/08/04	07:19:46	67.1
99	2017/08/04	07:19:49	67.7
100	2017/08/04	07:19:52	64.0
101	2017/08/04	07:19:55	65.5
102	2017/08/04	07:19:58	62.4
103	2017/08/04	07:20:01	65.9
104	2017/08/04	07:20:04	67.4
105	2017/08/04	07:20:07	65.0
106	2017/08/04	07:20:10	60.3
107	2017/08/04	07:20:13	63.9
108	2017/08/04	07:20:16	62.7
109	2017/08/04	07:20:19	62.3
110	2017/08/04	07:20:22	59.8
111	2017/08/04	07:20:25	57.4
112	2017/08/04	07:20:28	56.9
113	2017/08/04	07:20:31	62.1
114	2017/08/04	07:20:34	68.5
115	2017/08/04	07:20:37	66.4
116	2017/08/04	07:20:40	66.5
117	2017/08/04	07:20:43	65.3
118	2017/08/04	07:20:46	65.2
119	2017/08/04	07:20:49	65.6
120	2017/08/04	07:20:52	66.0
121	2017/08/04	07:20:55	68.2
122	2017/08/04	07:20:58	64.7
123	2017/08/04	07:21:01	65.1
124	2017/08/04	07:21:04	63.9
125	2017/08/04	07:21:07	71.0
126	2017/08/04	07:21:10	65.7
127	2017/08/04	07:21:13	66.2
128	2017/08/04	07:21:16	65.7
129	2017/08/04	07:21:19	67.0
130	2017/08/04	07:21:22	70.9
131	2017/08/04	07:21:25	73.9
132	2017/08/04	07:21:28	70.5
133	2017/08/04	07:21:31	64.9
134	2017/08/04	07:21:34	66.8
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- Time Weight : FAST
- Level Range : 40-100
- Max dB : 71.7 - 2017/08/04 07:48:05
- Level Range : 40-100
- SEL : 85.7
- Leq : 56.2
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268	2017/08/04	07:56:10	60.7
269	2017/08/04	07:56:13	61.4
270	2017/08/04	07:56:16	52.3
271	2017/08/04	07:56:19	51.9
272	2017/08/04	07:56:22	53.1
273	2017/08/04	07:56:25	52.5
274	2017/08/04	07:56:28	53.0
275	2017/08/04	07:56:31	51.0
276	2017/08/04	07:56:34	50.6
277	2017/08/04	07:56:37	51.4
278	2017/08/04	07:56:40	51.1
279	2017/08/04	07:56:43	51.2
280	2017/08/04	07:56:46	51.4
281	2017/08/04	07:56:49	52.6
282	2017/08/04	07:56:52	54.9
283	2017/08/04	07:56:55	53.7

284	2017/08/04	07:56:58	54.2
285	2017/08/04	07:57:01	52.4
286	2017/08/04	07:57:04	52.8
287	2017/08/04	07:57:07	51.9
288	2017/08/04	07:57:10	52.7
289	2017/08/04	07:57:13	52.0
290	2017/08/04	07:57:16	54.5
291	2017/08/04	07:57:19	52.6
292	2017/08/04	07:57:22	52.5
293	2017/08/04	07:57:25	52.3
294	2017/08/04	07:57:28	52.6
295	2017/08/04	07:57:31	53.6
296	2017/08/04	07:57:34	53.4
297	2017/08/04	07:57:37	54.2
298	2017/08/04	07:57:40	54.5
299	2017/08/04	07:57:43	54.2
300	2017/08/04	07:57:46	52.8

Appendix E

Traffic Technical Memorandum

KOA CORPORATION
PLANNING & ENGINEERING

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TECHNICAL MEMORANDUM

Date: September 27, 2017

To: Karly Kaufman – Rincon Consultants, Inc.

From: Brian A. Marchetti, AICP

Subject Traffic Impact Analysis – 8497 Sunset Boulevard, West Hollywood
JB71186

This study report identifies the potential traffic impacts associated with the proposed 8497 Sunset Boulevard commercial development (Project), to be located at the northeast corner of Sunset Boulevard and La Cienega Boulevard/Miller Drive within the City of West Hollywood. KOA Corporation was retained by Rincon Consultants, Inc. (Client) to analyze the potential traffic impacts at the intersection of Sunset Boulevard and La Cienega Boulevard/Miller Drive.

BACKGROUND

KOA Corporation completed a previous traffic impact study for this Project in April 2009. The 2009 study analyzed a proposed Project that would replace the existing 31-unit apartment building with 3,007 square feet of retail, 6,153 square feet of restaurant, and 34 condominiums units. That proposed Project was determined to create a significant impact at the intersection of Sunset Boulevard and La Cienega Boulevard/Miller Drive during all analyzed peak periods.

The recommended mitigation measure in the 2009 report was a restriping of the northbound approach within the existing curb-to-curb width, to provide one shared left/through/right lane (10-foot wide) and one exclusive right-turn lane (11-foot wide). This recommended mitigation measure fully mitigated the identified impact to a level of insignificance.

This technical memorandum provides an update to the traffic impact study completed in 2009. The impacted intersection at Sunset Boulevard and La Cienega Boulevard/Miller Drive was analyzed with the current (modified) roadway conditions for determination of traffic impacts caused by the proposed Project.

PROJECT DESCRIPTION

The current proposed Project is less intense than that proposed in 2009, with 9,775 square feet of high-quality sit-down restaurant and 11,520 square feet of office use, also replacing the entire existing 31-unit apartment building. Driveway access would remain at Miller Drive, north of Sunset Boulevard. The anticipated Project opening year is 2020.

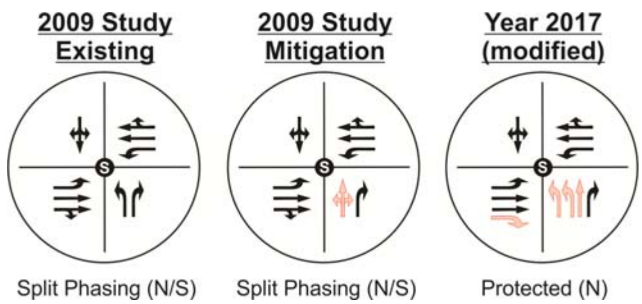
The proposed Project site plan is provided in Attachment A and the study area map is provided in Attachment B.

KOA CORPORATION
PLANNING & ENGINEERING

METHODOLOGY

The northbound approach of the study intersection has been restriped since 2009, to provide dual left-turn lanes, one through lane, and one exclusive right-turn lane. The eastbound approach has been restriped as well.

The current lane configuration does not match with the mitigation measure recommended in the 2009 study. However, this configuration would provide more capacity to accommodate the heavy turn movements at the northbound approach and at the overlapping eastbound right-turn movement. The following illustrates the intersection lane configuration before and after the roadway improvements, and the red/hollow arrows indicate the changes.



The new approach lane configurations have been incorporated into this study.

New manual intersection turning movement counts were collected on Thursday, August 31, 2017 during the timeframes of 7:00 a.m. to 10:00 a.m. and from 4:00 p.m. to 7:00 p.m. at the analyzed intersection, Sunset Boulevard and La Cienega Boulevard/Miller Drive. The traffic count data worksheets are provided in Attachment C.

The City of West Hollywood provided for the study intersection the signing and striping as-built plan, the traffic signal timing plan, and a list of cumulative/planned (related) projects. The study intersection new lane configuration and signal timing plan was input into the Synchro operations analysis software for determination of existing traffic conditions and future traffic conditions with and without the proposed Project.

Level of Service (LOS) Definitions

For analysis of Level of Service (LOS) at signalized intersections, the City of West Hollywood has designated the Highway Capacity Manual (HCM) methodology as the desired tool. The HCM method takes into account existing signal cycle lengths, minimum green times, vehicle volumes, pedestrian and bike movements, user defined saturation flow rates, storage bay lengths, and other variables if operations and timing. The resulting intersection average delay per approaching vehicle in seconds then defines a level of service value for that particular peak-hour period.

Level of service (LOS) values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating "capacity" of a roadway. Typically, LOS D is the lowest acceptable operating condition.

Significant Impact Definitions

The City of West Hollywood has established specific thresholds for project-related increases in delay at signalized study intersections, when intersecting roadways are both commercial corridors. The following increases in peak-hour delay are considered significant impacts:

Level of Service	Final Delay (sec.)	Project Related Delay increase
D	35 – 55 seconds	12 seconds or greater
E and F	55 seconds or more	8 seconds or greater

Note: Final delay is the delay at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.

PROJECT TRIP GENERATION

The current proposed Project is less intense compared to the 2009 study, and the following summarizes the differences in land uses and intensities.

2009 Study (Proposed Project)	
Specialty Retail	3,007 sf
Condominium	34 du
High-Turnover (Sit-Down) Restaurant	6,153 sf

Current (Proposed Project)	
Office	11,520 sf
Quality Restaurant	9,775 sf

The estimated traffic generated by the proposed Project during the weekday daily, a.m. and p.m. peak hours. The estimated Project trips were based on rates defined in the Institute of Transportation Engineers *Trip Generation (9th Edition)*.

The trip generation for the proposed Project is summarized in Table 1. As in the 2009 study, the estimated Project trip generation of the proposed Project also took into account the trips generated by the existing apartments which would be replaced by the proposed Project.

Table 1 – Analyzed Project Trip Generation

Land Use	Size		ITE Code	Average Weekday	Weekday AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Trip Generation Rates										
Office	-	sf	710	11.03	88%	12%	1.56	17%	83%	1.49
Quality Restaurant	-	sf	931	89.95	50%	50%	0.81	67%	33%	7.49
Apartment	-	du	220	6.65	20%	80%	0.51	65%	35%	0.62
Proposed Project										
Office	11,520	sf	710	127	16	2	18	3	14	17
Quality Restaurant	9,775	sf	932	879	4	4	8	49	24	73
Sub-total				1,006	20	6	26	52	38	90
Existing Use (trip credit)										
Apartment	31	du	220	206	3	13	16	12	7	19
Subtotal				206	3	13	16	12	7	19
Net Total Trip Generation				800	17	-7	10	40	31	71

Source: Institute of Transportation Engineers (ITE) "Trip Generation - 9th Edition". (Unless otherwise indicated).

The outbound trip generation total for the proposed Project in the a.m. peak hour would be negative, with the inclusion of the existing use trip credit. The negative value was analyzed as zero trips, to provide a more conservative analysis.

The 2009 project trip generation totals and the current proposed Project trip generation totals are compared here:

- The project proposed in 2009 was estimated to generate 906 weekday daily trips, 74 weekday a.m. peak hour trips and 74 weekday p.m. peak hour trips.
- The current proposed Project is estimated to generate 800 weekday daily trips (106 less), including 10 a.m. peak-hour trips (64 less), and 71 p.m. peak-hour trips (3 less).

ANALYSIS

This section summarizes the analysis of future traffic conditions with and without the proposed Project. The year 2020 was selected for analysis based on the anticipated completion date of the Project. The annual growth rate of one percent was utilized for traffic volumes increases at the study intersections. A growth factor of 1.0303 was used to define the future baseline scenario.

The City of West Hollywood provided the list of cumulative/related projects. These projects were considered to potentially contribute measurable traffic volumes to the study intersection during the future analysis period. The included projects are all located within an approximate 1.5-mile radius from the Project site. The related project trip generation estimates are provided in Attachment D.

Study Intersection Levels of Service

The following scenarios were analyzed for determination of traffic impacts during the weekday a.m. and p.m. peak periods:

- Existing
- Future (2020) without Project
- Future (2020) with Project

Table 2 provides a comparison of level of service for all analyzed scenarios during a.m. and p.m. peak hours. The overall traffic impacts created by the proposed Project and determinations of significant impact are provided in the two right-most columns of the table.

Table 2 – Intersection Impact Summary
Sunset Boulevard and La Cienega Boulevard/Miller Drive

Peak	Existing		Future Without Project		Future With Project		Change in	Sig
Period	Delay	LOS	Delay	LOS	Delay	LOS	Delay	Impact ?
AM	19.7	B	23.9	C	23.9	C	0.0	No
PM	26.5	C	40.8	D	43.1	D	2.3	No

Under existing conditions, the intersection operates at acceptable LOS C or better during both a.m. and p.m. peak hours.

The future without-Project scenario includes the addition of related project trips and the applied growth rate, and the study intersection would degrade to LOS D during the p.m. peak hour.

Under future with-Project conditions, the study intersection would continue to operate at LOS D during the p.m. peak hour.

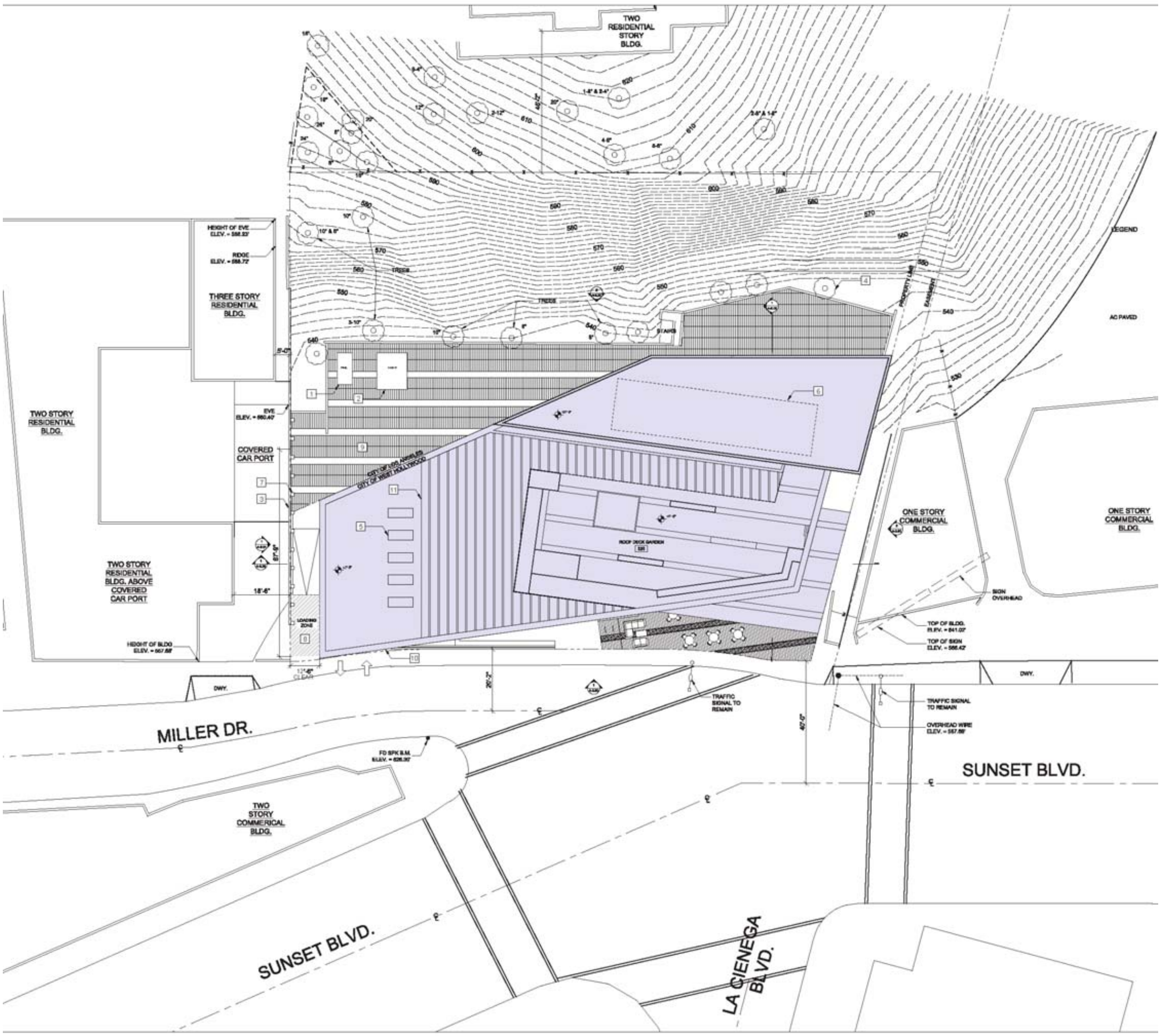
The level of service HCM calculation worksheets are provided in Appendix E.

Determination of Traffic Impact

The level of service (LOS) analysis was based on the Highway Capacity Manual (HCM) output value of seconds of delay per vehicle. As indicated in Table 2, based on the traffic forecasts, the level of service analysis, and significant impact thresholds, the Project would not create a significant traffic impact at the Sunset Boulevard and La Cienega Boulevard/Miller Drive intersection. Therefore, mitigation measures are not recommended.

ATTACHMENT A
Project Site Plan

Attachment A: Preliminary Site Plan



KOA CORPORATION
PLANNING & ENGINEERING

ATTACHMENT B
Study Area Map

Traffic Impact Study - 8497 Sunset Boulevard, West Hollywood

Attachment B: Study Area Map

LEGEND

Project Site

Study Intersection

ATTACHMENT C
Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miller Dr/La Cienega Blvd & Sunset Blvd
City: West Hollywood
Control: Signalized

Project ID: 17-05536-001
Date: 8/31/2017

Total

NS/EW Streets:	Miller Dr/La Cienega Blvd				Miller Dr/La Cienega Blvd				Sunset Blvd				Sunset Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	1	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	59	0	21	0	3	0	2	0	1	113	13	0	26	445	4	0	687
7:15 AM	38	2	26	0	0	2	3	0	1	137	15	0	23	411	4	0	662
7:30 AM	40	0	30	0	2	0	2	0	0	157	13	0	31	374	1	0	650
7:45 AM	60	0	29	0	3	2	2	0	0	196	20	0	26	341	2	0	681
8:00 AM	52	4	30	0	3	2	4	0	0	185	42	0	25	325	1	0	673
8:15 AM	87	3	41	0	3	3	5	0	1	214	26	0	28	322	0	0	733
8:30 AM	62	2	50	0	5	0	0	0	0	267	25	0	27	314	1	0	753
8:45 AM	86	1	30	0	0	3	0	0	0	254	15	0	28	430	1	0	848
9:00 AM	52	1	27	0	2	1	2	0	1	259	27	0	44	390	0	0	806
9:15 AM	71	5	38	0	6	0	0	0	1	268	34	0	33	362	1	0	819
9:30 AM	78	6	50	0	6	1	4	0	3	299	29	0	51	332	5	0	864
9:45 AM	63	0	52	0	3	1	7	0	6	207	39	0	41	364	2	0	785
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	748	24	424	0	36	15	31	0	14	2556	298	0	383	4410	22	0	8961
APPROACH %'s :	62.54%	2.01%	35.45%	0.00%	43.90%	18.29%	37.80%	0.00%	0.49%	89.12%	10.39%	0.00%	7.95%	91.59%	0.46%	0.00%	
PEAK HR :	08:45 AM - 09:45 AM				08:45 AM	44	37	48									TOTAL
PEAK HR VOL :	287	13	145	0	14	5	6	0	5	1080	105	0	156	1514	7	0	3337
PEAK HR FACTOR :	0.834	0.542	0.725	0.000	0.583	0.417	0.375	0.000	0.417	0.903	0.772	0.000	0.765	0.880	0.350	0.000	0.966
	0.830				0.568				0.899				0.913				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	1	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	81	0	83	0	9	1	3	0	5	396	56	0	56	244	4	0	938
4:15 PM	51	1	65	0	4	3	1	0	8	408	53	0	58	272	6	0	930
4:30 PM	54	4	80	0	4	5	1	0	5	345	42	0	47	209	8	0	804
4:45 PM	70	2	94	0	6	4	1	0	1	428	53	0	38	242	2	0	941
5:00 PM	68	5	79	0	7	2	0	0	2	443	56	0	47	278	1	0	988
5:15 PM	92	2	84	0	5	2	5	0	7	371	43	0	30	287	3	0	931
5:30 PM	99	6	70	0	0	2	3	0	3	408	48	0	45	268	2	0	954
5:45 PM	81	2	68	0	3	2	4	0	3	385	47	0	36	277	2	0	910
6:00 PM	76	5	63	0	4	2	4	0	1	334	49	0	38	223	1	0	800
6:15 PM	82	1	61	0	4	5	4	0	2	450	61	0	36	267	3	0	976
6:30 PM	56	5	104	0	1	4	4	0	6	378	50	0	38	228	2	0	876
6:45 PM	59	2	80	0	1	1	3	0	4	376	68	0	28	232	6	0	860
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	869	35	931	0	48	33	33	0	47	4722	626	0	497	3027	40	0	10908
APPROACH %'s :	47.36%	1.91%	50.74%	0.00%	42.11%	28.95%	28.95%	0.00%	0.87%	87.53%	11.60%	0.00%	13.95%	84.93%	1.12%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	329	15	327	0	18	10	9	0	13	1650	200	0	160	1075	8	0	3814
PEAK HR FACTOR :	0.831	0.625	0.870	0.000	0.643	0.625	0.450	0.000	0.464	0.931	0.893	0.000	0.851	0.936	0.667	0.000	0.965
	0.942				0.771				0.930				0.953				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miller Dr/La Cienega Blvd & Sunset Blvd
City: West Hollywood
Control: Signalized

Project ID: 17-05536-001
Date: 8/31/2017

Bikes

NS/EW Streets:	Miller Dr/La Cienega Blvd				Miller Dr/La Cienega Blvd				Sunset Blvd				Sunset Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	1	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	1	0	0	6	1	0	0	12	0	0	21
APPROACH %'s :					0.00%	50.00%	50.00%	0.00%	0.00%	85.71%	14.29%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:45 AM - 09:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	4	0	0	0	3	0	0	8
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.667
					0.250				0.500				0.375				

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	2	1	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	0	9	0	0	0	1	0	0	11
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.500
					0.250				0.625								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miller Dr/La Cienega Blvd & Sunset Blvd
City: West Hollywood
Project ID: 17-05536-001
Date: 8/31/2017

Pedestrians (Crosswalks)

NS/EW Streets:	Miller Dr/La Cienega Blvd		Miller Dr/La Cienega Blvd		Sunset Blvd		Sunset Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	8	2	4	0	3	1	0	20
7:15 AM	4	3	0	3	0	2	2	2	16
7:30 AM	2	3	0	1	0	0	2	4	12
7:45 AM	1	6	7	6	2	1	0	2	25
8:00 AM	3	2	4	11	1	2	2	0	25
8:15 AM	4	6	6	6	0	3	1	1	27
8:30 AM	0	5	5	8	0	0	4	5	27
8:45 AM	2	11	4	5	0	2	0	0	24
9:00 AM	3	6	10	6	0	1	1	6	33
9:15 AM	10	9	2	13	1	5	1	3	44
9:30 AM	4	4	7	12	1	8	0	0	36
9:45 AM	0	10	1	3	3	4	0	2	23
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	35	73	48	78	8	31	14	25	312
APPROACH %'s :	32.41%	67.59%	38.10%	61.90%	20.51%	79.49%	35.90%	64.10%	
PEAK HR :	08:45 AM - 09:45 AM								TOTAL
PEAK HR VOL :	19	30	23	36	2	16	2	9	137
PEAK HR FACTOR :	0.475	0.682	0.575	0.692	0.500	0.500	0.500	0.375	0.778
	0.645		0.776		0.500		0.393		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	3	3	5	4	0	7	1	2	25
4:15 PM	4	2	7	8	3	2	1	1	28
4:30 PM	5	0	6	3	2	2	2	1	21
4:45 PM	3	3	7	8	0	2	3	3	29
5:00 PM	9	5	5	10	3	1	4	0	37
5:15 PM	4	5	1	0	5	8	1	4	28
5:30 PM	15	2	13	4	1	3	0	3	41
5:45 PM	1	2	5	7	1	1	0	2	19
6:00 PM	4	3	8	1	0	1	0	5	22
6:15 PM	5	1	13	6	3	5	1	2	36
6:30 PM	6	9	0	7	2	4	3	1	32
6:45 PM	6	0	2	7	1	3	2	1	22
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	65	35	72	65	21	39	18	25	340
APPROACH %'s :	65.00%	35.00%	52.55%	47.45%	35.00%	65.00%	41.86%	58.14%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	31	15	26	22	9	14	8	10	135
PEAK HR FACTOR :	0.517	0.750	0.500	0.550	0.450	0.438	0.500	0.625	0.823
	0.676		0.706		0.442		0.750		

Prepared by National Data & Surveying Services

Miller Dr/La Cienega Blvd & Sunset Blvd

Peak Hour Turning Movement Count

ID: 17-05536-001
City: West Hollywood

Day: Thursday
Date: 08/31/2017

PEAK HOURS		COUNT PERIODS
AM	08:45 AM - 09:45 AM	07:00 AM - 10:00 AM
NOON	NONE	NONE
PM	04:45 PM - 05:45 PM	04:00 PM - 07:00 PM

Miller Dr/La Cienega Blvd – SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing
AM	6	5	14	0	25
NOON	0	0	0	0	0
PM	9	10	18	0	36
Lanes	0	1	0	0	

Sunset Blvd – EASTBOUND

	AM	NOON	PM	Lanes
Departing	1807	0	1413	
U-Turn	0	0	0	0
Left	5	0	13	1
Thru	1080	0	1650	2
Right	105	0	200	0

Sunset Blvd – WESTBOUND

	PM	NOON	AM	Lanes
Right	8	0	7	0
Thru	1075	0	1514	2
Left	160	0	156	1
U-Turn	0	0	0	0
Departing	1995	0	1239	

CONTROL

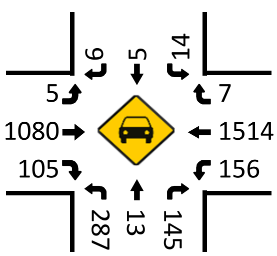
Signalized

	AM	NOON	PM
TEV	3337	0	3814
PHF	0.97		0.97

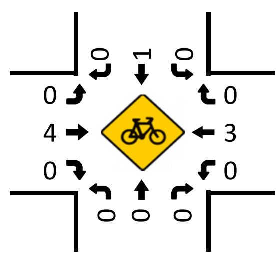
Miller Dr/La Cienega Blvd – NORTHBOUND

	Departing	U-Turn	Left	Thru	Right
Lanes		0	2	1	1
PM	370	0	329	15	327
NOON	0	0	0	0	0
AM	266	0	287	13	145

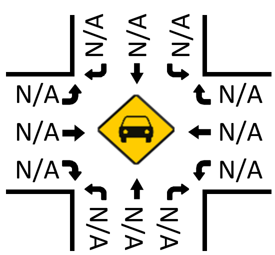
Total Vehicles (AM)



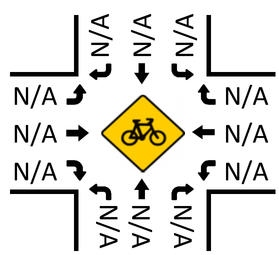
Bikes (AM)



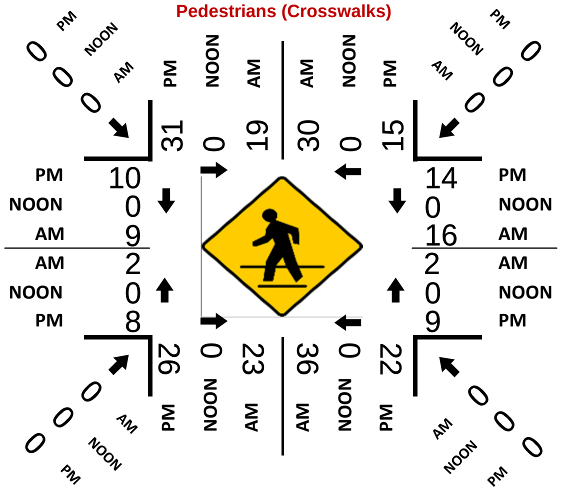
Total Vehicles (NOON)



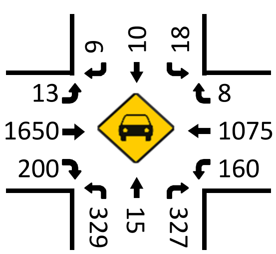
Bikes (NOON)



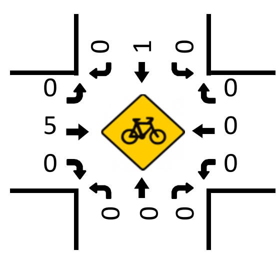
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



ATTACHMENT D
Related Project Trip Generation Table

Attachment D - Related Projects

					Daily	AM Peak Hour			PM Peak Hour		
ID	Location	Land Use	Intensity	Units	Total	In	Out	Total	In	Out	Total
City of West Hollywood											
1	8816 Beverly	Hotel	45	rm	368	14	10	24	14	13	27
		Retail - hotel	5,535	sf	245	4	3	7	7	8	15
		Restaurant/Bar - Hotel	7,070	sf	899	42	34	76	42	28	70
		Outdoor dining	1,819	sf	231	11	9	20	11	7	18
		Apartments	28	du	186	3	11	14	11	6	17
2	1048 Curson	Condominiums	5	du	29	0	2	2	2	1	3
3	900 Fairfax	Apartments	2	du	13	0	1	1	1	0	1
		Retail	1,145	sf	51	1	0	1	1	2	3
		Restaurant	2,281	sf	290	14	11	25	13	9	22
4	511 Flores st	Apartments	9	du	60	1	4	5	4	2	6
5	1216 Flores St	Condominiums	14	du	81	1	5	6	5	2	7
6	1009 Gardner	Condominiums	6	du	35	1	2	3	2	1	3
7	947 Genesee	Condominiums	5	du	29	0	2	2	2	1	3
8	1003 Hancock	Apartments	3	du	20	0	2	2	1	1	2
9	1264 Harper Ave	Condominiums	14	du	81	1	5	6	5	2	7
10	1345 Havenhurst Dr	Condominiums	16	du	93	1	6	7	5	3	8
11	1342 Hayworth Ave	Condominiums	16	du	93	1	6	7	5	3	8
12	1125 Kngs Rd	Condominiums	10	du	58	1	3	4	3	2	5
13	627 La Peer	Hotel	69	rm	564	22	15	37	21	20	41
		Condominiums	8	du	46	1	3	4	3	1	4
		Restaurant - hotel	2,700	sf	343	16	13	29	16	11	27
		Retail - hotel	1,760	sf	78	1	1	2	2	3	5
14	829 Larrabee	Apartments	13	du	86	1	6	7	5	3	8
15	1223 Larrabee St	Condominiums	8	du	46	1	3	4	3	1	4
16	8551 Melrose Ave	Retail	6,500	sf	288	5	3	8	8	10	18
17	8583 Melrose Ave	Retail/Commercial	9,545	sf	423	7	4	11	11	15	26
18	8650 Melrose Ave	Retail	14,571	sf	646	10	7	17	17	22	39
		Apartments	7	du	47	1	3	4	3	1	4
19	8711 Melrose Ave	Commercial	21,565	sf	921	13	8	21	38	42	80
20	8715 Melrose	Restaurant	8,997	sf	1,144	53	44	97	53	36	89
21	7914 Norton	Condominiums	8	du	46	1	3	4	3	1	4
22	1001 Ogden	Condominiums	5	du	29	0	2	2	2	1	3
23	1153 Ogden	Condominiums	6	du	35	1	2	3	2	1	3
24	1150 Orange Grove	Apartments	7	du	47	1	3	4	3	1	4
25	507 Orlando Ave	Apartments	9	du	60	1	4	5	4	2	6
26	923 Palm	Senior Housing	45	du	155	3	6	9	6	5	11
27	645 Robertson	Hotel	241	rm	1,969	76	52	128	74	71	145
		Restaurant	33,300	sf	4,234	198	162	360	197	131	328
		Retail	18,130	sf	804	13	9	22	22	27	49
		Design Showroom **	10,325	sf	458	7	5	12	12	16	28
		Nightclub *	3,780	sf	-	-	-	-	-	-	-
28	7811 Santa Monica Blvd	Hotel	81	rm	662	25	18	43	25	24	49
		Apartments	79	du	525	8	32	40	32	17	49
29	7965-7985 Santa Monica Blvd	Retail	4,365	sf	193	3	2	5	5	7	12
		Restaurant	13,682	sf	1,740	81	67	148	81	54	135
		Office	70,036	sf	772	96	13	109	18	86	104
30	8550 Santa Monica Bl	Grocery	25,000	sf	2,556	53	32	85	109	100	209
		café	1,319	sf	168	8	6	14	8	5	13
		office	3,998	sf	44	5	1	6	1	5	6
		health/fitness club	8,000	sf	263	6	5	11	16	12	28
		personal service **	4,000	sf	177	3	2	5	5	6	11
31	9001 Santa Monica Blvd	Retail	9,850	sf	437	7	5	12	12	15	27
		Restaurant	9,800	sf	1,246	58	48	106	58	39	97
		Condominiums	42	du	244	3	15	18	15	7	22
32	9040,9060,9080, 9098 Santa Monica Blvd	Condominiums	76	du	442	6	27	33	27	13	40
		Retail	82,000	sf	3,634	59	39	98	98	124	222
		office	137,000	sf	1,511	188	26	214	35	169	204
33	8430 Sunset Boulevard	Condominiums	125	du	726	9	46	55	44	21	65
		Commercial	35,000	sf	1,495	21	13	34	62	68	130

Attachment D - Related Projects

ID	Location	Land Use	Intensity	Units	Daily Total	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
34	8490/8500 Sunset Blvd	Hotel	280	rm	2,288	87	61	148	86	82	168
		Retail	30,000	sf	1,330	22	14	36	36	45	81
		Condominiums	190	du	1,104	14	70	84	66	33	99
		Commercial	78,500	sf	3,352	47	28	75	140	151	291
35	8920 Sunset Blvd - Arts Club	Private Club **	46,600	sf	-	-	-	-	-	-	-
		Office	25,000	sf	276	34	5	39	6	31	37
		Restaurant	15,000	sf	1,907	89	73	162	89	59	148
		Retail	7,200	sf	319	5	4	9	9	11	20
36	8950 Sunset Blvd	Hotel	165	rm	1,348	51	36	87	50	49	99
		Apartments	4	du	27	0	2	2	1	1	2
		Restaurant	30,000	sf	3,815	178	146	324	178	118	296
37	9040 Sunset Blvd	Hotel	190	rm	1,552	60	41	101	58	56	114
		Condominiums	20	du	116	2	7	9	7	3	10
		Commercial	29,000	sf	1,238	17	11	28	52	56	108
38	1253 Sweetzer Ave	Condominiums	8	du	46	1	3	4	3	1	4
39	605 West Knoll	Retail	7,000	sf	310	5	3	8	8	11	19
City of Los Angeles											
101	316 N La Cienega Bl	Apartments Retail Restaurant	45 3,800 800	du sf sf	602	41	53	94	31	22	53
102	8150 Sunset Bl	Apartments Retail	249 110,000	du sf	1,077	-92	10	-82	158	58	216
103	1502 N Gardner St	Supermarket	32,435	sf	1,522	30	19	49	74	68	142
104	7900 W Hollywood Bl	Apartments	50	du	251	3	16	19	14	8	22
105	8052 W Beverly Bl	Synagogue Apartments Medical Office Retail	5,000 102 15,000 1,000	sf du sf sf	725	19	26	45	21	49	70
106	8000 Beverly Bl	Apartment Restaurant	48 7,400	du sf	774	21	36	57	42	17	59
107	7510 W Sunset Bl	Apartments Retail Restaurant	210 20,000 10,000	du sf sf	1,239	63	125	188	117	61	178
108	8001 W Beverly Blvd	Restaurant Office	22,600 11,358	sf sf	3,248	142	118	260	157	106	263
109	431 N La Cienega Bl	Apartments Retail Restaurant	96 5,496 8,500	du sf sf	478	25	44	69	29	6	35
TOTAL					**61,110**	**2,031**	**1,822**	**3,853**	**2,722**	**2,386**	**5,108**

** This land use was excluded from the analysis as it would not occur during the a.m. and p.m. peak hours.*

*** Trip generation rates for this land use were based on the land use category - retail.*

ATTACHMENT E
HCM Calculation Worksheets

- Existing AM Peak Hour
- Existing PM Peak Hour
- Future without Project AM Peak Hour
- Future without Project PM Peak Hour
- Future with Project AM Peak Hour
- Future with Project PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1080	105	156	1514	7	287	13	145	14	5	6
Future Volume (vph)	5	1080	105	156	1514	7	287	13	145	14	5	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.84	1.00	1.00		1.00	1.00	0.98		0.97	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1745	3539	1337	1770	3535		3433	1863	1557		1680	
Flt Permitted	0.17	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.82	
Satd. Flow (perm)	312	3539	1337	1770	3535		3433	1863	1557		1415	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	1080	105	156	1514	7	287	13	145	14	5	6
RTOR Reduction (vph)	0	0	36	0	0	0	0	0	96	0	6	0
Lane Group Flow (vph)	5	1080	69	156	1521	0	287	13	49	0	19	0
Confl. Peds. (#/hr)	49		59	59		49	18		11	11		18
Confl. Bikes (#/hr)			4			3						1
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Perm	NA	
Protected Phases		6	7	5	2		7	4	5		8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	65.5	65.5	78.8	17.5	87.0		13.3	23.0	40.5		5.4	
Effective Green, g (s)	65.5	65.5	78.8	17.5	87.0		13.3	23.0	40.5		5.4	
Actuated g/C Ratio	0.55	0.55	0.66	0.15	0.72		0.11	0.19	0.34		0.05	
Clearance Time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Vehicle Extension (s)	3.0	3.0	0.2	1.0	3.0		0.2	4.0	1.0		3.0	
Lane Grp Cap (vph)	170	1931	877	258	2562		380	357	525		63	
v/s Ratio Prot		0.31	0.01	0.09	c0.43		c0.08	0.01	0.01			
v/s Ratio Perm	0.02		0.04						0.02		c0.01	
v/c Ratio	0.03	0.56	0.08	0.60	0.59		0.76	0.04	0.09		0.31	
Uniform Delay, d1	12.6	17.8	7.5	48.0	8.0		51.8	39.5	27.2		55.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.3	1.2	0.0	2.7	1.0		7.4	0.1	0.0		2.7	
Delay (s)	12.9	19.0	7.5	50.7	9.0		59.2	39.5	27.2		58.2	
Level of Service	B	B	A	D	A		E	D	C		E	
Approach Delay (s)		17.9			12.9			48.2			58.2	
Approach LOS		B			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1650	200	160	1075	8	329	15	327	18	10	9
Future Volume (vph)	13	1650	200	160	1075	8	329	15	327	18	10	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.87	1.00	1.00		1.00	1.00	0.98		0.96	
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1728	3539	1381	1770	3532		3433	1863	1546		1664	
Flt Permitted	0.26	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.84	
Satd. Flow (perm)	480	3539	1381	1770	3532		3433	1863	1546		1428	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	1650	200	160	1075	8	329	15	327	18	10	9
RTOR Reduction (vph)	0	0	70	0	0	0	0	0	211	0	9	0
Lane Group Flow (vph)	13	1650	130	160	1083	0	329	15	116	0	28	0
Confl. Peds. (#/hr)	46		48	49		46	23		18	18		23
Confl. Bikes (#/hr)			5									1
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Perm	NA	
Protected Phases		6	7	5	2		7	4	5		8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	63.6	63.6	78.2	18.1	85.7		14.6	24.3	42.4		5.4	
Effective Green, g (s)	63.6	63.6	78.2	18.1	85.7		14.6	24.3	42.4		5.4	
Actuated g/C Ratio	0.53	0.53	0.65	0.15	0.71		0.12	0.20	0.35		0.05	
Clearance Time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Vehicle Extension (s)	3.0	3.0	0.2	1.0	3.0		0.2	4.0	1.0		3.0	
Lane Grp Cap (vph)	254	1875	899	266	2522		417	377	546		64	
v/s Ratio Prot		c0.47	0.02	c0.09	0.31		c0.10	0.01	0.03			
v/s Ratio Perm	0.03		0.08						0.04		c0.02	
v/c Ratio	0.05	0.88	0.14	0.60	0.43		0.79	0.04	0.21		0.44	
Uniform Delay, d1	13.6	24.8	8.0	47.6	7.1		51.2	38.5	27.1		55.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.4	6.3	0.0	2.6	0.5		8.9	0.1	0.1		4.8	
Delay (s)	14.0	31.1	8.1	50.2	7.6		60.1	38.5	27.2		60.7	
Level of Service	B	C	A	D	A		E	D	C		E	
Approach Delay (s)		28.5			13.1			43.6			60.7	
Approach LOS		C			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1187	151	183	1653	7	346	13	165	14	5	6
Future Volume (vph)	5	1187	151	183	1653	7	346	13	165	14	5	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.82	1.00	1.00		1.00	1.00	0.98		0.96	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1750	3539	1302	1770	3535		3433	1863	1553		1671	
Flt Permitted	0.13	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.82	
Satd. Flow (perm)	247	3539	1302	1770	3535		3433	1863	1553		1407	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	1187	151	183	1653	7	346	13	165	14	5	6
RTOR Reduction (vph)	0	0	45	0	0	0	0	0	112	0	6	0
Lane Group Flow (vph)	5	1187	106	183	1660	0	346	13	53	0	19	0
Confl. Peds. (#/hr)	49		59	59		49	18		11	11		18
Confl. Bikes (#/hr)			4			3						1
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Perm	NA	
Protected Phases		6	7	5	2		7	4	5		8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	81.2	81.2	98.0	18.1	103.3		16.8	26.7	44.8		5.6	
Effective Green, g (s)	81.2	81.2	98.0	18.1	103.3		16.8	26.7	44.8		5.6	
Actuated g/C Ratio	0.58	0.58	0.70	0.13	0.74		0.12	0.19	0.32		0.04	
Clearance Time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Vehicle Extension (s)	3.0	3.0	0.2	1.0	3.0		0.2	4.0	1.0		3.0	
Lane Grp Cap (vph)	143	2052	911	228	2608		411	355	496		56	
v/s Ratio Prot		0.34	0.01	c0.10	c0.47		c0.10	0.01	0.01			
v/s Ratio Perm	0.02		0.07						0.02		c0.01	
v/c Ratio	0.03	0.58	0.12	0.80	0.64		0.84	0.04	0.11		0.34	
Uniform Delay, d1	12.6	18.6	6.9	59.2	9.1		60.3	46.2	33.5		65.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.5	1.2	0.0	17.2	1.2		13.9	0.1	0.0		3.7	
Delay (s)	13.1	19.8	6.9	76.4	10.3		74.2	46.2	33.5		69.1	
Level of Service	B	B	A	E	B		E	D	C		E	
Approach Delay (s)		18.3			16.8			60.7			69.1	
Approach LOS		B			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1807	255	196	1221	8	396	15	370	19	10	9
Future Volume (vph)	13	1807	255	196	1221	8	396	15	370	19	10	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	1.00		1.00	1.00	0.97		0.97	
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.98	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1730	3539	1359	1770	3533		3433	1863	1543		1674	
Flt Permitted	0.23	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.83	
Satd. Flow (perm)	415	3539	1359	1770	3533		3433	1863	1543		1431	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	1807	255	196	1221	8	396	15	370	19	10	9
RTOR Reduction (vph)	0	0	75	0	0	0	0	0	169	0	8	0
Lane Group Flow (vph)	13	1807	180	196	1229	0	396	15	201	0	30	0
Confl. Peds. (#/hr)	46		48	49		46	23		18	18		23
Confl. Bikes (#/hr)			5									1
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Perm	NA	
Protected Phases		6	7	5	2		7	4	5		8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	70.6	70.6	89.4	24.5	99.1		18.8	30.9	55.4		7.8	
Effective Green, g (s)	70.6	70.6	89.4	24.5	99.1		18.8	30.9	55.4		7.8	
Actuated g/C Ratio	0.50	0.50	0.64	0.18	0.71		0.13	0.22	0.40		0.06	
Clearance Time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Vehicle Extension (s)	3.0	3.0	0.2	1.0	3.0		0.2	4.0	1.0		3.0	
Lane Grp Cap (vph)	209	1784	867	309	2500		461	411	610		79	
v/s Ratio Prot		c0.51	0.03	c0.11	0.35		c0.12	0.01	c0.06			
v/s Ratio Perm	0.03		0.10						0.07		0.02	
v/c Ratio	0.06	1.01	0.21	0.63	0.49		0.86	0.04	0.33		0.37	
Uniform Delay, d1	17.8	34.7	10.5	53.6	9.2		59.3	42.9	29.4		63.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.6	24.5	0.0	3.1	0.7		14.2	0.0	0.1		3.0	
Delay (s)	18.3	59.2	10.6	56.7	9.9		73.5	42.9	29.5		66.7	
Level of Service	B	E	B	E	A		E	D	C		E	
Approach Delay (s)		53.0			16.3			52.1			66.7	
Approach LOS		D			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1187	151	183	1653	10	346	22	165	14	5	6
Future Volume (vph)	10	1187	151	183	1653	10	346	22	165	14	5	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.82	1.00	1.00		1.00	1.00	0.98		0.96	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1750	3539	1302	1770	3533		3433	1863	1553		1671	
Flt Permitted	0.13	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.81	
Satd. Flow (perm)	246	3539	1302	1770	3533		3433	1863	1553		1399	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	1187	151	183	1653	10	346	22	165	14	5	6
RTOR Reduction (vph)	0	0	45	0	0	0	0	0	112	0	6	0
Lane Group Flow (vph)	10	1187	106	183	1663	0	346	22	53	0	19	0
Confl. Peds. (#/hr)	49		59	59		49	18		11	11		18
Confl. Bikes (#/hr)			4			3						1
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Perm	NA	
Protected Phases		6	7	5	2		7	4	5		8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	81.2	81.2	98.0	18.1	103.3		16.8	26.7	44.8		5.6	
Effective Green, g (s)	81.2	81.2	98.0	18.1	103.3		16.8	26.7	44.8		5.6	
Actuated g/C Ratio	0.58	0.58	0.70	0.13	0.74		0.12	0.19	0.32		0.04	
Clearance Time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Vehicle Extension (s)	3.0	3.0	0.2	1.0	3.0		0.2	4.0	1.0		3.0	
Lane Grp Cap (vph)	142	2052	911	228	2606		411	355	496		55	
v/s Ratio Prot		0.34	0.01	c0.10	c0.47		c0.10	0.01	0.01			
v/s Ratio Perm	0.04		0.07						0.02		c0.01	
v/c Ratio	0.07	0.58	0.12	0.80	0.64		0.84	0.06	0.11		0.35	
Uniform Delay, d1	12.9	18.6	6.9	59.2	9.1		60.3	46.4	33.5		65.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.0	1.2	0.0	17.2	1.2		13.9	0.1	0.0		3.8	
Delay (s)	13.8	19.8	6.9	76.4	10.3		74.2	46.5	33.5		69.3	
Level of Service	B	B	A	E	B		E	D	C		E	
Approach Delay (s)		18.3			16.9			60.5			69.3	
Approach LOS		B			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1807	255	196	1221	16	396	35	370	26	25	18
Future Volume (vph)	25	1807	255	196	1221	16	396	35	370	26	25	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	1.00		1.00	1.00	0.97		0.97	
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1730	3539	1360	1770	3526		3433	1863	1541		1690	
Flt Permitted	0.23	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.86	
Satd. Flow (perm)	412	3539	1360	1770	3526		3433	1863	1541		1483	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	25	1807	255	196	1221	16	396	35	370	26	25	18
RTOR Reduction (vph)	0	0	77	0	1	0	0	0	167	0	10	0
Lane Group Flow (vph)	25	1807	178	196	1236	0	396	35	203	0	59	0
Confl. Peds. (#/hr)	46		48	49		46	23		18	18		23
Confl. Bikes (#/hr)			5									1
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Perm	NA	
Protected Phases		6	7	5	2		7	4	5		8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	69.7	69.7	88.5	23.7	97.4		18.8	32.6	56.3		9.5	
Effective Green, g (s)	69.7	69.7	88.5	23.7	97.4		18.8	32.6	56.3		9.5	
Actuated g/C Ratio	0.50	0.50	0.63	0.17	0.70		0.13	0.23	0.40		0.07	
Clearance Time (s)	5.3	5.3	4.0	4.0	5.3		4.0	4.7	4.0		5.0	
Vehicle Extension (s)	3.0	3.0	0.2	1.0	3.0		0.2	4.0	1.0		3.0	
Lane Grp Cap (vph)	205	1761	859	299	2453		461	433	619		100	
v/s Ratio Prot		c0.51	0.03	c0.11	0.35		c0.12	0.02	0.06			
v/s Ratio Perm	0.06		0.10						0.08		c0.04	
v/c Ratio	0.12	1.03	0.21	0.66	0.50		0.86	0.08	0.33		0.59	
Uniform Delay, d1	18.8	35.1	10.9	54.3	10.0		59.3	42.0	28.8		63.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.2	28.4	0.0	3.9	0.7		14.2	0.1	0.1		8.5	
Delay (s)	20.0	63.5	10.9	58.2	10.7		73.5	42.1	28.9		71.9	
Level of Service	C	E	B	E	B		E	D	C		E	
Approach Delay (s)		56.6			17.2			51.5			71.9	
Approach LOS		E			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group